

STRATEGIC ENTREPRENEURIAL FINANCE

FROM VALUE CREATION TO REALIZATION

DAREK KLONOWSKI

Strategic Entrepreneurial Finance

Entrepreneurial finance is a discipline that studies financial resource mobilization, resource allocation, risk moderation, optimization in financial contracting, value creation, and value monetization within the context of entrepreneurship. However, without proper strategic consideration the discipline is incomplete. This book examines how the activity of entrepreneurial finance can be enhanced via a concentration on value creation and through improved strategic decision making.

The most unique feature of the book is its focus on value creation. For entrepreneurs, value creation is not a one-off activity, but rather a continuous cycle of incremental improvements across a wide range of business activities. Entrepreneurial value creation is described in four comprehensive stages: value creation, value measurement, value enhancement, and value realization, referred to as the C-MER model. This book focuses on what creates value rather than merely presenting value creation in a straight accounting framework.

At the same time, deliberate and tactical planning and implementation ensure that the firm does not ignore the components necessary for it to survive and flourish. Rigorous strategic deliberations maximize the entrepreneurial firm's chances of making the right business decisions for the future, enable the firm to manage its available financial and non-financial resources in the most optimal manner, ensure that the necessary capital is secured to progress the development of the firm to its desired development level, and build value.

While financial considerations are important, the field of strategic entrepreneurial finance represents a fusion of three disciplines: strategic management, financial management, and entrepreneurship. This orientation represents a natural evolution of scholarship to combine specific domains and paradigms of naturally connected business disciplines and reflects the need to simultaneously examine business topics from different perspectives which may better encapsulate actual entrepreneurial practices.

Darek Klonowski is Professor of Business Administration at Brandon University, Canada.

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From value creation to realization

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Preface

Entrepreneurial finance is a discipline that studies financial resource mobilization, resource allocation, risk moderation, optimization in financial contracting, value creation, and value monetization within the context of entrepreneurship. Entrepreneurial finance deals with multiple issues: how much capital to raise and when; how to increase the chances of successfully raising capital; how to structure financial contracts; how to generate and increase value; and how to make exit or harvesting decisions (or operate the entrepreneurial venture into the foreseeable future). Flourishing entrepreneurship is dependent upon the accurate management of financial resources. At the core of entrepreneurial finance is financial decision making. The appropriate financial decisions must be made throughout the entrepreneurial firm's life cycle in order to take advantage of opportunities available in the marketplace.

Entrepreneurial finance without proper strategic management is incomplete. Deliberate and tactical planning and implementation ensure that the firm does not ignore the components necessary for it to survive and flourish. Vigorous strategic deliberations maximize the entrepreneurial firm's chances of making the right business decisions for the future, enable the firm to manage its available financial and non-financial resources in the most optimal manner, ensure that the necessary capital is secured to progress the development of the firm to its desired development level, and build value. This is why our book focuses not only on entrepreneurial finance, but also on *strategic* entrepreneurial finance.

Strategic entrepreneurial finance is an essential part of the comprehensive management of a new entrepreneurial venture. This means that in order for the entrepreneur to excel in his or her business venture, the entrepreneur does not have to correctly make all day-to-day decisions; instead, he or she has to make a *majority* of strategic decisions correctly. While financial considerations are important, the field of strategic entrepreneurial finance represents a fusion of three disciplines: strategic management, financial management, and entrepreneurship. This interdisciplinary orientation represents a natural evolution of scholarship to combine specific domains and paradigms of naturally connected business disciplines. This fusion also reflects the need to simultaneously examine business topics from different perspectives which may better encapsulate actual entrepreneurial practices.

The most important feature of this book is its focus on value creation. Value creation is the single most important concept at the heart of the three disciplines, and is the means by which these disciplines are harmonized, balanced, and equalized. In this book, we recognize that value creation is multidimensional and encompasses economic, social, and environmental dimensions. The multidimensional nature of value creation means that we have included special topics rarely covered in other books on entrepreneurial finance, such as corporate governance, social responsibility, entrepreneurial succession, and entrepreneurial

philanthropy. Value creation is not a one-off activity, but rather a continuous cycle of incremental improvement across a wide range of business activities. Value creation is a process and we aim to describe this process in a comprehensive manner. We also place a practical emphasis on value creation. This book does not focus on abstract theories, theoretical considerations, mathematical models, or financial simulations. The intricate practice of entrepreneurial value creation is captured here in four stages: value creation, value measurement, value enhancement, and value realization. We call this four-stage value creation approach the C-MER model. In this book, we focus on what creates value rather than merely presenting value creation in a straight accounting framework. Our focus on value creation addresses issues such as what creates value, what destroys it, how value is measured, and how value and risk are related.

This book is anticipated to serve as a primary textbook for courses in entrepreneurial finance at the undergraduate level. Graduate students may also find the book suitable due to its strong research orientation. The book can also serve as a supplement for courses related to entrepreneurship, strategic management, business foundations, new venture creation, management, financial management of new ventures, and so on. It may also be used by academics in need of a more rudimentary supplement for a more advanced course in entrepreneurial finance, or who require a more applied text for theoretical courses. Moreover, we believe that this book can serve as a useful value creation “handbook” for entrepreneurs and managers working in entrepreneurial firms due to the wide review of financial and non-financial concepts found within.

This book reflects a number of trends in the academic marketplace of entrepreneurial finance. First, course offerings in the area of entrepreneurial finance have been on the rise, particularly in universities where senior administration, policy makers, and the government have made entrepreneurship a priority. Second, courses in this area are taught by professors with a wide range of backgrounds (both practical and academic and specializing in areas including finance, accounting, strategic management, entrepreneurship, and organizational behavior). Many of these professors look for textbooks that offer an interdisciplinary treatment of the subject. Academics also note that many books in this area predominantly focus on accounting; this orientation does not seem to resonate well with academics in the area of entrepreneurial finance, as they view the topic in a broader context. Third, the book reflects a trend of movement away from entrepreneurial finance courses solely focused on venture capital and private equity (even though these methods of financing still represent an important contribution to the financing environment for entrepreneurial firms). Fourth, the book reflects the fact that strategic entrepreneurial finance and value creation are not just theoretical concepts – value creation is an applied field. For this reason, we discuss value creation in the context of real-life cases throughout each chapter.

Darek Klonowski

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This book represents a collection of ideas, approaches, and methods developed during my past ten years at Brandon University. It also reflects my 15 year practice as a professional working in the venture capital industry. The book reflects strong professional influences from professionals working in the venture capital industry such as Will Smith (Advent International), Joanna James (Advent International), George Swirski (Abris Capital), and Nick Callinan (Collins Hill Private Equity Services). Additionally, most of the material included in the book was classroom tested and received positive feedback from students.

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Part I

Introduction

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1 An introduction to strategic entrepreneurial finance

Chapter objectives

After reading this chapter, you should be able to:

- describe the individual fields of financial management, strategic management, and entrepreneurship;
- define the field of study termed strategic entrepreneurial finance;
- discuss the concept of value at the intersection of finance, strategy, and entrepreneurship;
- define value in entrepreneurial firms.

Entrepreneurship is a process by which individuals convert a new (or existing) idea into a business venture in order to successfully pursue opportunities available in the marketplace. Entrepreneurship plays a key role in shaping economies throughout the world, and for several reasons it is imperative for economic growth. Six out of every ten new jobs are created by the entrepreneurial sector. In addition, the entrepreneurial sector is spearheading an industrial transformation from traditional industries to the high technology sector. Entrepreneurial firms are at the forefront of developing innovations with a clear competitive advantage, and entrepreneurship is believed to offset economic declines and moderate economic cycles. Entrepreneurial firms are also making significant inroads in developing global markets.

Entrepreneurial ventures also face many challenges, one of which is access to finance. It is widely understood that entrepreneurial firms struggle with access to finance – securing capital is the most challenging, exhausting, and time consuming task for entrepreneurial firms. Capital constraints are especially prevalent in the seed/start-up phases of development (entrepreneurial firms in this stage are focused on business survival and often described as “virtual” because there is only an idea or concept in place) and during the expansion stage (entrepreneurial firms at this stage are looking to migrate to a higher level of development). Entrepreneurial firms may also have to deal with liquidity gaps if they are unable to secure the necessary expansion capital (these gaps may also occur for supply and demand reasons). Second, entrepreneurial firms are often developed and operated in a haphazard manner; their internal processes are chaotic. The planning, forecasting, and budgeting processes for most firms are either poorly developed or non-existent. Many entrepreneurial firms – even those with sizeable operations and revenues – do not employ functional managers (especially in the areas of finance, accounting, and marketing); consequently, their management teams are often incomplete. In many cases, the founding entrepreneur will fail outright to build his or her organization in a systematic, orchestrated, and deliberate manner. Third, many

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entrepreneurial ventures struggle with making strategic development decisions. Entrepreneurial firms often pursue expansion strategies which “undercut” (rather than protect) the core of their business and shift their internal focus into areas in which they have limited expertise. Most importantly (often on the advice of external consultants), they pursue strategies involving external modes of expansion: mergers, acquisitions, partnerships, and so on. Many firms pursue these expansion modes instead of pursuing a slower, more determined growth pattern based on organic growth (i.e., internal development). Poor strategic planning often results in a difficult transition for the firm from the entrepreneurial stages of development to more professional organizational structures. Fourth, entrepreneurial firms often struggle with corporate governance. There are multiple areas in which the corporate governance functions of a firm may fail: conflicts of interest, related party transactions, inadequate advisory functions (i.e., informal committees or formal boards of directors are constructed on the basis of internal management, friends, and family), poor financial and information disclosure, and so on. Finally, entrepreneurial firms are often less agile than they should be. While many entrepreneurial firms aspire to be “learning organizations,” they do not solve their internal problems systematically, learn from their own mistakes, experiment with new business approaches and solutions, or transfer knowledge effectively within the venture.

Strategic entrepreneurial finance

Disciplines in business

Business is an exciting field of study. Business studies have traditionally examined disciplines such as finance, management, human resources, marketing, operations, and accounting – these reflect the functional areas most commonly found in businesses. There are also other disciplines, often not classified as related to business (such as law, sociology, science, psychology, and so on), which have been making a mark on the business field. Over the years, there has been a movement to pursue interdisciplinary separation and division within business studies. Consequently, a number of new, narrower fields of business study have emerged such as entrepreneurship, business ethics, strategic management, risk management, supply chain management, purchasing, corporate governance, and real estate management. As academic evaluations of business evolve, academics attempt to gain more comprehensive insight and a greater understanding of each specific business topic. The benefits of such a high level of specialization include more detailed descriptions of business activities, new theoretical models and paradigms, and the emergence of new fields of business. There are also some drawbacks to this disciplinary separation and disaggregation: limited interdisciplinary linkages, increased competition between business disciplines, decreased predictability of existing business theories, and, most importantly, limited ability to explain more complex business phenomena.

For the purposes of this book, we propose that business is a symbiotic ecosystem of integrated disciplines. We believe that many business disciplines are connected, interrelated, and interwoven – they are a part of the same decision-making environment. We also conjecture that there are some disciplines in the business domain that fit together as a single field of study; these disciplines serve to jointly explain rudimentary business behaviors, actions, and activities. Some branches of business study have common themes, universal and mutual purposes, unified perspectives, and shared backgrounds. In this book, we offer a cross-disciplinary perspective focusing on three specific branches of business study: financial

management, strategic management, and entrepreneurship. We discuss these concepts in the context of a single unifying concept.

Before we discuss the connections between financial management, strategic management, and entrepreneurship, let's clarify what each of these three disciplines denotes on a stand-alone basis.

Strategic management

We define strategic management as a systematic set of management decisions and activities (i.e., investigations, commitments, and actions) that impact the long-term performance of a firm (i.e., the next three, five, or ten years). Strategic management answers a basic question: *What* does a business venture do to achieve its long-term plans? By contrast, business policy is a general management orientation which provides an integrative look inside the firm and determines how different functions of the business work together. Business policy answers another fundamental question: *How* do we organize our activities within the organization? Strategic management is a continuous effort aimed at channeling internal resources to develop, identify, and capture outstanding business opportunities available in the marketplace in the context of the firm's visions, missions, goals, and objectives; in short, it is about planning and execution. A strong competitive advantage for the firm is secured when superior internal capabilities match outstanding external conditions and prospects; this "internal strengths–external opportunities" fit is critical and must be sustained. Strategic management also involves the implementation and execution of the management's master game plan through a compendium of programs, budgets, and procedures. Last, strategic management requires performance evaluation and corrective actions. The reward for exceptional strategic planning and management is a superior and sustainable market position, strong revenue growth, robust profits and cash flows, continuous value creation, and above-average returns.

It is important to note that strategic management does not have to be a formal process; it can be somewhat informal, even chaotic and unstructured. Strategic management ideas first tend to germinate in the entrepreneur's mind, and over time these crystallize to become clear strategic goals. The strategic vision for the entrepreneurial firm is often refined at multiple junctures through informal discussions with employees, staff, managers, consultants, business partners, and other stakeholders. The discrepancy between how the entrepreneurial firm operates in the present and the strategic vision for the entrepreneurial firm in the future sets up a "strategic tension" which is subsequently converted over time into a "how-to" program. While written plans are always more powerful than strategic considerations captured in thought, entrepreneurs often carry their strategic visions in their mind for some time before "inking" them on paper. Of course, once entrepreneurs write their plans down, they are accountable for achieving them. Other stakeholders can also better align their actions against written plans.

Strategic management offers many benefits for entrepreneurial firms. Firms that embrace the strategic management process often have clearer long-term goals and are more acutely aware of what is of strategic importance to their venture. Firms engaging with strategic management considerations also tend to have a sharper focus and more business awareness. Entrepreneurs also become acutely conscious of changes in the firm's external environment as a result of strategic management practices, allowing them to make better tactical and strategic choices. Entrepreneurial firms with a strong strategic orientation also tend to develop back-up plans for their development; they have more robust and achievable contingency plans and are less surprised when unexpected events occur inside and outside of

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the firm. Last, a sharper strategic focus makes it relatively effortless for these firms to decline business opportunities that do not align well with their intended goals and visions. Entrepreneurs become much better at saying “no” to opportunities that are not along their desired growth path and development velocity.

Financial management

Financial management is a descriptive, analytical, and dynamic discipline that represents an amalgamation of the fields of accounting and economics. Financial management concerns the study of financial practices employed by managers when using financial and non-financial information to analyze, forecast, and allocate resources within the entrepreneurial firm. Financial management also involves financial decision making with respect to assessing and determining the impact of risk, evaluating and selecting investments, determining how much money is required and when, locating external sources of financing, and recommending the most optimal capital structure (i.e., debt-to-equity mix). Financial management requires efficient management and the proper allocation of the firm’s financial resources to accomplish goals and objectives. In short, it involves applying financial tools, obtaining capital, and cash flow management.

Financial management is based on using the appropriate systematic frameworks, models, and structures for financial analysis and decision making. At the center of financial management is the present value model, a simple framework that determines the value of assets, projects, or firms. Present value calculations are performed on the basis of internal cash flows. Strong financial analysis can easily assist in better decision making – and better decisions can enhance value. For example, managing working capital keeps the business alive and allows it to create value by raising capital efficiently, which, in turn, avoids unnecessary dilution to current shareholders. Employing robust financial management techniques also allows the firm to invest in cash-generative assets that can enhance the firm’s value.

Many of the benefits of financial management are similar to those accruing from participation in the strategic management process: better planning, clearer focus, better choices, more appreciation of risks, and so on. In addition, financial management provides a platform where various strategic scenarios can be tested “on paper” before they are implemented in reality. Financial management and analysis can illuminate areas of value creation and point to activities that may result in value destruction.

Entrepreneurship

Entrepreneurship is the process of converting ideas into business ventures in pursuit of opportunities available in the marketplace. Specifically, entrepreneurship is about generating a business idea (or relying on an existing one), developing it into an entrepreneurial venture, and overseeing its subsequent development. Entrepreneurship is not only about new business formation, but also the continual and systematic “migration” of the entrepreneurial venture through its subsequent developmental phases. Entrepreneurship also involves generating value and above-average returns to the entrepreneur and other investors and stakeholders who have supported the venture along the way. Entrepreneurship requires creativity in order to reform patterns of innovation, production, operation, promotion, and distribution. Resources must be aggregated (whether the entrepreneur currently possesses them or not) and assembled in a new and innovative manner in order to achieve higher productivity and

a higher yield. Inherent to the field of entrepreneurship is the acceptance of risks and failures in exchange for potentially extraordinary financial rewards. Time, effort, passion, and devotion are all prerequisites for a successful entrepreneurial venture.

Business owners perpetuate entrepreneurship. Entrepreneurial finance, value creation, and divestment create ample opportunities for future entrepreneurial engagement. Through the continual re-use of cashed-out proceeds by exiting entrepreneurs, the use of stock options by employees of public firms (which are converted into cash), the exodus of talented people from successful entrepreneurial firms or corporations, corporate spin-offs, or improved access to entrepreneurial finance, individuals become first-time entrepreneurs and existing entrepreneurs become second-time and serial entrepreneurs. Furthermore, over time, entrepreneurs may become investors themselves and eventually build a portfolio of entrepreneurial ventures. Such entrepreneurs are typically more cognizant when detecting, realizing, capturing, and navigating through new business opportunities. When business owners re-engage into entrepreneurship through subsequent business ventures, they create a “snowball” effect for business formation and create a culture of entrepreneurship. These continuous activities produce wealth creation and redistribution potential for a larger group of individuals.

Interdisciplinary combinations

Interdisciplinary connections are not a new academic phenomenon – academics have made interdisciplinary connections between strategy, entrepreneurship, and finance to define such business fields as strategic entrepreneurship and entrepreneurial finance (strategic financial management has not been formally defined). It is important to note that these interdisciplinary fusions are relatively recent and their definitions are still evolving. In the following paragraphs, we discuss these two-construct fusions and spotlight contemplative evolutions in these concepts. More importantly, we highlight that the blending of the two disciplines is incomplete from the value creation perspective. In other words, excluding one of these critical disciplines from our building blocks (i.e., strategic management, entrepreneurship, and financial management) would significantly compromise the value creation, measurement, enhancement, and realization process.

Entrepreneurial finance, one of the first conceptual fusions among the three disciplines, is a field that studies financial resource mobilization, resource allocation, risk moderation, optimization in financial contracting, value creation, and value monetization within the context of entrepreneurship. The concept recognizes that flourishing entrepreneurship relies on the meticulous administration and supervision of financial resources. Entrepreneurial finance deals with multiple issues such as how much capital to raise and when (this is one of the most challenging issues facing entrepreneurial firms), how to increase the chances of successfully raising capital, how to structure financial contracts, how to generate and increase value, and how to make exit or harvesting decisions. Appropriate financial decisions must be undertaken throughout the entrepreneurial firm’s life cycle; initially, the most critical issues are fundraising, cash optimization, and financial management. These decisions need to be made on the basis of the right financial tools, methods, and techniques. At the core of the entrepreneurial financial decision-making process is the ability of the entrepreneurial firm to attract capital. However, entrepreneurial finance is incomplete without the strategic management component. Entrepreneurial finance without proper strategic management results in a lack of deliberate and tactical long-term planning and implementation. Entrepreneurial finance lacking the strategic component is a discipline unable to develop a

sustainable and durable competitive advantage. A lack of strong strategic deliberations also minimizes the firm's chances of securing the necessary capital to progress the firm along its desired development trajectory. Poorly designed strategies do not attract funding from capital providers (i.e., venture capitalists, business angels, financial institutions, and so on).

There has also been development in the area of strategic entrepreneurship. This interdisciplinary fusion focuses on entrepreneurial creativity, dexterity, flexibility, and innovation in pursuit of a sustainable competitive advantage in the constantly evolving marketplace. Shifts in the external environment are embraced by entrepreneurs by virtue of their drive, passion, enthusiasm, resilience, commitment, and tolerance for risk. Strategic entrepreneurship is about internal organizational transformation relative to available external opportunities. These entrepreneurial transformations come from three strategic sources: revitalization (altering the manner in which the firm competes in the marketplace), internal rebirth (changing internal processes, procedures, and structures to re-assemble the firm's operations in new ways), or a redesign of the mode of operations (redesigning a business model according to a new paradigm or construct). Strategic entrepreneurship is a process of discovering opportunities and building a competitive advantage. In this respect, while short-term survival is critical to any young entrepreneurial business, the true focus of the entrepreneurial venture should be on long-term sustainability and durability – building the organization over an extended period of time. Again, in the case of strategic entrepreneurship, this orientation appears incomplete and compromised when we omit the field of financial management. In fact, there may be limited value creation opportunities for the firm without the financial management component, because every strategic decision has powerful financial implications which must be taken into account (the combination of strategy, entrepreneurship, and finance creates a natural decision-making feedback loop). Operating an entrepreneurial firm without an in-depth understanding of the financial consequences of strategic decisions would be abnormal and irrational: the entrepreneur would generate the idea, nurture it, convert it into a business, and pay attention to all strategic components of his or her business, but would be unable to convert strategic plans into reality due to limited capital or financial mismanagement. Without a proper financial management function, the entrepreneur may not know where to secure financing from or the optimal time to do so. Having obtained capital, the entrepreneur may not have sufficient enough expertise to employ it in an efficient manner. The entrepreneur may also experience problems with the day-to-day management of the entrepreneurial venture as the financial management function assures that the entrepreneurial firm operates economically. Last, since a significant part of financial management focuses on cash flow management, the entrepreneurial firm may experience problems related to liquidity which can ultimately threaten the very survival of the firm.

The last interdisciplinary field, strategic financial management, is composed of strategy and finance and has not yet been clearly defined by academics. We envisage that such a concept can be defined as a study of financial management in the context of the firm's long-term objectives. This field may represent an extension of financial management to include a more strategic long-term orientation for the entrepreneurial firm. In this case, the dual concept fails to take into account important components of entrepreneurial development: entrepreneurial drive, passion, enthusiasm, tolerance for failure, inherent acceptance of risk, etc. These entrepreneurial components need to be a part of the success formula for the entrepreneurial firm. A two-tier construct is comparable to a well-designed engine – but in order for it to run, it requires fuel, and the fuel is provided by entrepreneurship.

Strategic entrepreneurial finance

The fundamental building blocks of this book are represented in Figure 1.1. There are two key features represented in the graph. First and most obviously, the graph shows that strategic entrepreneurial finance represents a fusion of three disciplines: strategic management, financial management, and entrepreneurship. From an academic's point of view, this interdisciplinary blend reflects a natural evolution of scholarship to combine specific domains and paradigms of connected or more distant business disciplines; it also reflects the need to simultaneously examine business topics from different perspectives which may better encapsulate actual entrepreneurial practices, experiences, and behaviors. As we noted earlier, single disciplines or even dual concepts may not be sufficiently “deep” enough to clarify the breadth of specific entrepreneurial activities. The need to search for new interdisciplinary paradigms reflects the complexity, diversity, and velocity of change in the external environments surrounding an entrepreneurial firm's ecosystem. Second (and most importantly), the graph illuminates the central theme that rests at the intersection of the three disciplines – VALUE. Value is the way by which the three disciplines are harmonized, balanced, and equalized. It is on the basis of this concept that we are able to develop a value-based process composed of four key steps: value creation, measurement, enhancement, and realization (these steps are discussed in detail in Chapter 2).

Entrepreneurs instinctively accept that firms exist to create value and realize that value may come in different forms for the shareholders and stakeholders of the firm. For an entrepreneur looking to succeed and create value, entrepreneurial aptitude in financial management, strategic management, and entrepreneurship is necessary, as these are the necessary foundations of the value creation process. Even though expertise across these three disciplines may not be inherent to the entrepreneur's repertoire and skill set, the entrepreneur should be mindful that in order to create value, he or she must integrate, assemble, and master all of the necessary management skills. For the entrepreneur, the three disciplines do not represent discrete silos of knowledge, intelligence, and business practice, but rather exist as the complementary building blocks of a symbiotic entrepreneurial ecosystem designed to create value. Blending these disciplines is a natural instinct for most entrepreneurs as they intuitively recognize that entrepreneurial value creation is achieved

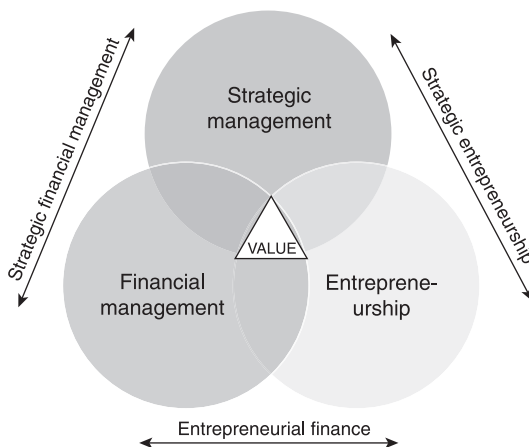


Figure 1.1 The key foundational components of strategic entrepreneurial finance and value as a unifying concept

through conceptual integration, amalgamation, and aggregation as opposed to separation and division. Most entrepreneurs also recognize that many of the developmental challenges faced by their firms are interconnected and interrelated (not separate and discrete). For example, it is difficult to separate the firm's financial performance from its competitive market position, its competitive stand in the market from the strategy it embraces, and its corporate governance structure from its ability to successfully raise external finance.

Whether we arrive at the field of strategic entrepreneurial finance through a conceptual extension of existing business fields or by combining the three disciplines outright through the means of a single unifying idea, it is important to note that financial considerations are especially important for the purposes of this book. Our goal is to illuminate how financial tools, models, methods, and mechanisms can be successfully applied to various domains of entrepreneurship and strategic management in order to create value. Entrepreneurial finance is especially important to newly created entrepreneurial firms looking to grow their operations to the next level of development.

Most importantly, in order for the entrepreneurial venture to create value, the entrepreneur does not have to correctly make all of the day-to-day decisions; instead, the entrepreneur has to make a majority of strategic decisions correctly. Entrepreneurs recognize that strategic choices profoundly affect value creation, and financial acumen is an inherent part of making the correct strategic decisions. Consequently, this book focuses on the most critical strategic decisions an entrepreneurial venture can make in order to become a long-term value generator. Strategic decisions in the framework of financial management are especially critical for entrepreneurial firms because there is no room for mistakes (mature firms or larger corporations can withstand some operational oversights, financial mismanagement, and strategic errors). It is also important to note that we do not concentrate on accounting transactions in this book, but rather on the most critical financial management concerns that impact value creation. In this respect, we distance ourselves from the traditional accounting model of entrepreneurial finance and focus on cash and cash flow management rather than on earnings. Simply put, accounting considerations are not viewed as strategic considerations. We also favor cash flow management at the expense of earnings.

One of the key considerations of strategic entrepreneurial finance is to ensure that the entrepreneurial firm migrates effectively from its early stages of development (i.e., from seed and start-up) to become a successful, medium-sized firm. In this respect, strategic entrepreneurial finance is about using the most appropriate financial tools, methods, and processes to make strategic decisions in the entrepreneurial setting to achieve this goal. Strategy-driven financial considerations in an entrepreneurial firm typically relate to proper financial analysis, financial forecasting and planning, capital budgeting, working capital management, real option evaluations, and so on.

Value in entrepreneurial firms: a unifying concept

Entrepreneurial firms exist to create value. The concept of value creation has evolved over time. In the industrial era, traditional scale-based manufacturing relied on tangible assets (which were regarded as the main sources of business value or business generators); the concept of value was derived on the basis of cost-led pricing. The simplest method to define value was to ensure that revenues exceeded the cost associated with all factors of production (i.e., expenses); the net result was profit.

Today, defining value is more complex. Value is multidimensional. It is not a strict financial measure of performance – it encompasses economic, social, and environmental

dimensions, as well. Value creation is not a one-off activity, but rather a continuous cycle of incremental improvements. While maintaining efficiently operating facilities continues to be important, the value creation process has shifted to encompass other important critical (often non-financial) components. Some entrepreneurial firms originate and build value on the basis of intellectual capital and innovation by relying on research and development, patents, software, and technology. Intellectual capital may also be reflected by unique internal processes, innovative business models, promising partnerships, tacit knowledge, and so on. While these elements of the entrepreneurial firm are seldom considered as value creators (and are rarely explicitly valued), they have a strong potential to translate into sustainable cash flows for the entrepreneurial firm.

Other entrepreneurial firms are successful generators of value because they take a basic (often non-technology-oriented) idea, identify a niche in the marketplace, and execute it to perfection. Entrepreneurs often have a superb “antenna” for identifying business prospects where strong value creation opportunities exist. Entrepreneurs may create value in industries where limited competition exists or where competitors are especially ineffective in serving their target audience.

Many entrepreneurial firms recognize that at the core of value creation is a superb organizational infrastructure. Value is often regarded as a robust measure of organizational performance and is set as the absolute priority for managers, employees, shareholders, and other stakeholders. Organizationally sound firms are outstanding creators of internal structures, systems, processes, and practices. They rely on tested financial approaches to segregate optimal projects from inefficient ones on the basis of basic financial concepts (i.e., present value calculation, net present value) and more advanced techniques (i.e., capital budgeting, real options, financial forecasting, cost of capital, financial policy, capital structure, and sensitivity analysis). At the center of this value creation are employees, who often exhibit an obsessive focus on customers and service. Value creation reflects the existence of talented, inspired, and dedicated employees.

Many (but not all) entrepreneurs instinctively recognize the importance of ascertaining value (through different valuation approaches) and confirming it on a regular basis. They also understand how value can be created and destroyed. Most importantly, they are keenly aware of their value drivers. Value generation is ultimately the only verifier of how well the entrepreneurial firm is performing. Value-focused entrepreneurs tend to make decisions based on research, competitive market intelligence, and feedback from customers; they also rely on basic but effective products. However, as noted above, it is the firm’s organizational architecture and internal workings that provide the firm with a competitive advantage that is difficult to replicate. This, in turn, results in value generation.

Of course, most successful entrepreneurs understand that they need to create value across a wide spectrum of business activities; they also recognize that they cannot define value creation too narrowly. Entrepreneurs must create value for customers, employees, and shareholders. Value, however, can mean different things to different stakeholders. For customers, value means delivering products and services that solve actual problems (rather than minor irritants). Generating and delivering a persuasive commercial proposition is unlikely to be accomplished without satisfied employees and shareholders. Value for employees is present when they are treated honestly, respectfully, and generously. Employees perform best when they are engaged in creative work, experimentation, design, and decision making. Financial and non-financial incentive and reward mechanisms also create value for employees (i.e., compensation, training and development, time, stock options, bonuses, and so on). When an organization operates with high employee morale, satisfaction, and contentment, superior

results are achieved by the firm. For shareholders, value means achieving consistent (preferably above-average) returns in order to assure continuous access to capital for the firm. Successful entrepreneurs instinctively recognize that the interests of these three groups are linked and interdependent. To summarize, the primary focus for the firm should always be on creating value for its customers – but this cannot be achieved unless the right employees are selected, developed, and rewarded and unless investors are receiving strong returns.

Understanding the firm's key value drivers is another key part of value creation. Entrepreneurs need to know where value comes from in a young venture and understand the strategic factors that build or erode value. Value creation also provides long-term agility for the firm.

Many entrepreneurial firms have transformed the value creation process, making it necessary to update the conceptual academic models and measurement methods associated with value creation. The transformation of the value creation process also requires an extension of the framework capturing value and its key drivers for entrepreneurial firms; hence, our analysis of value in the context of the three disciplines. Most of these “soft” activities are rarely acknowledged in accounting methods, although they can be captured in incremental cash flows.

The importance of cash flow for value creation

From the financial management perspective, the value of the firm is always determined by a willing buyer who believes that the firm is valuable and is willing to pay to own it. While the buyer's willingness to purchase the firm is sometimes grounded in the firm's past achievements, usually it is the firm's anticipated endeavors and future aspirations that attract the most interest. Specifically, a firm's value is driven by three interrelated components: cash flows, the timing of cash flows, and risks related to cash flows. As we will continuously note throughout this book, cash is what settles the firm's liabilities. Cash is also what the entrepreneurial firm receives for the sale of its products and services. In short, cash is king. Cash flows represent the movement of cash through the firm (either into or away from the firm). If an entrepreneurial firm anticipates generating strong cash flows, that gives the firm value.

It is important to stress the obvious but often forgotten point that generating revenue does not equate to cash inflows (firms sell goods on credit and no cash may change hands at the time of the actual transaction). Some costs may also not necessitate an immediate payment (purchases are often made on credit). If cash from revenue is not collected, it cannot convert into value creation for the firm (cash collection is an especially important financial management function for entrepreneurial firms). Of course, expenses are settled with cash. The higher the expected cash inflows and the lower the anticipated cash outflows, the more positive the impact of net cash flow (or free cash flow) on the value of the firm.

Free cash flows are not the only components that can affect the entrepreneurial firm's value; the timing of cash flows is also very important to value creation. Net cash inflows can arrive at the entrepreneurial firm at various times and intervals. Most entrepreneurial firms normally exhibit an intuitive preference to receive cash inflows sooner rather than later. If the firm receives cash sooner, it can direct the cash towards worthwhile projects or invest it into suitable investment opportunities – this enables the firm to generate value within a more immediate time horizon. Business logic and intuition also confirm that the firm will have a higher value if free cash flows grow and the timing between cash inflows and outflows expands; this serves as a formula for a healthy free cash flow.

Last, there is risk. Risk also affects value because the less certain the entrepreneurial firm is about its cash flows in the future, the more these cash flows will be discounted (hence, a lower value can be anticipated). A higher risk increases the probability that at least some of the anticipated cash flows are unlikely to materialize; this, in turn, denotes that the actual value of cash flows will be lower.

In this book, we define value and value creation in a variety of ways. It is important to note that our analysis of value is predominantly cash-flow-based rather than profit-oriented. In Chapter 8, we discuss the process of discovering the market value of the firm's equity through business valuation. We use two main valuation methods for this purpose: the discounted cash flow method (DCF) and the earnings before interest, taxes, depreciation, and amortization (EBITDA) multiples method (please note that while the EBITDA method is rooted in the income statement, EBITDA is often used as a proxy for internally generated cash flows). On the basis of these valuation techniques, we can determine what the entrepreneurial firm is likely to be worth. Of course, as observed earlier, the market – through the participation of willing buyers – ultimately determines the final price of the entrepreneurial firm (or any asset, for that matter). In Chapter 8, we also focus on the concept known as the economic value added method (EVA). The EVA method does not help to establish the firm's equity value; instead, it centers on incremental value generation and highlights whether the entrepreneurial firm creates or destroys value for its shareholders. Last, the concept of value creation is captured in Chapter 10, where we consider incremental value creation in the context of capital budgeting. Using a specific capital budgeting evaluation (called a net present value analysis, or NPV), we discover whether a particular project is likely to increase the firm's value.

The book's objectives and its structure

Numerous objectives guided the design of this book. First and most importantly, the book focuses on value and the four components of value creation (value creation, measurement, enhancement, and realization). As we noted previously, value creation is the single most important unifying idea behind the fusion of interdisciplinary concepts we draw from.

Second, since access to finance is one of the most challenging areas for entrepreneurial firms, the book aims to present a wide range of tools and techniques used in the financing of entrepreneurial firms. Among these modes of entrepreneurial finance, venture capital is perhaps the best known, understood, and researched. The attention dedicated to venture capital can be at least partially explained by its significant contribution to the development of some of the most successful and prominent entrepreneurial firms. That said, it can be argued that academic coverage of venture capital is disproportionate to the actual contribution it makes to entrepreneurial development (quantitatively, venture capital makes only a modest contribution to the overall supply of entrepreneurial finance). Consequently, a significant focus of our book is dedicated to other modes of entrepreneurial finance, such as “bootstrapping,” business angel financing, bank financing, and other, alternative means of financing (i.e., government assistance programs, corporate venturing, crowdfunding, and family financing). Even though academic literature on entrepreneurial finance has grown substantially over the last decade, these alternative modes of entrepreneurial finance are still relatively misunderstood and under-researched. Most notably, alternative modes of entrepreneurial finance have had a pronounced impact on business formation and entrepreneurial perpetuation. We view all modes of entrepreneurial finance as complementary rather than

competing. Each mode of finance has its place along the life cycle of the entrepreneurial firm, and all financing modes are intrinsically connected. Striking the right balance of academic coverage between venture capital and other modes of entrepreneurial finance is a unique feature of this book.

Third, the book aims to narrow the gap between different academic disciplines in the universe of academic investigation. We view strategic entrepreneurial finance as an interdisciplinary area of study, with input from many disciplines including finance, entrepreneurship, and strategic management (as the main components of the book) as well as human resources, business policy, economics, law, and other fields. Each discipline provides a unique and distinct contribution to the field. Moreover, strategic entrepreneurial finance is an applied field; it is not only a theoretical or empirical area of study (an applied component is reflected in our proposition). This inclusive approach is a unique attribute of this book.

Fourth, the book highlights a number of themes requiring “special attention” in entrepreneurial finance where conflicting academic evidence exists, research gaps stand, or where emerging fields are sprouting or beginning to crystallize. Examples of these areas include liquidity gaps, entrepreneurial succession, development of family firms, and entrepreneurial philanthropy.

Finally, our objective is to introduce a unique educational proposition. Although this book is predominantly directed at undergraduate students, graduate students are likely to find it satisfactory because of its significant research orientation. Our book appears to be different from other texts on at least five fronts. First, the book has a unique thematic focus centered on the value creation process. Many other books offer limited central themes. Second, the book aims to achieve a balance between different methods of entrepreneurial finance (such as venture capital, bank financing, business angels, and so on). We contend, in line with research evidence, that entrepreneurial firms can successfully develop while relying on their own financial resources and bootstrapping techniques (as opposed to external financial means) – albeit at a slower pace. Third, the book focuses on the financial and non-financial determinants of entrepreneurial success. Fourth, the book offers a unique framework for financial analysis (different from the traditional financial-ratio approach) based on a step-wise approach (liquidity, cash flow, profitability, and growth). Our predominant focus in financial analysis is on cash flow. We also focus on relatively standard financial techniques as well as new techniques that have practical applications (many of which are highly intuitive). Finally, the book draws more heavily on the concepts of strategic management, entrepreneurship, and financial decision making and ties processes in these areas to the performance of the entrepreneurial venture.

The structure of the book

The book comprises five major parts (Introduction to strategic entrepreneurial finance, Value creation, Value measurement, Value enhancement, and Value realization), 14 chapters, and the preface. For a comprehensive summary of key concepts and topics covered in each chapter and how these concepts intersect with financial management, strategic management, and entrepreneurship, please refer to Table 1.1.

Part I of the book comprises two chapters. The first chapter provides a broad definition of the field of strategic entrepreneurial finance and an overview of its foundational concepts. It also focuses on value and value creation as a unifying concept of the book. The second chapter provides an overview of the value creation process in entrepreneurial firms by

Table 1.1 A summary of the book's major components as they relate to financial management, strategic management, and entrepreneurship

Major part of the book	Chapter	Key concepts	Financial management	Strategic management	Entrepreneurship
Part I Introduction	1	Strategic entrepreneurial finance	x	x	x
		Value and value creation	x	x	x
		Cash flow and value	x		
	2	C-MER value creation model	x	x	x
		Components of the C-MER model	x	x	x
		Value creation and types of entrepreneurs			x
Part II Value creation	3	Determinants of value creation	x	x	x
		Management		x	x
		Mode of operations		x	x
		Margins	x		
		Money management	x		x
		Market		x	x
		Market share		x	x
	4	Financial forecasts (5-step model)	x		
		Financial forecasts and capital providers	x		
		Introduction to various sources of financing	x		x
	5	Venture capital financing	x		x
		Overview of venture capital	x		x
		Financial contracting	x		
	6	Modes of entrepreneurial finance	x		x
		Entrepreneurial firms and liquidity gaps			x
		Bootstrapping	x		x
		Business angels			x
		Bank financing	x		x
		Alternative sources of financing	x		x

(Continued)

(Continued)

Table 1.1 (Continued)

<i>Major part of the book</i>	<i>Chapter</i>	<i>Key concepts</i>	<i>Financial management</i>	<i>Strategic management</i>	<i>Entrepreneurship</i>
Part III Value measurement	7	Financial analysis	x		x
		Cash-flow-based financial ratios	x		
	8	Business valuation	x	x	
		Discounted cash flow methods	x		
		Multiples methods	x		
Part IV Value enhancement	9	Intellectual property		x	x
		Valuation of intellectual property	x	x	
	10	Time value of money	x		
		Capital budgeting	x		
		Strategic choices and real options	x	x	
	11	Methods of entrepreneurial growth		x	x
		Preparation for growth		x	x
		Acquisitions	x	x	
		Differential analysis	x		
Part V Value realization	12	Corporate governance	x	x	x
		Social responsibility		x	
	13	Methods of value realization	x		x
		Trade sale			x
	14	Initial public offering (IPO)	x		
		Entrepreneurial succession		x	x
		Entrepreneurial perpetuation			x
		Entrepreneurial philanthropy			x

specifically discussing the C-MER model of value creation. This value-based process is defined as value creation, measurement, enhancement, and realization – a natural progression of successful entrepreneurial firms.

Part II of the book (four chapters) focuses on the concept of value creation and the financial and non-financial components, processes, and mechanisms that contribute to generating value in entrepreneurial firms. The first chapter in this section (Chapter 3) illustrates the most important financial and non-financial components of value creation. The key non-financial aspects of value creation include the market and its growth rates, the founding entrepreneur

and the importance of building a complete management team, the competitive dynamics in the marketplace as captured by market share, and the choice of business model for an entrepreneurial venture (note that discussion around the non-financial components of value creation is generally limited in existing entrepreneurial finance literature). The key financial components of value creation include profitability (i.e., margins) and money management (i.e., cash flow management). Chapter 4 discusses the mechanics of preparing financial projections. Financial projections serve as the cornerstone for securing external capital, whether from venture capital, bank financing, or other sources. Chapter 4 also discusses the process of preparing financial forecasts for different types of capital providers, as different capital providers vary in their approach to financial analysis and have unique decision-making processes. As the ability to prepare financial forecasts is critical to obtaining external finance, this is one of the most important discussions in the book. Chapter 5 specifically focuses on venture capital, highlighting the importance of venture capital for entrepreneurial firms and its most critical hands-on components, corporate governance expectations, and exit orientations. In addition to discussing the advantages and disadvantages of venture capital, Chapter 5 focuses on the complexities of the venture capital investment process, venture capital negotiations, and financial contracting. Chapter 6 centers on other major modes of entrepreneurial finance such as bootstrapping, angel investing, debt financing, and unique, alternative types of entrepreneurial finance such as government assistance programs and crowdfunding. This chapter highlights that a firm's desire to raise external finance depends on its level of development, profitability, revenue growth, and trajectory. While entrepreneurial firms in the later stages of their development may take advantage of a wider array of financing alternatives, the financing choices available for younger firms are more limited. Some financing alternatives are effective at closing liquidity gaps for certain types of entrepreneurial firms.

Part III of the book is dedicated to value measurement and concentrates on areas related to financial analysis, business valuation, and monitoring the non-tangible aspects of value creation (such as intellectual property, innovation, invention, and brand name). It is important to note that value is not only about determining the absolute value of the entrepreneurial firm – the vital signs, key performance indicators, and value drivers of the business must also be understood. For every entrepreneurial firm, there are usually a handful of value metrics that, if achieved, will contribute to the strong development of the venture and the value creation process; such metrics are referred to as the “entrepreneurial dashboard.” Chapter 7 provides a unique step-by-step framework for financial analysis of entrepreneurial firms focusing on specific financial measures rather than a broad-based approach to financial analysis and investigation. The proposed analysis concentrates on liquidity, cash generating ability, profitability, and growth dynamics (in terms of revenue and profits). These financial aspects are inherently connected with increased business valuation, which is discussed in the following chapter. The key feature of this analysis is that many of the ratios suggested for the analysis are based on cash flow. Chapter 8 focuses on business valuation. While the chapter provides a broad-based overview of different business valuation methods, it focuses predominantly on the most common approaches to valuation, namely the discounted cash flow method (DCF) and the multiples method (based on EBITDA multiples). Chapter 8 explains how value can be measured in absolute terms (i.e., how much the entrepreneurial firm is actually worth) and incremental terms (i.e., how much value the entrepreneurial firm generates as a result of taking on a specific project). The last chapter of this section (Chapter 9) focuses on describing intellectual property and determining the importance and value of the non-tangible aspects of the firm's operations (i.e., innovation, intellectual property, inventions, and brand names).

Part IV of the book focuses on value enhancement and comprises three chapters focusing on the financial tools used to enhance the value of entrepreneurial firms, the method of growth for entrepreneurial firms (internal means versus external modes), and corporate governance and social responsibility as important contributors of value. Chapter 10 outlines the key financial tools that are critical to the creation of value in entrepreneurial firms; these tools should be well understood and readily used by entrepreneurs. The specific tools discussed include present value calculations, capital budgeting, and real options in the context of strategic alternatives. This chapter is critical because strategic choices affect value creation. Chapter 11 discusses the key modes of entrepreneurial growth. How the entrepreneurial firm develops and grows is important. Entrepreneurial firms can embrace a vast range of different growth strategies such as mergers, acquisitions, buyouts, franchising, joint ventures, and so on. Our main focus in Chapter 11 is on comparing internal growth versus growth through acquisitions; this evaluation is performed in the context of recent research evidence and practice. In the last chapter of this section (Chapter 12), we discuss the importance of instilling appropriate corporate governance practices and the evolution of corporate governance in entrepreneurial firms over time. We also discuss the possible approaches an entrepreneur can take towards social responsibility (three specific approaches are offered). As suggested by research evidence, corporate governance and social responsibility can be important drivers of value creation in entrepreneurial firms.

In the final part of the book (Part V), the main focus of discussion is on entrepreneurial divestment, succession, and perpetuation. We also highlight an increasingly important topic in strategic entrepreneurial finance – entrepreneurial philanthropy. Chapter 13 provides an analysis of the alternative avenues by which the value of an entrepreneurial venture can be monetized. Methods of divestment for entrepreneurial firms include trade sales, initial public offerings (IPOs), and other means of value realization such as liquidation, orderly wind-ups, and buyouts. The last section of the book (Chapter 14) discusses issues related to entrepreneurial succession in the context of family- and non-family-held firms. We also highlight the different modes of entrepreneurial perpetuation and provide a systematic model for entrepreneurial philanthropy.

Questions to consider

1. Describe the connections between financial management, strategic management, and entrepreneurship. Why does it make sense to consider these disciplines jointly rather than separately?
2. Define the field of strategic entrepreneurial finance. How does it differ from other fields?
3. How do you define the concept of value creation?
4. What are the financial and non-financial determinants of value creation?
5. Discuss the link between cash flows and value creation. What roles do timing and risk play in the value creation process?

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2 The value creation model for entrepreneurial firms

Chapter objectives

After reading this chapter, you should be able to:

- understand the importance of the processes used in various business disciplines;
- describe the four components of the C-MER value creation model;
- illustrate the major themes within each component of the C-MER model;
- discuss differences in value creation for different types of entrepreneurs.

Business processes

Business objectives are commonly achieved by following a well-defined practice using a step-by-step approach. A business process may be defined as a collection of interrelated tasks established to accomplish a specific organizational objective. It is a set of activities that are organized in time and space, and this process is continuous, logical, and natural. Business processes are usually represented in the form of a diagram or flowchart and composed of a number of clearly defined action-oriented components. Each component of the business process can often be divided into specific business sub-processes and decisions. Some business processes are clearly observable while others may be invisible, silent, and intangible.

Clearly defined business processes may bring many advantages to an entrepreneurial firm. Business processes provide a step-by-step, sequential, and systematic methodology to achieve specific business objectives. Business processes also provide employees, managers, and shareholders with a sense of direction and guidance with respect to their immediate tasks and more distant activities. Some processes serve as useful reference points that can not only be followed by experienced executives, but also by novice managers; they provide clarity with respect to organizational emphasis and managerial actions. Business processes also divide more complex business problems into visibly delineated collections of tasks, which are then structured differently than those found in traditional organizational structures and hierarchies. In this respect, business processes often break away from traditional organizational structures which are organized around functional departments. Some business processes may encourage the development of invisible, informal, and tacit linkages in the business's organizational chart that typically extend across functional activities.

Business processes do not have to be fixed. The best business processes are often flexible, adjustable, and adaptable within a desired framework of business objectives. Moreover, business processes do not have to be linear, where one task is followed by another and tasks are performed only once; instead, they can overlap. Business processes may also be circular,

implying that certain activities are reiterated a number of times until the desired business outcomes are achieved.

Financial management, strategic management, and entrepreneurship processes

There have been multiple processes developed across various disciplines in business. Most business disciplines (such as finance, economics, human resources, management, accounting, international business, and so on) rely on a wide range of processes, procedures, methods, and mechanisms. Since in our book we focus on the conceptual amalgamation of financial management, strategic management, and entrepreneurship, we will here briefly discuss the step-by-step processes commonly associated with these foundational disciplines (see Figure 2.1).

It is useful to note that the financial management, strategic management, and entrepreneurship processes have at least two similarities. First, these processes normally begin with the application of a certain analytical framework (i.e., due diligence, screening, examination, etc.); later on, actions are taken, often near the end of the process. Second, these processes generally rely on a feedback loop. If the desired results are not achieved, the entrepreneurial firm is expected to go back to the beginning of the process and effectively start it all over again. However, this valuable feedback may not arrive in a timely manner, as it takes time for the process to go from beginning to end. The architectural construct of many of these processes can be described as “READY → AIM → FIRE.” Although the concept may appear logical and coherent, it has many shortcomings. The most fundamental deficiency of this approach is that the entrepreneurial firm may be stuck for a long period of time in the stages of analysis, examination, and evaluation without actually taking any actions or undertaking any activities deemed untimely from the competitive point of view. Because of this approach, entrepreneurs often state that the most idea-rich place is the graveyard because

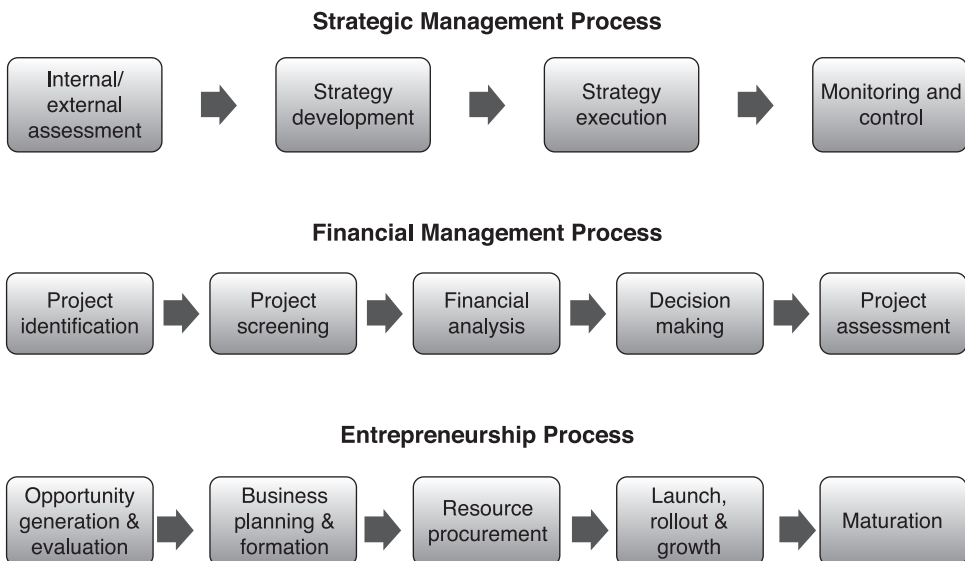


Figure 2.1 Examples of different business processes (financial management, strategic management, and entrepreneurship)

many entrepreneurs take their business ideas to the grave and never attempt to realize them; they are often paralyzed in the analytical stage of examining the feasibility of a specific business idea. As feedback comes late in the process, a timely adjustment of entrepreneurial activities is not possible (note that timely adjustments, modifications, and adaptations of products, services, and processes are the most fundamental steps in achieving entrepreneurial success). In comparison, the proposed value creation process is structured around the “READY → FIRE → AIM” paradigm. During the value creation process, there is a significant amount of preparation and analysis undertaken, and entrepreneurial activities and actions are integral parts of virtually every single step in the process, from beginning to end. Most importantly, the circular feedback loop does not connect the last step of the value creation process with the first one; the most important feedback ring is included in the middle of the process, between the measurement and enhancement steps. Value creation relies on the timely adjustment of entrepreneurial activities and actions rather than on perfecting the entrepreneur’s approach to business formation.

There are four steps to the strategic management process (see Figure 2.1). The first step involves external and internal analysis. Environmental scanning normally entails monitoring, evaluating, and disseminating information about the relevant environmental forces (i.e., economic, socio-cultural, political, legal, technological) to individuals in the entrepreneurial firm. External analysis focuses on two fundamental questions with respect to the environment: how complex is the industry and how fast is it changing? Environmental scanning also involves determining whether a specific industry is fragmented or consolidated and how fast it grows. Internal analysis involves understanding the critical strengths and significant weaknesses of the organization. The key question to be asked throughout the internal scanning process is whether or not a sustainable competitive advantage has been achieved; this can be based on a mix of competencies, skills, processes, access to resources, procedures, assets, and so on. Another aspect of internal examination is the value-chain analysis, which involves breaking organizational activities into distinct elements and examining what resources the firm has, how to convert them into tangible assets, how to maximize the profit potential of each product or service, and how to close resource gaps. The second step in the strategic management process involves strategy development; this is the process of engaging in long-term planning and forecasting in the context of the firm’s strengths and the opportunities available in the marketplace. Of course, the best results are achieved when the firm’s internal strengths are well matched with robust market opportunities – this is referred to as a strategic fit. The long-term planning process involves determining how the entrepreneurial firm should compete in the marketplace and what strategies and tactics it can effectively employ. Strategy development also involves deciding upon the entrepreneurial firm’s orientation towards growth (the most predominant directional strategy for most entrepreneurial firms). Many potential alternatives exist on the strategic directional growth map, with the most basic strategies relating to concentration or diversification. There are also multiple mechanisms that allow firms to convert strategies into actions, such as mergers, acquisitions, alliances, joint ventures, etc. Firms must also decide how best to deal with a portfolio of products (or firms that comprise the entrepreneurial portfolio of ventures) and how different parts of their organization can effectively share resources (or combine them into synergies in order to achieve optimal value creation). Of course, the most important objective of strategy is to create a sustainable competitive advantage. Last, strategy development requires the functional departments in the entrepreneurial firm to co-operate with each other in the context of a predetermined competitive strategy. The third step of the strategic management process is predominantly action-oriented and is referred to as strategy execution. Strategy

execution is a process through which strategies are converted into actions with the use of detailed implementation tools such as budgets, programs, procedures, policies, processes, and mechanisms. A successful execution is often dependent upon the people who carry out the strategic plan – this means attention must be paid to staffing, training, directing, and monitoring employees, managing workplace culture, and succession planning. The fourth and final step of the strategic management process focuses on monitoring and control. Throughout this process, the entrepreneurial firm ensures that it is achieving its mission, goals, and objectives by looking at its key success factors, performance indicators, and value drivers (these components are normally part of the firm's internal reporting system). This final step can be accomplished by monitoring certain measures or conducting a more comprehensive review of the firm in the form of a strategic audit. This step is critical, especially for entrepreneurial ventures that have been unable to achieve their desired success. The monitoring and control function effectively serves as a trigger point to revisit all steps of the strategic management process and assess all of its individual components.

The financial management process normally consists of five steps: project identification, project screening, financial analysis, decision making, and project assessment (also see Figure 2.1). The first step in this process is identifying suitable projects. In order to develop projects, entrepreneurial firms normally rely upon a combination of internal ideas, knowledge, and know-how as well as external stimuli (i.e., customers, market shifts, competitors' actions, and so on). If suitable or attractive projects are not forthcoming from within the organization, the entrepreneurial firm may seek external assistance from consulting firms, independent advisors, business partners, and so on. Most entrepreneurial firms – being creative, innovative, and resourceful – are capable of generating projects that go beyond the actual financial and human resources available at their disposal. The next step in the financial management process involves project screening. Screening is the preliminary appraisal of the most critical components thought to drive the commercial attractiveness of the project. In Chapter 3, we outline the key determinants of entrepreneurial success (i.e., the attractiveness of the market, the management that is expected to lead the project, the market share potential of the new project, the business construct that the new project is expected to operate under, etc.). The parameters outlined in Chapter 3 are normally used to estimate the commercial success of a new project. If the project successfully passes through the preliminary screening stage, the entrepreneurial firm can perform a more detailed examination in the form of financial analysis. Financial analysis is performed on a “stand-alone” basis in order to separate the project out from the overarching entrepreneurial venture. Analysis is usually performed through the use of capital budgeting techniques (i.e., net present value, payback period, internal rate of return, etc.). As part of the capital budgeting analysis, there is a detailed examination of revenue growth potential, earnings before interest, taxes, depreciation, and amortization (EBITDA) or EBIT margins, liquidity, and cash flow. The entrepreneurial firm also focuses on other measures specific to the industry in which it operates. Financial analysis is also performed in the context of the entire entrepreneurial venture so as to outline how the new project is likely to fit within the firm's existing operations. Opportunities for operating and financial synergies are also investigated. Operating synergies can result in economies of scale (increased production efficiency), significant market pricing power (ability to adjust prices), consolidation of functional areas (reduced cost), and more robust growth in new or existing markets (reliance on distribution networks and brand recognition). Financial synergies may result in reduced cost of capital and tax benefits (i.e., the new project may initially generate losses, which can reduce the taxable income of the entrepreneurial firm). Financial synergies can also result from combining the potentially

lucrative, high-return projects with the excess cash resources generated by other projects in the entrepreneurial firm. Financial analysis inevitably culminates with decision making with respect to a single project or various projects (financial analysis allows firms to rank projects in terms of revenue potential, profitability, commercial attractiveness, and so on). By this point in the financial management process, the entrepreneurial firm understands how much value the contemplated project or projects are expected to generate. Last, there is a post-implementation project assessment. This stage is often regarded as the most neglected part of the financial management process. Learning from project-related challenges, mistakes, and rewards can prove to be invaluable for an entrepreneurial firm.

The entrepreneurial process normally consists of five steps: opportunity generation and evaluation; business planning and formation; resource procurement; launch, rollout, and growth; and maturity (see Figure 2.1 for illustration). Many of the steps in this process occur sequentially, although on occasion they can proceed in an overlapping or even simultaneous manner. Every entrepreneurial venture begins with a thought, idea, or vision. These ideas or visions often result from the entrepreneur's attentiveness toward consumer needs. An entrepreneur must clearly identify a market need and decide upon the product or service offering to fulfill it. Entrepreneurs also have to understand why a specific problem in the marketplace exists and why it has not yet been addressed by other market participants. Entrepreneurs can participate in existing markets or discover new markets by offering new products or alternative uses for existing products. Entrepreneurs must also consider the key advantages of their products over those offered by the competition, and whether such competitive advantages are sustainable. Competitive advantages can come from a variety of different sources: a unique business model, a distinctive business architecture, key relationships and partnerships, a superior management team, an innovative commercial offering, technological advantages, intellectual property, patents, and so on. Once the opportunity has been correctly identified, other steps have to occur. Through evaluation or screening, entrepreneurs effectively test-drive their ideas through research, market estimates, potential customer interviews, or offering new products to consumers (even if they are not yet perfected); these activities – collectively referred to as a feasibility study, opportunity analysis, or an opportunity assessment plan – are aimed at confirming the viability of the entrepreneurial undertaking. The analysis also considers whether the business opportunity is a natural fit with the entrepreneur's personal make up, traits, and characteristics. The most fundamental question at this stage is, "Is the opportunity worth investing into?" If the feasibility study confirms a strong market potential, the entrepreneur needs to determine the extent to which he or she will be able to procure the necessary resources to form the entrepreneurial venture and endow it with the appropriate resources. The second step of the entrepreneurial process is business planning and formation. In this stage of the process, ideas, visions, and objectives are converted into an actual business plan through the development of competitive strategies and resource acquisition policies. When the planning phase is complete, the necessary (but often mundane) step of deciding upon the actual legal form of business organization for the entrepreneurial venture must be made. There is a wide range of organizational forms to choose from, ranging from proprietorship to a more corporate structure. The various forms of legal business organization differ with respect to their foundational capital requirements, taxes, level of personal liability, and so on (we discuss legal forms of business organization in more detail in Chapter 12). The third step in the entrepreneurial process is resource procurement. For some entrepreneurs, this step is inherently connected with business planning and formation, as entrepreneurs often lay the foundation for building their management team early on in the entrepreneurial process. The required resources are

financial, human, technological, production-oriented, etc. In the fourth step of the entrepreneurial process, execution takes priority over planning. The process of executing a business idea includes a number of actions such as marketing, business generation, sales, operations management, budgeting, and forecasting. The immediate objective for most newly created entrepreneurial firms is to prove the real-life validity of their business model. This confirmation is critical since it establishes the foundation for further entrepreneurial development. If the business model is validated and the process goes smoothly, the entrepreneur can move to extend the proven business model and scale it up to the desired level. If problems arise with the business model, the entrepreneur will need to rethink the business construct. In any case, most entrepreneurial firms eventually figure out their most optimal business architecture and delivery model as they make the transition to the growth phase. Unfortunately, some firms may run out of financial resources along the way and their entrepreneurial ventures end prematurely; others may not reach their full potential or desired level of success. The fifth step in the entrepreneurial process is maturation. This is the phase in the entrepreneurial firm's development where revenues, profits, and cash flows begin to level off and reach their natural plateaus.

The value creation model

The value creation process consists of specific steps that can be followed by the entrepreneur. The value creation model proposed here transcends the individual processes enshrined in strategic management, financial management, and entrepreneurship and consists of four major steps: value creation, value measurement, value enhancement, and value realization. We refer to this specific value creation approach as the C-MER model.

As Figure 2.2 illustrates, the C-MER model is not a linear concept; a feedback loop exists between the value measurement and value enhancement stages. The “value measure-and-enhance” ring illustrates that value measurement and enhancement are interrelated and interlocking components of the C-MER approach. This loop also highlights value addition throughout the process. Throughout the life of the entrepreneurial venture, value measurement and enhancement may occur multiple times. These components are related in such a way that one immediately impacts the other one. Value enhancement efforts often prompt the entrepreneur to inquire as to how much value has been created and added as well as what the

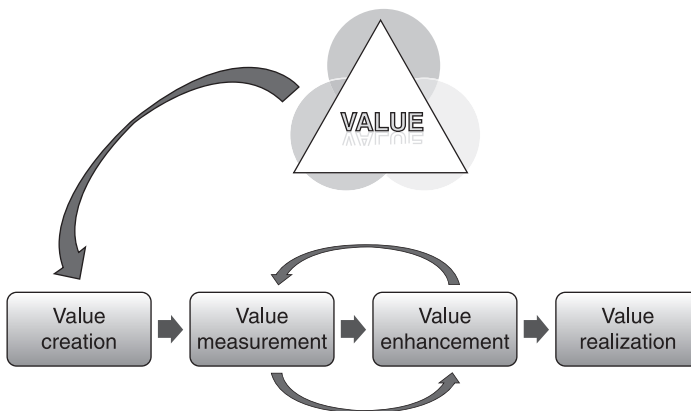


Figure 2.2 The C-MER model of value creation

entrepreneurial business is actually worth. Focusing on the right sources and drivers of value, optimizing the efficiency of the entrepreneurial venture, and reaching operational and financial milestones enable an entrepreneur to continue along a positive development path or make corrective actions in order to build value. This measurement-and-enhancement loop is the self-propelling engine of the entrepreneurial value creation process.

It is important to state upfront that we have deliberately placed value measurement ahead of value enhancement in the C-MER model. While this may not seem immediately intuitive, there are at least four reasons for selecting this sequence of steps. First and most importantly, in order to be successful, an entrepreneur has to know the most critical vital signs of his or her business and the key sources and drivers of value creation for the venture. Moreover, the entrepreneur has to be mindful that every business decision he or she makes affects value (be it in a minor or major manner). Of course, it is important that the entrepreneur focuses on the right value drivers. The value measurement phase of the process is not going to be useful if the entrepreneur is focused on suboptimal or incorrect value drivers. Furthermore, the entrepreneur must become keenly aware of these value drivers sooner in the entrepreneurial process rather than later. Simply put, the entrepreneur has to understand what key value metrics to monitor and why achieving them is important to the value creation process. While some value creation indicators and measures are straightforward or even generic (i.e., financial ratios), many of them are directly related to the specific nature and characteristics of the entrepreneurial venture and vary from business to business. In a marketing firm, for example, the key value drivers can relate to profitability per customer. In the case of a restaurant, the key metrics may include average price and “turns per table.” In the radio business, key value markers relate to listenership data. In the new technology and software sector, key value indicators include the number of new systems installed, the deal-closing cycle, and backlog.

The key value drivers in the entrepreneurial firm can be thought of as gauges on the entrepreneurial vehicle’s dashboard (standard gauges in an automobile dashboard include the odometer, the fuel gauge, the temperature gauge, rpm’s, and so on). Most vehicles are equipped with only a select few gauges on their dashboard, but the ones that are built into the dashboard are critically important for the vehicle’s (and the driver’s) safety, efficiency, and long-term performance. In effect, each entrepreneurial firm is a unique vehicle with its own instrumentation; an entrepreneur must understand the most optimal instrumentation for the dashboard. It is only in the context of these key value drivers that the entrepreneur can understand whether he or she is creating value, destroying value, or staying motionless within the value creation process. Knowing the appropriate value drivers will allow the entrepreneur to ascertain whether or not value has been created quickly, efficiently, and often effortlessly. Once the appropriate value drivers have become the “bread-and-butter” of an entrepreneurial firm’s operations, establishing the actual equity value of the entrepreneurial firm becomes relatively straightforward and a natural extension of the value creation process. It is important to note that the key value drivers (and the instrumentation on the entrepreneurial dashboard) are not static and may change over time. The instrumentation featured over time on the dashboard should reflect the entrepreneurial firm’s evolution through the different stages of its life cycle, changes to its external environment, market and operational risks, and the firm’s capital needs.

Second, understanding the key value drivers and the absolute value of the business (i.e., how much the venture is actually worth) early on in the firm’s development can establish a useful reference point for the entrepreneur’s future actions. This process is comparable to “checking the temperature” of the entrepreneurial venture to see whether it is falling,

declining, or static. As previously noted, value measurement is an important input component for value enhancement activities such as strategic considerations, financial forecasting, and so on.

Third, measuring value is important for many entrepreneurs because achieving certain strategic milestones (whether directly related to business valuation or indirectly influencing the firm's equity value) impacts decision making. For example, an entrepreneur may consider his or her business mission, goals, or aspirations to be fulfilled if the business reaches a specific level of revenue, profit, or even cash flow. Other entrepreneurs may wish to grow their business in order to achieve a certain level of valuation and trigger the disposal of the venture. It is also not uncommon for entrepreneurs to verbalize that they will retire or seek to decrease their exposure to the business should the venture reach a certain level of value. In other instances, attaining certain financial or operational milestones or value targets may prompt the entrepreneur to pursue other business opportunities. Other entrepreneurs will initiate the process of entrepreneurial succession after certain goals have been met. No matter what the personal or business circumstances are for the entrepreneur, knowing, understanding, embracing, and using the key vital signs and value drivers of the venture is an important part of the entrepreneurial decision-making process.

Fourth, value creation is becoming more widely recognized as a better management goal than revenues or earnings. In this respect, value measurement becomes a central component of value creation – only through value measurement can the entrepreneur identify how the venture is performing along the desired value creation trajectory.

Value creation

The value creation model proposed in this book is based on six distinguishing business components: market size and growth rates; the management team and the founding entrepreneur; market share and competitive dynamics; the mode of operations (business model); money management (cash flow); and margins (profitability). These value-contributing factors can be viewed as internal or external. The internal-external distinction is important because some elements of value creation are more driven by the entrepreneurial venture, while others are shaped by the entrepreneurial firm's external environment. In the sections that follow, we predominantly highlight the importance of market and management among the six determinants of entrepreneurial success and value creation. Although there has been significant debate among academics and practitioners about distinguishing the relative importance of key success factors and value generators, the majority of academics and practitioners agree that the management and the market are the top considerations. The other components of value creation are discussed in more detail in Chapter 3.

The “right” business approach for any entrepreneurial firm always begins with identifying unmet demand, solving the “real” problems of customers (rather than removing small irritants), correcting market imperfections where existing competitors are unable to meet customer expectations, and developing new market segments. Business opportunities in the marketplace are either temporary (i.e., a window of opportunity which lasts for a short period of time) or permanent (i.e., a market niche that is presumed to exist indefinitely). Market conditions are central to entrepreneurial analysis and decision making. Market risk should be regarded as the entrepreneurial firm's worst enemy, since entrepreneurial firms may not be able to do anything about the market conditions, the market's size, growth rates, customer requirements, and so on. While a small group of entrepreneurial firms owe their market success to a superb idea, the vast majority succeed because they have extraordinarily

executed an ordinary idea. Entrepreneurs often stumble across potential opportunities unexpectedly by skillfully observing the marketplace in which they are operating. The initial business ideas or products of many successful entrepreneurial firms have in many cases failed; in fact, an initial product or service failure is often regarded as a predictor of long-term entrepreneurial success. Resilience, persistence, and experimentation are the signatures of successful firms.

Ideas pertaining to the right markets or industries to pursue, what products and services to offer, and how to craft a winning competitive strategy in the marketplace come from people. The presence of the right people in the entrepreneurial firm is second only to market considerations as the most important variable for the entrepreneurial venture to succeed and create value. Successful firms are rarely built around a single visionary leader; instead, most entrepreneurial firms benefit from the combined talents of a dedicated management team. An entrepreneurial firm built on a “genius paradigm” or “solo entrepreneur structure” rarely achieves its desired long-term success and value creation potential. The most successful entrepreneurial firms develop a lasting and enduring organization around a single unifying idea or concept.

There are four other components relevant to entrepreneurial success and value creation. First, there is market share, which captures the essence of competition in the marketplace. Market share illuminates the performance of the entrepreneurial firm relative to other competitors and defines the percentage of the total market that is owned by the firm’s specific product or service. Second, there is the right mode of operations or the business model. A business model effectively represents the framework that the firm employs to conduct its business. A strong business model often provides a competitive advantage for the firm. Although the right business model can enhance entrepreneurial value creation, a suboptimal or inefficient business model can damage the entrepreneurial firm’s ability to compete or even destroy the business. A third component of entrepreneurial success and value creation is the cash flow generated by the entrepreneurial firm. Strong cash flows are important to survival, growth, and value generation. Cash flows are critical components in the discounted cash flow valuation method, which directly determines the value of the entrepreneurial firm. Of course, the objective of most entrepreneurial firms is to develop repeatable and growing cash flows; this is the hallmark of any successful entrepreneurial firm. Fourth, the entrepreneurial firm focuses on profitability, which refers to profit margins (profits divided by revenue). For this analysis, we look at the most critical measures of profitability such as EBITDA and EBIT while mostly ignoring profit measures (i.e., gross profit, net profit). Net profit, which may be important in deciding the level of dividends, is a less central point of focus in profitability analysis.

Many entrepreneurial firms struggle with securing access to finance. These situations are typically the result of supply-side challenges and demand-side problems. In terms of supply of capital, capital limitations come from actual shortages in the marketplace where private sector participants are effectively “hoarding” capital and are unwilling to extend it to entrepreneurial firms (this may be due to high perceived risks, the entrepreneurial sector not being a strategic area of focus, or the bank’s unfamiliarity with the sector). Poor access to finance may also result from instances in which entrepreneurial firms are unable to connect with the “right” capital providers (this can result from “asymmetric information” or for “moral hazard” reasons). Last, entrepreneurial firms may not actually warrant financing. Firms may not meet the financing criteria related to profitability, liquidity, and growth potential as set by capital providers. On the other hand, some entrepreneurial firms may not be “investment-ready”; reasons for this may include a lack of business plan, an incomplete management team, poor presentation skills, and so on.

No matter what avenue the entrepreneurial firm ultimately uses to secure financing, the fundraising process cannot be completed unless the firm prepares a set of financial projections. Financial projections represent an assessment of the firm's fortunes moving forward. Financial forecasts are an important tool for entrepreneurial firms for a variety of reasons. Most importantly, they provide the basis on which a vision for the firm can be developed moving forward. The mere act of preparing financial forecasts forces the entrepreneurial firm to develop its market and competitive strategy, focus on product pricing considerations, understand what resources are needed to fulfill its market and revenue objectives, understand its capital requirements, and consider various financing alternatives.

Entrepreneurial firms can generate capital either internally or externally. The desire to raise a specific form of capital depends on the entrepreneurial firm's level of development, profitability, revenue, anticipated growth trajectory, market share, risk tolerance, industry, and strategic planning. While entrepreneurial firms in the later stages of their development can take advantage of a wider array of financing alternatives, the choices for younger firms are more limited. If the firm has been operating for some time and is profitable, it may be able to support its expansion using its own financial resources. Commercial banks traditionally represent the most important source of entrepreneurial financing, and may satisfy a significant portion of the entrepreneurial firm's capital needs. However, obtaining external financing from a bank can be challenging because banks do not tolerate risks well and risk taking is inherent to the entrepreneurial process. Business angels can be another source of capital; these investors typically provide capital to entrepreneurial firms in the early stages of their development. Business angels are private investors who take an ownership interest in a venture created by someone else; they do not typically initiate a business idea, but can assume an active role in the management of the firm. Raising capital from "friends-and-family" is another possible route for entrepreneurial firms. These funders can be business "lifesavers" for an entrepreneurial firm if other, alternative routes of financing have failed and the firm's existing financial resources are exhausted. Of course, there is also venture capital, which represents a unique combination of capital and know-how that is provided to entrepreneurial firms by institutional investors. Venture capital aims to accelerate the firm's development and exploit available market opportunities to obtain long-term, above-average returns.

If the entrepreneurial firm is not profitable, it may have to rely on more creative approaches in order to secure financing. Bootstrap financing or "bootstrapping" is the process of acquiring resources and developing the entrepreneurial firm with little or no capital. Bootstrapping is reliant upon entrepreneurial imagination, creativity, and "sweat equity" as opposed to borrowing debt or raising equity. Bootstrapping also involves the use of a wide range of common sense approaches that rely upon the entrepreneurial firm's ability to utilize all of its resources and capabilities. Common bootstrapping techniques include relying on trade credit, customers (i.e., pre-payments, advances), equipment suppliers, bartering, and personal resources (i.e., credit cards, real estate, lines of credit), as well as peer-to-peer leading, factoring, equipment sharing, and leasing. Bootstrapping is not simply an approach – it is the philosophy of operating a business while conserving cash, limiting spending (or spending as frugally as possible), and saving. Ultimately, bootstrapping is about cash flow management.

Value measurement

Business valuation is the systematic manner by which a firm is valued (or, simply put, the market value of the entrepreneurial firm's equity). The purpose of business valuation is to

develop a valuation range that best captures the value of the entrepreneurial firm. Business valuation aims to narrow the wide spectrum of possible values which can be assigned to the entrepreneurial firm. Of course, the ultimate value of the firm is determined by the market forces when the firm is sold or by any type of “liquidity event.”

Business valuation is performed for a variety of reasons. Common reasons include business transactions (i.e., disposal of shares, mergers, acquisitions, bank loans, business sale, initial public offering), personal circumstances (i.e., divorce, estate planning), and legal disputes (i.e., tax challenges, shareholder disputes). Business valuation is most commonly performed ahead of an acquisition or disposal. For the entrepreneur, there is another important reason for business valuation. Entrepreneurs need to know on a regular basis whether their strategic decisions are creating or destroying value. However, many entrepreneurs rarely know the value of their firms and how this has changed over time. Research and business practice indicate that less than 30 percent of entrepreneurs actually know the value of their venture; this is especially true for entrepreneurial firms that have not obtained any external financing. Furthermore, entrepreneurs rarely engage in the business valuation process, and those that pay attention to the topic often quote a wide range of business valuation “rules-of-thumb” which may or may not be relevant to the specific type of entrepreneurial firm they operate.

Valuing entrepreneurial firms requires a combination of “art” and “science.” The “science” involves understanding the connections between strategic decisions and their financial implications, recognizing the relationships between financial statements, applying the appropriate financial techniques, comprehending the external environment, and appreciating the internal dynamics of the entrepreneurial venture. The most suitable business valuation techniques (relevant to the specific entrepreneurial firm) must also be chosen, and the financial forecasts must be error-free. The “art” involves exercising appropriate business judgment, developing robust economic assumptions for the valuation model (related to the valuation multiples, discount rates, growth rates, and so on), and dealing with the underlying risks inherent to the entrepreneurial venture. Value must also be crystallized during negotiations.

The valuation range of the entrepreneurial firm is commonly developed on the basis of different valuation methods which reflect the actual purpose and premise of the valuation exercise. There are three main valuation methods: multiples, capitalization, and accounting-based. In the multiples method of business valuation, industry comparable data is applied to determine the firm’s equity value. These valuation methods are relatively simple, intuitive, and easy to apply. Capitalization methods are based on using specific financial indicators of the firm and then discounting (or capitalizing) them. This method is deeply rooted in the two most fundamental concepts of finance – risk and reward. The most common capitalization method is the discounted cash flow (DCF) valuation, which is based on the firm’s financial forecasts. The third category of valuation techniques relates to the firm’s accounting practices (specifically the firm’s balance sheet). Accounting-based methods include net book value, liquidation value, and replacement value. It is important to reiterate here that the valuation methods described above capture the “absolute” value of the entrepreneurial firm’s equity (i.e., how much the firm’s equity is actually worth); as we observed earlier in the chapter, incremental value can also be established.

Before performing business valuation (whether absolute or incremental), it is useful to monitor the key vital signs of the business, its key performance indicators, and the most critical value drivers; these measures can be generic or business-specific. Since we have already briefly described the concept of business-specific indicators and value drivers, we

focus here on the more common approaches to financial analysis that, in our view, are most relevant to the value creation process.

Traditional financial analysis involves calculating and assessing ratios. Moreover, conventional financial analysis involves a standard set of ratios (i.e., liquidity, profitability, asset activity, debt, leverage, and so on). However, the best approach to financial analysis is based on recognizing that not all financial ratios are equal; there needs to be relative importance assigned to some ratios while not to others. Our proposed analytical framework for financial review is based on a hierarchical and sequential progression rather than a complete and exhaustive application of ratios. The proposed framework rests on a four-step sequence of analysis: liquidity, cash generating ability, profitability, and growth dynamics. The ratios and financial indicators relevant to these four steps are provided in their traditional form, but also on the basis of cash flows (cash flows are used instead of traditional balance sheets or items from the income statement). This cash-flow-based ratio analysis is especially relevant to entrepreneurial firms, who are more vulnerable to failure than more mature firms.

One of the more unique methods used to assess the performance and value creation capability of a firm is a comparative analysis. The essence of comparative analysis is to compare the performance of one firm to other firms operating in the same industry (this analytical approach is often termed as cross-sectional analysis or benchmarking). A significant amount of research is required in order to find the most suitable comparative benchmarks.

Value enhancement

Growth is a priority of all entrepreneurial firms and is especially important for a firm's survival. Growth for an entrepreneurial firm means movement beyond the early stages of development; it is the natural and evolutionary process of adaptation and maturation. Growth provides tangible benefits to an entrepreneurial firm, such as a reduction of unit costs (revenue growth is especially important for entrepreneurial firms, which compete on price). Top-line growth converts into a strong competitive position and a growing market share. A high market share often results in sustainable profitability. Growth is also important to business stakeholders. But with growth comes risk; increasingly larger "business bets" must be made in order to grow the entrepreneurial firm. The key impediments to entrepreneurial growth include lack of sufficient finance, human resource challenges, an improper organizational structure, organizational transition issues, and so on.

There are a number of strategic alternatives that an entrepreneurial firm can pursue in order to secure growth and create value. Some entrepreneurial firms exhibit a neutral orientation towards growth and prefer to continue with their current operations (at least for a period of time), while others may consider retrenchment strategies if they have lost a competitive advantage or are experiencing declining profits. Note that the two possible scenarios (stability and retrenchment) are popular for entrepreneurial firms with limited growth aspirations that occupy a small-yet-profitable market segment.

An entrepreneurial firm has to deal with three main strategic considerations: deciding upon its general orientation towards a pattern of growth, selecting the appropriate industry or market segment, and co-ordinating resources. Although there are a variety of ways an entrepreneurial firm can grow its business, the two most common expansion themes are concentration and diversification. Concentration occurs when the entrepreneurial firm continues to expand its current product or service line across a single industry. Such a strategy is especially appealing to entrepreneurs whose products and services have strong growth

potential. Diversification, on the other hand, requires the entrepreneurial venture to pursue new product lines for other industries the firm has not yet participated in. Within these two fundamental strategic directions, other expansion alternatives exist: vertical growth, horizontal growth, concentric diversification, conglomeratic diversification, and so on.

The entrepreneurial firm broadly considers each possible growth path and then selects the one with the most advantages in the context of opportunities available in the marketplace and the firm's internal strengths and weaknesses. As it is difficult to imagine that most entrepreneurs would consider each strategic consideration on a one-by-one basis and develop a detailed set of financial projections for each, the best entrepreneurial practice would be to consider the three most attractive strategic routes and then determine the financial implications for each of these options by performing a detailed financial analysis.

For the entrepreneur, the central issue is not growing the venture, but rather deciding upon the desired growth velocity and trajectory – managing growth is one of the most essential components of entrepreneurial success. Growth has to be based on at least three main fundamental pillars. First, the entrepreneurial firm should grow at a rate that it can control and afford. Second, the entrepreneurial firm should grow at a rate commensurate with its ability to secure appropriate human resources. Third and most importantly, growth must be value generative. While recognizing that an entrepreneurial firm can grow either internally or externally, we argue that the preferred mode of growth and value generation for entrepreneurial firms is through internal, in-house development rather than external means (i.e., acquisitions, mergers, and other means).

Once the appropriate growth strategies and tactics have been selected, the next step for the entrepreneurial firm is to create a detailed project analysis. This is normally done in the context of capital budgeting, which is a unique investment appraisal tool that allows the entrepreneur to decide whether or not a specific investment project is worthwhile. While capital budgeting methodology is normally used to evaluate investments in tangible assets, it can be easily applied to significant capital outlays such as marketing and promotion, human resources, acquisitions of other firms, working capital improvements, research and development, intellectual property, and so on. All capital outlays deserve a structured evaluation and the capital budgeting process ensures a detailed examination. A central evaluation technique within capital budgeting is known as net present value (NPV). NPV outlines how much the value of the firm has increased as a result of engaging in a specific project. Another important analytical tool is called “real options.” This technique recognizes that many capital outlays have unique characteristics in that they have choices (or options) embedded within them. Consequently, investment projects often have multiple revision possibilities and proper consideration of these choices is critical to entrepreneurial decision making. The chief advantage of this technique is that it allows the firm to analyze investment projects with multifaceted risks and opportunities. Real options also “force” entrepreneurial decision makers to consider uncertainties related to the firm's external environment.

A growing amount of academic literature and evidence from practitioners reflects that there are two concepts related to improved financial performance and value creation: corporate governance and social responsibility. Corporate governance refers to the interactions between management, shareholders, and the board of directors and is the channel through which the interests of these stakeholders are brought together. Corporate governance is also the formal process by which rights, obligations, and responsibilities are distributed to the key stakeholders in the firm. Corporate governance provides the mechanism through which managers are responsible to owners and determines how the activities of the entrepreneurial firm are controlled. Corporate governance brings strong benefits to an entrepreneurial firm: it is

an effective tool for dealing with opaque business activities, unethical behavior, self-interest, and self-dealing, and it allows firms to have easier access to finance raised at a lower cost than would otherwise be possible. Firms with strong corporate governance structures also have an easier time reaching public markets. Social responsibility, on the other hand, relates to the entrepreneurial firm's orientation towards "giving back" to society. Social responsibility can involve a wide plethora of actions, but the central theme is that private firms have a responsibility to society. As is the case with strong corporate governance, socially responsible behaviors can create multiple benefits for an entrepreneurial firm, such as attracting higher-quality candidates, a strong reputation in the marketplace, and strong financial performance. All of these components directly and indirectly contribute to the value creation process.

Value realization

Value creation begins with identifying unmet demand, solving the "real" problems of customers, correcting market imperfections where existing competitors are unable to meet customer expectations, and developing new market segments. While a small group of entrepreneurial firms owe their market success to a superb idea, the vast majority of firms succeed because they have extraordinarily executed an ordinary idea.

Value realization is defined as divestment or harvest of an entire entrepreneurial firm or its parts following the entrepreneur's conscious decision to totally or partially exit from the business. Realization typically involves monetizing investments made from entrepreneurial innovations and relinquishing control over or transferring ownership of the business; in other words, it is the point in the life cycle of an entrepreneurial firm where the entrepreneur decides to convert his or her holdings into cash. Realizations are normally positive events in the life cycle of an entrepreneurial venture, even though there are cases where entrepreneurial development does not result in a happy ending for the entrepreneur and the other stakeholders involved in the venture. The most critical considerations for the entrepreneur to contemplate during the value realization process include the internal desires of the firm, the financial objectives of shareholders, the management team's aspirations, the entrepreneur's own personal circumstances, and the entrepreneurial firm's financial considerations. The value realization process may also be driven by the external conditions of the marketplace.

There are multiple modes of exit available for entrepreneurs, including an initial public offering (IPO), a sale to a strategic investor (or a trade sale), a sale to a financial investor, management buyouts or buy-ins, asset sales, and so on. Some of these realization routes are strong generators of value (IPOs and trade sales) while others provide less robust financial returns and value creation. Evidence suggests that IPOs yield the highest amount of value.

For some entrepreneurs, achieving divestment may represent the ultimate climax of entrepreneurial activity, but for others transitioning the business is the most important part of the entrepreneurial journey. For these entrepreneurs, divestment may not be a preferred route of exit, as they wish to engage in a process that we broadly describe as entrepreneurial succession. Entrepreneurial succession can be defined as a written, comprehensive, strategic, and orchestrated roadmap or plan for the founding entrepreneur, his or her family, and potential successors in the event of the founder's normal course of disengagement or in extraordinary circumstances such as the founder's disability, incapacity, retirement, or death. Entrepreneurial succession is the process of preparing for an orderly handing over and passing on of knowledge, ownership, authority, and responsibility over the familial entrepreneurial venture. In essence, entrepreneurial succession is a form of organizational change.

Entrepreneurial finance, value realization, and exit possibilities also create opportunities for future entrepreneurial engagement and value creation. Such activity is termed “entrepreneurial perpetuation.” Through the continual re-use of cashed-out proceeds by exiting entrepreneurs or the use of stock options by employees, the exodus of talented people from entrepreneurial firms, the creation of corporate spin-offs, and access to entrepreneurial finance, employees become first-time entrepreneurs and existing entrepreneurs become serial entrepreneurs. Furthermore, over time, these entrepreneurs may become investors themselves or eventually build a portfolio of entrepreneurial ventures. Such entrepreneurs are typically more cognizant when detecting, realizing, capturing, and navigating new business opportunities. When “perpetual entrepreneurs” re-engage into other ventures and extend their experience, knowledge, capital, business contacts, and networks to other entrepreneurial ventures, they create a “snowball” effect with respect to business formation and create a culture of entrepreneurship. Entrepreneurial finance is a critical component of this symbiotic ecosystem.

Last, there is entrepreneurial philanthropy. Though its definition has evolved over the years, entrepreneurial philanthropy is generally defined as recruiting and deploying resources to champion innovative and sustainable resolutions to difficult social problems. Entrepreneurial philanthropists aim to mold society in order to achieve peace and social stability; they also believe that philanthropy contributes to economic development by elevating individuals from hardship and adversity. Entrepreneurial philanthropists generate innovative ideas and, through entrepreneurial-based actions, convert them into social benefits in order to improve the quality of life for local communities and global societies. Entrepreneurial discipline, approaches, methods, innovation, and operational flair are all unique features of entrepreneurial philanthropy. Ultimately, entrepreneurial philanthropists look for “high social rates of return.”

Value creation for different types of entrepreneurial firms

The process of value creation is not homogenous for all entrepreneurs; it depends on the entrepreneur’s assumed level of risk; the rewards sought from the entrepreneurial venture; ease of access to finance; management styles; and overall business objectives. On the basis of these characteristics, we may distinguish four unique types of entrepreneurs: “average” entrepreneurs, family-oriented entrepreneurs, female entrepreneurs, and “serial entrepreneurs.” The process of value creation and the value curvature is likely to differ depending on the type of entrepreneurial firm (i.e., high-tech, service, or production), the industry, the stage of the firm’s life cycle, the technology orientation of the firm, and so on.

Figure 2.3 illustrates that the four groups of entrepreneurs are likely to experience distinctive curvatures of value creation. Value growth patterns can be robust, conservative and moderate, steady, or flat. As Figure 2.3 highlights, value creation does not occur from the outset of the new venture’s formation. The initial part of the value curvature for virtually all types of entrepreneurs (the exception being serial entrepreneurs) portrays a decline in value; this represents the fact that for some time in the life of a new entrepreneurial firm, it is unclear whether or not the venture will actually survive. At the beginning of the firm’s life cycle, business and financial risks are compounded, operational mistakes are frequent, management teams are incomplete, and cash is scarce. In a nutshell, all contributions committed to the venture by the entrepreneur (whether financial or otherwise) are at risk of a total loss. This uncertainty around the actual survival of the entrepreneurial venture lasts for some time, usually until the initial “teething” problems of the venture have passed and it

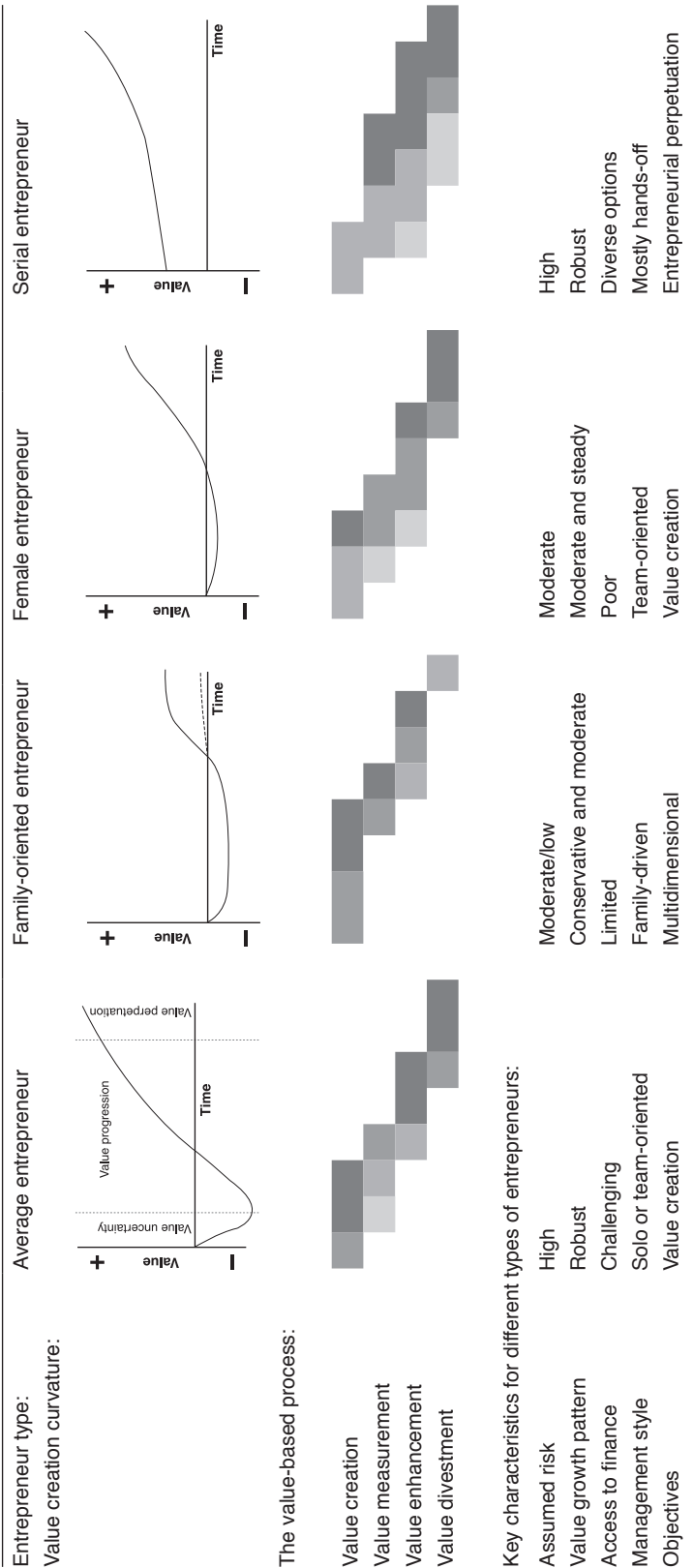


Figure 2.3 The patterns of value growth, processes, and characteristics of different types of entrepreneurial firms

is on a clear and relatively unobstructed path to entrepreneurial development and value creation. For some entrepreneurs, value creation may occur quickly, while for others it is a more extended and elongated process. Some entrepreneurs assume substantial risk when forming a new venture and are more comfortable with “above-average” levels of risk in expectation of potentially higher returns. Other business owners are more conservative and risk averse; they deliberately and strategically aim to implement risk moderation strategies, perhaps at the expense of substantial returns in the future. The value creation curvature can be divided into three distinct segments: value uncertainty (the initial phase of committing financial resources and entrepreneurial efforts and the uncertainty associated with these resources), value progression (the period of generating value in the entrepreneurial venture), and value perpetuation (where value growth in the entrepreneurial firm increases at diminishing rates). Please note that in Figure 2.3, we only delineate between these three segments (value uncertainty, progression, and perpetuation) in the graph for the “average” entrepreneur (we do not divide other curvatures so as to avoid unnecessarily complicating the remaining diagrams).

The different categories of entrepreneurs also vary with respect to the amount of time spent in each stage of the value creation process and the velocity with which they actually progress through these stages. Some entrepreneurs progress through the stages of value creation quickly, while others progress in a manner that is more measured, calibrated, and pre-orchestrated. Furthermore, the progression of some entrepreneurial groups through the different stages can be more sequential (where one stage of value creation is followed by another), while others may progress in an overlapping or simultaneous manner.

The “average” entrepreneur

Although it can be complex to define what constitutes the makeup of an “average” entrepreneur, establishing this profile forms a useful reference point for when we compare average entrepreneurs to the other, more specific categories of entrepreneurship. As we noted earlier in Chapter 1, an average entrepreneur is an individual who generates a business idea, tests it, converts it into a functioning business venture, and oversees its successful development. The average entrepreneur is a unique aggregator of resources, capable of assembling them in a new and innovative manner and thereby achieving higher productivity and economic yield. It is likely that most first-time entrepreneurs have thought about or simmered their business idea over a long period of time before actually forming the venture. When their product or service ideas have been tested in the marketplace, the entrepreneur is compelled to build a business around them.

The average entrepreneur is willing to assume substantial business, financial, and operational risks in order to realize his or her business objectives and achieve the desired financial rewards (these rewards may or may not be financial in nature, especially at the outset of the entrepreneurial venture when the entrepreneur aims to solve an actual problem, fill a market niche, and so on). The average entrepreneur is often willing to sacrifice his or her own personal wealth and contribute significant “sweat equity” to see the venture succeed; he or she also expects to achieve significant growth in revenue, profits, cash flow, and value creation. Average entrepreneurs also wish to achieve a cash break-even point (where the entrepreneurial venture no longer burns cash) as quickly as possible. Access to finance is generally difficult for entrepreneurial firms and this is no different for the average entrepreneur, who needs to be creative in generating access to financial resources by relying on various “bootstrapping” techniques before being able to secure more substantive external

financing (in the form of debt or equity). In terms of management style, average entrepreneurs may choose to operate their venture on the basis of their own skills, capabilities, and vision, or build a proper management team. The typical business objective for the average entrepreneur is value creation (although, for some entrepreneurs, the value objective may not be apparent or even important at the point of new venture formation).

Many scientific constructs have been developed to describe a special phenomenon in the form of a diagram that initially falls and then subsequently rises – a curvature that is often described as the “J-curve,” or the entrepreneurial value creation “hook.” The value creation curvature for the average entrepreneur may best be depicted in this manner. In our case, the “J-curve” captures the value creation process and the overall propensity of the entrepreneurial firm to generate losses in the early years of its operation and to achieve substantial value gains during the subsequent years of the venture. In the value creation graph, the value curvature declines sharply initially – this is reflective of the risks undertaken by average entrepreneurs and the uncertainty around new venture success. Thereafter, the value creation curvature increases sharply and the value growth pattern is sustained over a longer period of time. The graph eventually flattens out in the later stages of the value creation process.

The value creation process illustrated in Figure 2.3 (below the value creation curvatures) demonstrates the fact that value creation takes time. In some cases, value creation activities may be deliberate and pre-orchestrated by the entrepreneur, while in other cases these activities may be swift and reflective of the dynamic nature of the market (i.e., strong market demand, rapid market growth, changing customer needs, and so on). The average entrepreneur may not immediately engage in value measurement activities; however, this may quickly change if the entrepreneur attempts to secure financing from external sources (i.e., private equity, angel financing, or bank financing). While establishing a formal valuation of the entrepreneurial venture is not a typical priority, the most successful average entrepreneurs determine the key vital signs of their business and the most important value drivers early on in the process; these become the most frequently monitored components of the venture. The value enhancement phase of the value creation process is relatively stretched in terms of time, reflecting the need to continuously improve operations in order to enjoy a higher value growth trajectory. Last, the value divestment phase occurs. This can be an unexpected phase in the life of an entrepreneurial firm. Strategic investors display a propensity to either acquire successful start-ups almost instantly after their inception or wait to see the rollout of the entrepreneurial firm’s business plan. Start-ups often enjoy the shortest divestment timelines, particularly if they own proprietary technologies, innovative products, have a loyal customer following, or present new market opportunities to strategic investors. As we will observe in Chapter 13, entrepreneurial start-ups are especially attractive to investors if their valuation range falls within the range of \$20 million to \$30 million. For most attractive entrepreneurial start-ups, a divestment phase can easily occur within 18 to 24 months of new venture formation.

The family-oriented entrepreneur

Family-oriented entrepreneurial firms are unique business ventures for at least three reasons. For one, the motivation to start a business may be different from the average entrepreneur, and business objectives are often multidimensional and complex. Some family-oriented firms are established to “sustain” the family by providing employment opportunities for family members and in order to pass the business venture on to future generations (founding family-oriented entrepreneurs often operate under the assumption that their children will

take over the business, even though this often proves not to be the case in reality). Second, family-oriented entrepreneurial firms face issues related to succession. Often, the new generation of family members does not wish to be involved with the family business moving forward, and when a family business succession actually occurs, it rarely works well (we discuss this specific topic in detail in Chapter 14). Third, family-driven entrepreneurial firms face challenges with respect to access to finance (this problem is even more pronounced than it is for the average entrepreneur). This poor access to finance reflects a multitude of agency issues which can be difficult for external financiers to address.

Family-oriented firms take a more measured approach to business formation. Commonly, a single family member establishes the entrepreneurial venture while other family members (e.g., a spouse) retain regular employment. Family-held firms place a priority on employing family members; this practice is deeply rooted in the family philosophy even when the venture is more mature and a more professional management team may be necessary. Involving family members in management is the prevailing management style in family-held firms. Furthermore, family-oriented entrepreneurial firms are normally capitalized with minimal financial resources committed to the venture (i.e., less than in the case of the average entrepreneur) and plenty of “sweat equity” from family members. If additional capital is required, the family is often slow to obtain financial commitments and capital infusions; capital may be trickled into the business over a sustained period of time. The level of business and financial risk for these firms is moderate or low.

The dynamics of value creation in family-oriented firms are different than those for the average entrepreneur. The curvature for family firms is represented by the flattened and elongated “S-curve,” where the flatness and amplitude in initial value creation (below the value break-even point) are symmetrical with value creation (above the value break-even point). The value creation pattern here can be described as conservative or moderate. In the first phase of the value creation process, the family-oriented firm takes less financial risk spread over a longer period of time (the value creation curvature does not go so profoundly into the negative value territory). There may also be less expectation on the part of family firms for a substantial future financial reward from the venture. Once a family-oriented firm secures revenue growth and reaches a profit (or cash) break-even point, its founders often “cash out” from the venture by, for example, increasing salaries for family members, making dividend payments, charging extra costs to the business. In short, cash begins leaking from the business; hence, less value creation occurs. Family firms may be satisfied with the level of value built into the family venture or exhibit limited ambition to grow the business further. Family firms also tend not to accrue the significant financial resources needed to elevate their business to a major level. Although profits and cash flow may be strong, they may not increase the overall value of the firm. Value remains constant over a longer period of time for family firms due to cash flowing out of the business to support family priorities. Value creation for these firms is secondary to fulfilling multidimensional family objectives. Consequently, value is built very slowly and shows negligible long-term improvement; the value curvature crosses a value break-even point well into the future. At the break-even juncture, family-oriented firms can choose two distinctive paths of development. While the value creation paths are different, they ultimately result in the flattening out of the value creation curvature. Some family-held firms prefer to direct significant resources into the venture in order to achieve moderate or even strong value creation. These firms believe that growing a family firm will secure its long-term success and ensure proper family succession in the future. In this scenario, value creation is likely to occur, but will even out at some point in time. Other family firms may dedicate only the minimum required resources to the firm in

order to sustain its development to the point where the venture can support family needs. In this instance, value creation is minimal and barely exceeds the value-creation break-even point.

The value-based process for family firms is also much different from the process experienced by the average entrepreneur (although the three segments are still visible). Family-oriented entrepreneurial firms appear to spend a significant period of time in the value creation phase. The organizational architecture, internal procedures and processes, and management capabilities of these firms are developed slowly and unsystematically. Financial analysis, business plan preparation, and business valuation in family-oriented firms are often prompted when the firm applies for a bank loan or if an equity partner is being admitted into the venture. The lack of proper planning, budgeting, and forecasting also implies that family-oriented firms may be less likely to employ financial techniques, processes, and methodologies to improve their decision-making processes. Family-oriented entrepreneurial firms may therefore be less sensitive to the key value drivers in their business – this is chiefly because they spend less time analyzing their ventures than other types of entrepreneurs. Family-oriented entrepreneurs extract limited understanding and appreciation of business valuation from the value creation process. Additionally, corporate governance is often problematic in family-oriented firms. Actual value measurement rarely occurs because in the entrepreneur's eyes, there is no apparent need for it. As noted above, value enhancement in family firms is slow, haphazard, and unsystematic. Value divestment is rarely considered at the time of business formation; consequently, family-oriented firms rarely operate their business in preparation for exit, and divestment often becomes problematic when succession issues emerge.

The female entrepreneur

Another unique category of business owners are female entrepreneurs. Women are typically late bloomers with respect to business ownership, but are strong contributors to economic development. Studies in the areas of psychology, human resources, entrepreneurship, and strategic management show that women tend to think more contextually and comprehensively, evaluate alternatives more carefully, and have a greater orientation toward teamwork, co-operation, and inclusiveness. As a consequence, women tend to be more risk averse, embrace and exhibit a readiness for change, and prefer long-term business sustainability to the immediacy of profit. Similar to family-oriented entrepreneurial firms, female entrepreneurs face more challenging access to finance than the average entrepreneur. Female entrepreneurs are often team-oriented and focus on value creation as their main business objective.

The value creation pattern for female entrepreneurs resembles a “U-shape” rather than the traditional “J-curve” of the average entrepreneur. There are some specific characteristics of female entrepreneurs that drive the shape of the value creation curvature. First, as previously noted, female entrepreneurs generally assume less business and financial risk. This is reflected in the value curvature, which initially falls (denoting the initial uncertainty about the fortunes of the venture); note that the amplitude of the initial decline is lower than for the average entrepreneur and the family-oriented entrepreneur. The curve declines at the beginning, flattens out, and rises slowly but consistently. Value creation is steady, conscious, and more deliberate. Female entrepreneurs also take longer to deploy capital, but strive to quickly achieve a value break-even point. Second, limited access to finance is likely to constrain value creation for female entrepreneurs; consequently, value creation is less robust. Returns

are also lower compared with the average entrepreneur, but more pronounced than those achieved by family-oriented entrepreneurs.

The value creation process for female entrepreneurs is quite distinct. The first stage of the process takes a considerable amount of time because female entrepreneurs show a greater desire to “get it right” from the very beginning of their entrepreneurial pursuits. The preparation, formation, and configuration of the venture are premeditated, deliberate, and orchestrated. Female entrepreneurs are generally more intuitive, imaginative, and flexible than their male counterparts, and demonstrate innovation and creativity in business. Women also tend to develop their ventures on the basis of team building, strong internal business systems, and robust organizational compositions and structures. Female entrepreneurs rarely operate their ventures as “solo” operators. Similar to other types of entrepreneurs, value measurement is not a natural step for many female entrepreneurs. In spite of this, effort is taken to ascertain the value of the venture before obtaining an external round of financing, and most female entrepreneurs are keenly aware of their key value drivers and monitor them diligently. Being more conservative by nature, female entrepreneurs are intuitively sensitive to value destruction activities and avoid behaviors that lead to such circumstances. The value divestment orientation of these entrepreneurs is similar to the other types.

The serial entrepreneur

A serial entrepreneur is a generator, starter, grower, nurturer, and owner of multiple entrepreneurial ventures. Serial entrepreneurs regard entrepreneurship as a profession or calling and are driven by uncertainty and entrepreneurial success. Business formation comes naturally to these entrepreneurs; to this category of entrepreneur, entrepreneurship is a lifestyle choice. Serial entrepreneurs are often acute seekers of value creation who exhibit a high tolerance for risk and acceptance of failure. They often imagine themselves in business early on in their career and often start their first small business between the ages of 10 and 15. Serial entrepreneurs are also regarded as patient investors.

Serial entrepreneurs are comfortable assuming business risk and have a strong tolerance for it. Because they have likely been involved in multiple ventures in the past, they instinctively recognize that some ventures are likely to experience extraordinary success while others may develop slowly, generate losses for long periods of time, and require regular infusions of cash. Serial entrepreneurs use a portfolio approach not only to generate multiple value creation opportunities, but also to moderate business risks. While they tend to operate within industries in which they have already been successful, they often diversify their business exposure by investing in other (often related) sectors, pursuing firms at various stages of development, and deploying varying capital amounts to business ventures. Serial entrepreneurs have diverse options available for financing the entrepreneurial ventures that they get involved with. Most commonly, serial entrepreneurs cross-subsidize underperforming ventures with their more profitable operations; they can also rely on their own personal wealth. Moreover, their past experience in securing external capital allows them much easier access to finance. In terms of management orientation, serial entrepreneurs prefer to operate on a hands-off basis, although they are eager to share their business experience with their portfolio firms. While many types of serial entrepreneurs exist, most are systematic organizational builders and business model developers.

The value creation curvature for serial entrepreneurs is distinctly different from that of other entrepreneurs; this is because the value creation curve represents a composite of the value creation curvatures of the individual entrepreneurial firms with which the serial

entrepreneur is involved (hence, value is not shown to fall below the value break-even point). If the serial entrepreneur has been actively investing into entrepreneurial firms, value creation is positive and rises with each new entrepreneurial venture that is added to the existing portfolio. The value creation curvature may also become somewhat cyclical if a significant portion of the portfolio firms underperform.

As serial entrepreneurs have gone through the value creation process many times and have often successfully divested from past ventures, many phases of the value creation process are likely to overlap for them. Serial entrepreneurs are mindful of value creation, value measurement, and value enhancement and go through these phases regularly. They are prolific in their focus on business and value drivers and monitor these regularly. Serial entrepreneurs are also keen to recognize and analyze the value that they have created in their firms on a regular basis. While serial entrepreneurs expect their portfolio firms to be divested after some time, they do not operate with a pre-orchestrated time horizon for such divestments to occur.

Questions to consider

1. Why is an understanding of business processes important? Describe the advantages of business processes in general.
2. Describe the major components of the C-MER value creation model.
3. Discuss the importance of the “measurement-enhancement” loop in the value creation model.
4. Is the value creation curve the same for different types of entrepreneurs? Why or why not?
5. Differentiate between “average” entrepreneurs and “serial” entrepreneurs.

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Part II

Value creation

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3 Determinants of value creation in entrepreneurial ventures

Chapter objectives

After reading this chapter, you should be able to:

- discuss the major building blocks of the “six component” model;
- estimate the market size for products and services;
- identify the characteristics of visionary management teams;
- understand the importance of the leader and his or her contribution to venture success;
- understand the various architectures for developing a business model;
- illustrate operational business models.

Extensive research has been conducted over the last three decades on the importance of the various financial and non-financial factors which contribute to the overall success of an entrepreneurial venture and to the value creation process. Research in this field can be separated into at least two broad perspectives: management orientation and investment insights.

In the first case, management specialists have attempted to discern key success factors in entrepreneurial ventures, but no uniform model has emerged. Early studies focused more on the characteristics of the entrepreneur and included such aspects as tolerance of risk and ambiguity, flexibility and determination, “street smarts,” willingness to accept partial solutions, ability to proceed by trial-and-error, propensity for change, ambition and motivation, ability to find unique solutions to problems, opportunity recognition, and so on. Subsequent studies have focused on a wide plethora of internal and external forces that contribute to entrepreneurial success: the industry, the market, competitive dynamics and forces, the entrepreneur and the team, a winning idea and concept, customer proposition, and so on. The studies also provided a range of opposing conclusions on the importance of the various factors. For example, some studies suggest that industry knowledge is a key prerequisite for entrepreneurial success, while others suggest that industry knowledge is negatively correlated to venture success. Another contradictory example involves risk: some studies found entrepreneurs to be risk takers or even risk seekers, while others characterized entrepreneurs as risk averse and acting more from a position of certainty and knowledge.

The second broad perspective on entrepreneurial success focuses more on the entrepreneurial venture’s financing. Unless the entrepreneurial firm is conducting its financial matters in such a way that no external financing is required, the firm must secure access to financing at appropriate stages of development. Most studies in this category were aimed at identifying key success factors in the entrepreneurial venture and were carried out from the perspective

of venture capitalists, who are inherently interested in how entrepreneurial firms grow, build value, and realize value. Specifically, this category of studies focuses on what factors contribute to entrepreneurial success in the context of venture capital financing. The studies confirm many of the same key success factors identified earlier (management, the market, and prudent financial management). In addition, they also illuminate the financial management aspects of entrepreneurial success: working capital, cash flow, access to financial resources (bank and equity financing), margins, revenue growth rates, returns (i.e., internal rates of return), valuation techniques, and so on.

So, why is it difficult to precisely pinpoint the reasons behind entrepreneurial success and value creation? There are at least three reasons. As industries and business opportunities evolve, they require different combinations of entrepreneurial DNA. Consider the industrial revolution, the internet era, and the social networking phenomena of today; the management skill sets and operational practices needed to succeed for one time period may not be directly applicable or even practical in the next period, even though the broad economics and management principles may still apply. Second, the speed at which entrepreneurial ventures can grow and become successful is much faster than in the past. This “entrepreneurial velocity” has the potential to threaten existing industry players and favor new entrants as various aspects of the business are now easier to establish (i.e., logistics and distribution, which is one of the most time consuming and costly internal functions to develop). Third, the value creation process can evolve and be defined differently by the investment community. Value creation can result from more traditional sources such as cash flow, profitability, and dividends, but can also be reflected by broader factors such as market share, market potential, customer loyalty, website traffic, and so on. Some valuation metrics have a tendency to change frequently, creating an undue rapid increase or fall in the value of an underlying asset (i.e., the entrepreneurial firm).

This book proposes the “six component” model as a platform to understand the value creation process in an entrepreneurial setting. Details of the model are now discussed.

The components of entrepreneurial value creation

Academic research and business practice may be summarized in the “six component” model – a single model based on six interrelated components or forces of entrepreneurial value creation (see Figure 3.1). The proposed model is made up of the following distinguishing success factors: market size and growth rates; management team and the founding entrepreneur; market share and competitive dynamics; mode of operations (business model); money management (cash flow); and margins. These contributors of entrepreneurial value creation can be further delineated according to two major factors: internal and external. While the internal and external factors can cross-influence each other, the distinction is important because some components are more driven by the entrepreneurial organization itself, while others are more influenced by the external environment. The entrepreneurial venture may have limited ability to influence factors such as the economic cycle, the level of interest rates and exchanges rates, consumer spending patterns, and so on. External factors (market and market share) reflect the value drivers which are outside of the sphere of influence of the firm. Conversely, the entrepreneurial firm may enjoy full control over what product or service it offers and when, whom to hire, how to motivate its employees, and what distribution methods and logistics structure to employ. Internal factors are those that are generally perceived as being more under the control of the entrepreneurial venture.

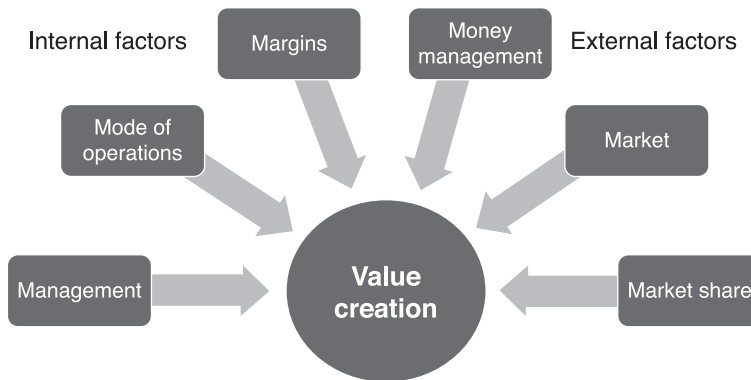


Figure 3.1 The building blocks of the “six component” model of entrepreneurial value creation

There are two financial aspects to the “six component” model of value creation: margins and money management (cash flow). These may be regarded as hybrid contributors to entrepreneurial value creation because they are both influenced by internal factors and market forces. For example, the entrepreneurial firm’s cash flow can generally be managed by the venture, but must reflect the realities in the external environment. The most critical components of the cash flow, such as working capital (defined as inventory, accounts receivable, and accounts payable), reflect external forces in the marketplace. Furthermore, even though the entrepreneurial venture may wish to limit its investment in inventory so as to conserve cash for other purposes, customers may effectively force it to carry more stock. The firm’s best intentions may effectively be “verified” by the competitive forces in the marketplace (competitors can offer more preferable terms of payment). Similarly, the entrepreneurial venture can attempt to set its accounts receivable collection policy to 15 days, even though the standard in most industries is 30 days. The difference in days in the collection period may negatively impact the sales of the entrepreneurial business.

Depending on the entrepreneurial venture and the business it engages, the two financial factors mentioned can either be directly responsible for the entrepreneurial venture’s success, or can result in the venture undertaking specific actions (these financial aspects can impact critical decisions related to the market, management, etc.). In any case, they are included in the “six component” model as it is difficult to imagine the ultimate success of an entrepreneurial business without a strong financial performance and cash flow.

Please note that in this chapter, we will focus on four non-financial components of value creation in the entrepreneurial setting: management, mode of operations, market, and market share. In Chapter 7, we will turn our attention to the remaining components of the model.

Market and growth rates

Debate frequently occurs among academics and practitioners about the relative importance of distinguishing the success factors of an entrepreneurial venture (i.e., which one of the building blocks of the entrepreneurial venture is the most important component). Luckily, the majority of academics and practitioners agree that the management and the market are the top considerations.

Many academics and practitioners hold the view that the market is the key contributor to entrepreneurial success and the value creation process; others believe that it is the

management team, which ultimately conceives the business idea, develops the appropriate action plan, and subsequently executes it. It is relatively easy to succeed in favorable market conditions in which market demand is sizeable and rapidly growing, competitive pressures are low, market entry barriers are high, and no dominant players exist. As the saying goes, “a rising tide raises all ships.” On the other hand, research suggests that many successful entrepreneurial ventures have been built in seemingly unattractive market segments or in competitive market conditions. In these situations, it was the people and a superb execution that led to the ultimate success of the business. Examples of successful entrepreneurial ventures which succeeded in challenging market conditions (i.e., small market size, declining demand, and strong competition) include Polaris and Intuit. Polaris, a manufacturer of recreational vehicles such as snowmobiles and all terrain vehicles (ATVs), faced a declining market size and strong local and international competition. The managers initially resurrected the snowmobile business, and subsequently moved into larger and more attractive market segments like ATVs and motorcycles. Intuit, an accounting and small business software developer (its flagship products include Quicken and QuickBooks), started as about the 50th-largest firm in its market. The company was able to grow its market share quickly, as other competitors were not able to offer satisfactory products in the marketplace.

A common sense approach suggests that market conditions should be central to entrepreneurial analysis. Entrepreneurial ventures can change, nurture, modify, and supplement their inferior management teams, but they may not be able to do anything about the market conditions, the market’s size, growth rates, customer requirements and perceptions, and so on. Consequently, entrepreneurs should regard market risk as one of their worst enemies (other business risks – such as management, technology, operations, and financial matters – are more controllable and manageable). A proper assessment of the market must be regarded as a cornerstone of the strategic analysis undertaken by entrepreneurs.

It is worthwhile at this point to clarify the difference between “the industry” and “the market.” An industry is a collection of firms producing the same products or delivering the same services. The market is a subset or segment of an industry which can be segmented further. For large entrepreneurial businesses, the industry seems like the appropriate reference point, while for smaller entrepreneurial firms, the market may be more relevant (as smaller firms aim to pursue considerably smaller opportunities). Since analysis of the industry and the market is broadly based on similar ideas and tenants, we will use the term “the market” to define the relevant external universe in which the entrepreneurial venture operates and competes.

Defining customer preferences, decision criteria, purchasing behavior, price consideration, product or service loyalty, and sales cycles helps entrepreneurial firms to ascertain and forecast market opportunities and to define key market drivers. The most critical components of market analysis are market size and market growth rates (both historical and forecasted). Entrepreneurial firms must know the size of the market volume (according to number of units sold) and value terms (expressed in dollars). The market size and growth rates, in turn, allow entrepreneurs to determine their firms’ level of sales, to understand the extent of competitive pressures (there is more severe competition in declining markets with excess capacity), and to ascertain the venture’s earning potential.

Entrepreneurs struggle with two components related to the market. First, they argue that it is difficult to estimate market size, especially in circumstances where market forecasts, industry reports, and expert opinions are not readily available. Second, they find it difficult to convert market size and growth rates into a coherent revenue line for their financial

forecasts. Let's see how these two objectives can be achieved by way of a simplified example (see Table 3.1).

Imagine that we are looking to start a part-time snow removal business in a small town with a population of 50,000 people and we are trying to estimate the market size. As the snow removal business is cyclical (lasting only about four months per year), it is important to supplement the business with another business activity that is counter-cyclical to snow removal (i.e., a lawn care business). The city planning office confirms that the average family household is 3.5 people; thus, there are 14,286 households. The office also confirms that the local population declines at a rate of about 2 percent per annum (people migrate to a larger metropolitan center nearby). Home ownership is on the increase and about 50 percent of residents have their own homes (this statistic has been rising every year by about 2 percent). Approximately 60 percent of households take care of their own property. A discussion with one of the local operators reveals that fewer and fewer people require assistance; the more mature population tends to leave town and younger people tend to take care of their own properties. Since the lengths of the snow and summer seasons differ, so do the work requirements and pricing schemes.

Using this information, we can estimate that the total market size for the snow removal and lawn care services in town is equal to approximately \$2.1 million per annum (see Table 3.1). Since there are four competitors in town (a new business enters the market every year) and our business will be the fifth one in the marketplace, the potential average sales per competitor are likely to be equal to \$411,429. Such high revenue prospects may tempt us to input this revenue amount into our business plan. However, our enthusiasm over the revenue potential may not be well founded.

A closer consideration reveals that there are two limits to the revenue potential of our business: the number of clients and the number of workers. The first limitation comes from our inability to generate clients. We have only one salesperson and the success rate of our "cold calls" to potential clients is low (equal to 10 percent). This means the business can generate roughly 12 new clients per month and 144 clients per annum – a sales potential of about \$103,680. The second limitation comes from the number of field staff we can actually afford to hire. Since we are a start-up business and can only afford to hire one person, our revenue potential becomes limited to about \$57,600. Our service ability is below our ability to generate new business.

A few key conclusions can be drawn from the above scenario. Basic market research (the city planning office), a few friendly discussions, and a little investigation can provide sufficient background information for us to create a simplistic analysis of the market size. Also, minor changes in assumptions (inputs to the model as presented in Table 3.1) can result in large changes to output (in this case, the actual market size). In our scenario, the analysis illustrates that the market size is actually expected to decline over a period of five years. The declining market size reflects the diminishing population base, the desire of local owners to maintain their own properties, and a reduced service requirement for lawn care (from two visits per month to one). The percentages of the first two variables are relatively small on an annual basis, but the compounded and aggregate effect over the long term is substantial. The expected sales for the intended business were also much lower than the initial market analysis led us to believe. The average revenue of competitors is estimated to be \$0.4 million, while the actual sales for the business are equal to \$57,600 and only reach \$172,800 over a longer period of time ($t + 5$). The average sales per competitor are arrived at by using the so called "top-down" analysis, which takes into consideration the major aggregate factors of the industry and key industry drivers; this is almost never equal to the revenue estimate developed

Table 3.1 Determining the market size for a lawn care and snow removal business

	<i>Now(t)</i>	<i>t+1</i>	<i>t+2</i>	<i>t+3</i>	<i>t+4</i>	<i>t+5</i>
Population	50,000	49,000	48,020	47,060	46,118	45,196
Population growth rate	−2%	−2%	−2%	−2%	−2%	−2%
Family size	3.5	3.5	3.5	3.5	3.5	3.5
Number of households	14,286	14,000	13,720	13,446	13,177	12,913
Home ownership	50%	52%	54%	56%	58%	60%
Number of homes	7,143	7,280	7,409	7,530	7,642	7,748
Snow removal and lawn care	60%	61%	62%	63%	64%	65%
Households requiring service	40%	39%	38%	37%	36%	35%
Total households	2,857	2,839	2,815	2,786	2,751	2,712
Snow removal season (months)	4	4	4	4	4	4
Lawn care season (months)	6	6	6	6	6	6
Snow removals per month	4	4	3	2	2	2
Lawn care visits per month	2	2	2	1	1	1
Snow removal price (\$)	30	30	30	30	30	30
Lawn care price (\$)	20	20	20	20	20	20
Total snow removal market (\$)	1,371,429	1,362,816	1,013,524	668,623	660,310	650,823
Total lawn care market (\$)	685,714	681,408	675,683	334,311	330,155	325,411
Total market size	2,057,143	2,044,224	1,689,207	1,002,934	990,465	976,234
Number of competitors	5	6	7	8	9	10
Sales potential per competitor	411,429	340,704	241,315	125,367	110,052	97,623
<i>Marketing output</i>						
Number of sales visits per day	6	6	6	6	6	6
Success rate per call	10%	15%	20%	20%	25%	25%
Contracts per month	12	18	24	24	30	30
Total number of clients	144	360	648	936	1,296	1,656
Sales potential	103,680	259,200	388,800	336,960	466,560	596,160
<i>Service output</i>						
Number of employees	1	2	3	4	5	6
Visits per day	4	4	4	4	4	4
Snow removal revenue	38,400	76,800	86,400	76,800	96,000	115,200
Lawn care revenue	19,200	38,400	57,600	38,400	48,000	57,600
Total annual sales	57,600	115,200	144,000	115,200	144,000	172,800

by using the “bottom-up” analysis where actual operational drivers are considered (i.e., the number of sales calls, the rate of converting these calls into actual clients, the number of staff, and so on). The model also extends the analysis from the time frame (t) through subsequent time periods (t + 5) and highlights critical market information for us. The most important information we gain is that the market size is small, declining, and filled with competitors ready to enter the industry every year. The model’s complexity and accuracy can be easily improved by observing the spending patterns of consumers (i.e., younger versus more mature households), the competitive dynamics of the marketplace (i.e., weaker versus stronger competitors), and so on. A further extension of the model would add more precision to the market data estimates and future growth rates.

A common question is whether basic assumptions about market size – and, therefore, the resulting estimate of the market size – can be off-target or simply wrong. Entrepreneurial firms (and more mature firms, as well) are generally willing to tolerate a certain degree of uncertainty when making their estimates. Analysis often reveals the underlying trends in the industry, illuminates key market dynamics, and steers entrepreneurs in the right direction in terms of their market strategy. In short, this exercise can be somewhat off-target. However, in practice, entrepreneurial ventures have generally improved their ability to estimate market size and growth rates as they engage in forecasting and analytical processes on a more regular basis; often, they are able to minimize errors in their estimates to a negligible number.

The robustness of the calculations used to determine market size is rooted in key factors. The quality of the market model reflects the quality of assumptions; in short, poor assumptions equate to poor quality output. The model also has to focus on the “right” assumptions. Practitioners estimate that accurate “judgment calls” on three to five major assumptions can account for as much as 80 percent of the accuracy of the market size assessment. Assumptions also need to be based on various sources (i.e., observations, research, trade publications, magazines, etc.). In cases where the market is new or non-existent, the quality of the market estimate will be judged on the quality of the assumptions and the logic behind them.

Markets can be either consolidated or fragmented. Consolidated markets are traditionally dominated by a small number of market leaders that control a dominant portion of the market. In such markets, three to five major players account for between 40 to 80 percent of the market, while a large number of smaller players service the remaining market demand. In a fragmented market, no dominant market players exist and the market is divided among a large number of participants. In this case, no single participant owns more than 5 or 10 percent of the market. Academic research suggests that entrepreneurial ventures perform better in fragmented markets than in consolidated markets. The ideal market is deep enough to offer profitable opportunities for a limited number of entrepreneurial ventures, but small enough to appear marginal or unattractive to larger players.

There is perhaps one more important point to make about the market – it represents an aggregate behavior of all firms participating in it. From this point of view, the market serves as a reference point or benchmark to all existing market participants and new entrants alike. The significance of this is that a longer-term performance by any market participant is likely to gravitate toward the industry average – a point that is repeated throughout this book. For example, if a newly established entrepreneurial venture is able to generate higher margins from its venture, then over the long term, these margins will gravitate toward market averages and be reduced.

Ascertaining and “discovering” markets

Environmental scanning – the process of monitoring, evaluating, collecting, and disseminating information about a specific market – can be complex. Numerous external factors have the ability to impact the entrepreneurial venture, including economic forces (GDP growth, interest rates, inflation, unemployment levels, etc.), technological variables (R&D spending, patent and intellectual property protections, innovation, productivity, technology transfer, etc.), legal and political issues (tax laws, business incentives, commercial laws, trade laws, etc.), and socio-cultural underpinnings (lifestyle changes, consumer habits, household composition, divorce rates, etc.). Entrepreneurs often instinctively focus on the most critical drivers of the market and pay less attention to “background noise.” While ignoring these variables at the outset of the venture can be justified because of the limited capital and human resources available during the start-up stage, assuming that these “irrelevant” market drivers are likely to remain constant can negatively affect the entrepreneurial venture. For example, in terms of socio-cultural trends, an entrepreneur should not ignore a declining mass market, changing household composition, or increasing diversity in the workforce.

Regular and in-depth environmental scanning is not just an intellectual exercise; it can reduce the anxiety of the entrepreneurs with respect to the prospects for their business venture and limit environmental uncertainty (the degree of complexity and change to the external environment). Entrepreneurs need to properly recognize external trends, assess their probability of occurring, and ascertain their impact upon the entrepreneurial venture. Entrepreneurs need to pay specific attention to external strategic factors – external trends that have a high probability of occurrence and a potentially high impact on their entrepreneurial venture. Entrepreneurial ventures – especially young ventures with limited financial resources, vulnerable market positions, and inexperienced staff – should avoid “surprise” external factors if they are to succeed.

In the example of the snow removal/lawn care business, we determined the size of the market, its dynamics, key drivers, and competitive characteristics (in terms of average revenue per competitor). The focal point of the exercise was to “ascertain” the market size, given that snow removal and lawn care services are already defined in the marketplace as available services that consumers can freely engage in. In the snow removal/lawn care example, the market is established, the service delivery model is understood, consumer benefits are clear, competition exists, and pricing is known and accepted by consumers. Even in the case of a novice entrepreneur, the appropriate market size can be determined.

Establishing the market size for a new product or service that has not yet been offered in the marketplace is infinitely more challenging. There are two scenarios to consider. The first involves estimating market demand for a product or service that is new to a specific geographic region or market segment. In this case, data available from other regions can be used to derive the market demand; other geographic regions can serve as useful baseline models. A simple approach for estimating market demand would be to compare the target region to another region or country that has similar characteristics (i.e., customer expectations, public propensity to purchase a product or service, consumption patterns, competitive dynamics) and estimate how quickly consumers in the target region are likely to reach the level of demand experienced in the reference zone. As an example, if we assume that the consumption for soy-based yogurt in the comparable reference zone is four kilograms per annum and in the target region is negligible (equal to 0.2 kilogram per annum), it will take the target region five years to reach the level of consumption in the reference zone. Value calculations can be made using a financial calculator to discover the rate of growth in

the market: present value, or $PV = -0.2$; future value, or $FV = 4$; number of periods, or $n = 5$; payment, or $PMT = 0$; find interest rate, or $Y/I = []$. If we were to insert one of these values (whether PV or FV) with a negative sign into the calculator as it processes data (in terms of input and output, or investment and return), one of these values would need to be negative. For our example, the projected annual growth rate would be equal to 82 percent. Of course, the growth rate would need to be adjusted to reflect local realities. The growth curvature is relatively flat upfront; demand is normally slow for new products and services initially before growing rapidly and then later becoming flat. The growth rate could also be steep upfront if sales go “viral” right away (the “tipping” point may come early in new revenue development).

The second scenario relates to when no comparable product or service idea exists in the marketplace. In this scenario, market demand is uncertain, consumer behavior is unknown, business economics are unclear, and the revenue growth trajectory is difficult to determine. In such circumstances, business practitioners suggest introducing a product or service to the marketplace as quickly as possible (even if the product or service is not ideal). A product or service does not have to be perfect, but it should be good enough to not unduly damage the entrepreneurial firm’s market reputation in the long term. Entrepreneurs engaging consumers with a novel product or service for the first time need to begin the process of gathering market intelligence as they continue to develop the venture. In doing this, entrepreneurs are likely to develop and test assumptions, obtain valuable consumer feedback, understand pricing considerations, and so on. The prospects of “discovering” a new market can be both exciting and nerve-wracking to entrepreneurs. At this stage of the entrepreneurial venture, business risks (financial, operational, and so on) appear magnified.

Windows of opportunity and market niches

Careful observation and analysis of the marketplace can result in finding an opening or “market niche” – an objective for any entrepreneurial venture. A market niche can be defined as a part of the existing marketplace or a new market segment which is currently unsatisfied. Market niches can crystallize at the local, national, or international level and are often “stumbled upon” or discovered by entrepreneurs at the local level. In the early stages of discovering a market niche, market demand is typically small enough for only one or two competitors to maintain favorable business economics, making the market unattractive for new entrants. As we previously established, larger and established businesses are often uninterested in pursuing and directing resources towards small market opportunities.

While market niches are of a more permanent nature, there may be a number of other temporary and unique openings available in the marketplace (i.e., strategic windows of opportunity) to satisfy specific consumer needs in a profitable manner. A strategic window of opportunity is a targetable portion of the market with a predefined group of customers. Strategic windows illuminate a market potential which is especially advantageous for an entrepreneurial venture. Unless acted upon quickly, these market opportunities can be lost or may disappear forever.

Management team and founding entrepreneur

Ideas about what products and services to offer, what markets to target and serve, and how to craft a winning competitive strategy do not self-generate; rather, they come from people.

The presence of “the right people” in the entrepreneurial venture is second only to the market as the most important variable for an entrepreneurial venture to succeed.

One of the most critical questions entrepreneurs face is whether to start an entrepreneurial business on their own or to build a management team. Many entrepreneurs intuitively recognize that business is not a solo sport, but rather a team event. A puzzle-like arrangement of the right individuals is a prerequisite for any entrepreneurial venture to succeed. Most successful entrepreneurs are organizational builders rather than chasers or arbitrageurs of a single idea or concept. Academic research and business practice suggest that entrepreneurial firms with the most complete management teams have the highest rates of success. An entrepreneurial venture started by a complete team has a distinct advantage over a venture started by an incomplete management team or a solo entrepreneur. The same principle applies for a more mature entrepreneurial business. A well-selected management team is a source of multiple talents, has infinitely more ideas to consider, and can access a wide network of personal and business contacts. The individuals that make up the management team should not be “homogenous.” Diversity in a management team ensures constructive debate, alternative points of view, and value added conflict. The presence of a complete management team is also a critical consideration of external financiers (i.e., banks, venture capitalists, or angel investors), as they prefer to back complete teams over sole entrepreneurs. Ideally, members of the management team will possess a combination of relevant market experience, university training, and capability in process management and business implementation.

In some cases, installing a complete management team right at the outset of an entrepreneurial venture may not be possible owing to cost, the limited attractiveness of the entrepreneurial venture to new recruits, its low credibility in the marketplace, and so on. In some cases, employees are willing to work for the entrepreneurial firm for a deferred compensation (i.e., a combination of stock options and bonus payments). The entrepreneurial venture may also outline key strategic goals that it needs to achieve in the next phase of its development and then attempt to hire managers capable of achieving these shorter-term objectives; the manager is effectively matched to the current strategy of the entrepreneurial venture.

Superior management teams do not get built on their own. Often, the management team is the product of a visionary leader or leaders. This leader may be the founding entrepreneur, or could emerge from within the entrepreneurial venture early on. A prominent venture capitalist once said, “It is difficult to describe the characteristics of a visionary leader, but I know one when I see one.” Superior leaders have extraordinary resilience to adversity (and a strong personal “backbone” that enables them to bounce back from difficult times), accept partial solutions to problems in order to find the most suitable permanent solutions in due course (they are not perfectionists), possess flexibility and an orientation towards change, and believe in evolutionary processes. A good leader also sets transcending and stimulating goals for the entrepreneurial venture while recognizing the core competencies that have allowed the entrepreneurial firm to succeed in the past. Such ambitious goals often take a long time to implement, often exceeding the natural tenure of a single leader. Long-term goals are based not on bravado, but on research, knowledge, and facts; this approach allows for a careful assessment of the situation and acts to moderate the perception of higher risk. Contrary to general belief, the most visionary leaders are often soft-spoken, mild mannered, withdrawn, thoughtful, serious, modest, simple, and even quiet – they are certainly not what you would consider to be “celebrities.” More importantly, they are relentless constructors of organizational systems who are able to implement tangible mechanisms and processes and

experiment with many different concepts and ideas. Great leaders are both organizational architects and general contractors: they build powerful internal systems, whether for innovation, organizational change, or internal competition. Great leaders also realize that their ultimate legacy should be the creation of a sustainable organization. Anyone can stumble upon a single superior idea for a product or service, exploit the concept, and generate temporary profits. The true test for an entrepreneurial venture is its long-term sustainability. Another test is how well the business continues to operate after the visionary leader or leaders leave the business. The idea of building an organization based on a superior management team that produces repeatable results should be logical and appealing to an entrepreneur. Such permanent structures are the true hallmarks of a successful entrepreneurial venture, as they represent the best protection against external and internal threats.

The question often arises whether a successful entrepreneurial venture needs to have the “right” idea at the outset of its operations. The most traditional way to start a business is to come up with the right idea or concept. Indeed, many successful business ventures start with what appears to be a winning concept, product, or service idea. However, one should not immediately discard the other possible avenues by which an entrepreneurial venture can be established. Although it may sound like a paradox, many successful entrepreneurial ventures did not begin with a singular concept, vision, or idea at their core. The best examples of this are Sony, which initially developed rice cookers, Walmart, which began as a single-store retail concept, and Hewlett-Packard, which experimented with various electronic gadgets. In fact, the initial products or concepts of many now-successful businesses were outright failures (i.e., 3M – failed mine → sand paper → consumer products; Walt Disney – failed comic strip). Some researchers argue that there is a negative correlation between the early success of an entrepreneurial venture and its propensity to develop into a sustainable business in the long term.

One of the most critical tasks for the management team is to create a vision for the business and to communicate it to the firm’s employees and other stakeholders. The most powerful vision statements are often the shortest: “democratizing car ownership”– Ford; “freedom of choice”– Phillip Morris; “authentic athletic performance”– Nike; “make people happy”– Walt Disney; “medicine is for people”– Merck.

Employment, management, and termination

Hiring the right people to run an entrepreneurial venture is one of the most critical decisions facing management. Successful entrepreneurial firms often “hire for attitude and train for skill” – they believe that technical skills are more teachable than attitude, work ethic, or level of enthusiasm. Successful entrepreneurial firms often recruit the most talented people even when it is not entirely clear what these individuals will be doing at the firm (this approach was used by firms such as Hewlett-Packard, Walmart, Google, Apple, and Amazon in the early stages of their development). Avoiding competition, reducing hiring fatigue, and desperately needing to fill a job are among the most common reasons for making a “poor hire.” While academic literature has outlined many methods by which managers can be appropriately hired (job interviews, reference checks, performance or integrity tests, psychological or medical evaluations), business practitioners often employ simpler and more tested hiring tactics (i.e., “the mall test”– hiring people on the basis of “interpersonal chemistry”; hiring people at the bottom of the organization regardless of their experience and educational preparedness; ignoring the “irrelevant” background information of new recruits). While many

of these techniques are highly subjective, they underscore the point that making “the right hire” is not a precise science.

If the management team hires the right people and appropriately places them within the entrepreneurial venture, subsequent problems are minimized or eliminated. High-level or “A+” performers need limited management and supervision and are self-motivated and driven; they exhibit high propensity to produce high-quality results on time, every time. If the entrepreneurial venture makes suboptimal hires, it needs to create extra mechanisms to oversee the poor performers and manage them. Consequently, “star performers” will leave as the organization creates more supervisory mechanisms for a larger pool of incompetent managers and employees. Managing people is about developing a clear job description, establishing a proper performance appraisal system, conducting regular performance evaluations, allowing time for personal work-related initiatives and projects, and recognizing and rewarding excellence. Some business practitioners have achieved strong results by experimenting with paying bonuses “upfront,” acting as if results have already been delivered (this approach works as a performance incentive rather than a bonus for completing the job).

Proper management also means operating within a broader organizational context in a way that recognizes the firm’s values. The firm’s values must be authentic and widely recognized throughout the organization. The most powerful values are not those that are declared on paper – they are a part of the entrepreneurial firm’s fabric.

If management and employees are properly selected and managed, the problem of termination becomes virtually non-existent. A hallmark of highly successful entrepreneurial firms is key individuals who have been with the venture a long period of time (+15 years). Successful firms also pride themselves on promoting talent from within (including replacement CEOs from the firm’s own internal pool of candidates). Sometimes, termination is necessary in the event of downsizing or retrenchment. The most successful firms will determine whether or not they have assigned the appropriate people to the most suitable tasks by moving them around the organization. Other firms will terminate unsuitable employees more quickly, as they believe management should spend its time and resources not on improving a suboptimal employee, but working with the most talented ones. The ultimate choice of tactics will depend on the personal preferences of the leader, the leader’s management style, or the organizational culture of the firm (among other factors).

Market share and competitive dynamics

The essence of competition in the market can be captured in a single number – the market share. Market share illuminates a firm’s performance relative to other competitors and defines the percentage of the total market that is owned by the firm’s specific product or service. Market share can be expressed in absolute or relative terms. When expressed as a percentile, market share is calculated on the basis of value or unit sales volume; specifically, it is calculated by dividing the firm’s sales or revenue by the total estimated market value or size (expressed in absolute terms). A market share expressed in relative terms captures the firm’s competitive position in relation to its competitors as a ratio (in other words, to what extent one firm’s market share is larger or smaller than that of other firms in the marketplace).

A firm’s competitive strategy focuses on improving the competitive position of the firm’s products or services within a specific market or target market. The essence of a sound competitive strategy is to develop a sustainable competitive advantage, which then translates into a strong market share.

Michael Porter, in his book, *Competitive Advantage: Creating and Sustaining Competitive Performance*, defines two basic competitive strategies available to firms: cost leadership and differentiation. The cost leadership strategy focuses on providing value to customers through competitive prices. In this strategy, firms attempt to seek a cost advantage over their competitors by offering good-to-excellent quality products or services at competitive prices. Porter argues that cost advantage can be achieved by reducing costs along the components of the value chain (i.e., primary or support activities, as discussed next), and that cost reduction can be broadly achieved by controlling cost drivers and restructuring the value chain. Some specific strategies used to reduce costs include making significant investment into machinery and equipment, competitive raw material sourcing, lowering labor costs, limiting marketing expenditure, leveraging the distribution structure, stripping away “unnecessary” features for products or services, simplifying product design, and outsourcing certain internal functions (i.e., accounting). The strategy works best in circumstances in which products or services are essentially identical to one another and competition is especially fierce. The best examples of companies that have effectively executed low cost strategies are Walmart, Dell, General Electric (appliances), McDonald’s, Tim Hortons, and Timex. The low cost strategy may not be sustainable in circumstances in which competitors can easily imitate the product, technology changes and eradicates the cost advantage, or other bases for the initial cost advantage diminish.

The differentiation strategy, conversely, involves offering a unique product or service that cannot be easily imitated by competitors, or which contains features competitors do not have and are unable to offer. Successful differentiators normally command a premium price for their product or service (customers are less sensitive to price considerations), and the firms gain customer loyalty. Differentiation can result from many factors: multiple product features, superior service, unique design, product reliability and quality, technological advantage, and so on. The competitive advantage found in the differentiation strategy does not come from a single source, but rather a combination of factors. The strategy works the best in circumstances where there are many avenues by which the firm can differentiate its market offer, technological improvements are frequent, and customers demonstrate diverse purchasing preferences. The strategy does not work well if competitors are able to imitate the product or service, or if other bases for differentiation diminish or disappear. Top differentiators include Microsoft, Starbucks, 3M, and Mercedes-Benz.

Increasing market share should be among the most critical objectives of any entrepreneurial firm. A growing market share confirms that the entrepreneurial firm is offering competitive products or services, has a loyal customer base, that its marketing and promotional activities work well, and that the firm enjoys a competitive advantage. As previously mentioned, the most common rewards for improving market share are growth in sales and increased profitability. Table 3.2 summarizes some of the main strategies for improving market share.

Mode of operations or business model

Many practitioners and academics argue that the pursuit of a sustainable competitive advantage in the marketplace is deeply rooted in the business model that the entrepreneurial firm employs. Even though discussions of the business model have recently become a more frequent part of mainstream strategic planning, academic studies confirm that few ventures have a thorough understanding of how to develop a solid business model in order to gain a competitive advantage in the marketplace. While the importance of building and operating an optimal business model has been a part of academic considerations in management for

Table 3.2 Market strategies for market share leaders and followers

<i>Market share position</i>	<i>Main strategies</i>	<i>Description</i>
Leaders	Continue offensive drive	Continue improvements and innovation Find additional sources of demand (new products or new markets) Promote new uses of products
	Protect current territory	Protect sources of competitive advantage Erect entry barrier by high advertising, superior service, and research & development Build additional capacity to discourage entry Offer new brands directly aimed at competitors' products
	Show dominance	Offer deeper discounts and more differentiation Aggressively promote products Offer discounts to customers for exclusivity Seek distribution exclusivity
Followers	Grow by acquisition	Find acquisition targets in new markets or those with new product offerings Create cost efficiencies Buy new technologies
	Pursue niche strategy	Find and exploit smaller markets (unattractive to large players) Grow smaller markets in new directions
	Become specialist	Focus on a single product or product family Build competitive advantage and leadership with limited offer

Source: Based on Thompson et al. (2005).

decades (as demonstrated in the works of Alfred Chandler, Igor Ansoff, Kenneth Andrews, and Michael Porter), the recent resurgence of academic interest in business models is a relatively new phenomenon. Such academic investigations have been fuelled by the extraordinary success of entrepreneurial ventures in the sphere of e-commerce.

Business practitioners observe that while a suboptimal or inefficient business model can damage the entrepreneurial firm's ability to effectively compete in the marketplace, an outright poor business model can effectively destroy the business. Successful entrepreneurial ventures need a well-defined business model or platform from which to operate. Both academics and practitioners agree that venture-appropriate and innovative business models can be more transformative to entrepreneurial ventures than new products or services, technologies, distribution methods, marketing gimmicks, etc.

The definition of a business model has evolved over time, but, in simple terms, a business model is a framework that the firm employs to conduct its business. A business model is the internal architecture of the firm; it captures how the business works, and is the way by which the management team rationalizes the importance of the business's various components as the key contributors to its success. The business model also serves as a formal description of the inner components of the firm and outlines their relationships to one another. The business model must also describe the interplay of the structural and operational features of the firm, how these components fit together, and how they generate profit, cash flow, and, ultimately, economic value. In ideal circumstances, the business model is flexible, sustainable, and enduring, and allows for creativity, invention, and innovation. Most

importantly, the business model must outline the commercial orientation of the firm to its most important stakeholders – customers.

Business models are not static; rather, they evolve. As previously noted, an innovative business model is perceived as a powerful tool that can invigorate the firm's revenue and profits, as well as its products, delivery, and service. Apple, for example, innovated its business model by introducing iTunes (music distribution), iPods (music consumption), and iPhones (connectivity and telecommunications). Dell, on the other hand, established a build-to-order system in competition with more traditional "build-inventory" system operators. As a result of its business model, Dell effectively became an assembler and a distributor, rather than a manufacturer.

There are two business innovation models: forward and backward integration (utilizing the value chain) and clustering the firm's activities in new ways. While business model innovation has recently become a mainstream management practice (such innovation has led to much success for firms like Google, MySpace, Dell, and many others), business practitioners caution against an uncontrolled pursuit of innovation and the excessive use of internet technologies to transform entrepreneurial ventures. The most unsuccessful attempts to innovate business models occurred during the dot.com era of the late 1990s and early 2000s, during which many entrepreneurial start-ups aimed to dis-intermediate traditional brick-and-mortar retailers by offering products online. While some of these firms achieved temporary success, many others failed.

There is no single way by which a firm can develop or operate a successful business model. Different business models can be successfully employed in the same industry (examples include Dell, Apple, Hewlett-Packard, and IBM; Google, Amazon, and eBay; Lufthansa, Singapore Airlines, and Ryanair). An effective business model reflects the firm's vision, organizational culture, management preferences, internal processes, an understanding of the marketplace, and its key forces.

Business model architecture

The founding architecture for a business model can be "closed" or "open" (see Figure 3.2). A "closed" business model is constructed upon the idea that economic value is generated along a value-chain process based on availability of certain resources. The strategic underpinnings for the closed-model construct are erecting barriers to gain competitive advantage, retaining and controlling proprietary knowledge, fiercely protecting new products and processes, and defending market position. An "open" business model represents a relatively new approach based on inclusion, co-operation, and value-exchange. The open model recognizes that significant economic value (whether in the form of innovation, invention, research, and so on) can be gained from access to external resources and rests on the non-ownership of resources. This business model is often perceived as a higher-level accelerator of innovation.

In terms of "closed" business models, academics have traditionally defined two general constructs: the value-chain model and the resource-based model. The two approaches comprise similar components and are effectively constructed around the firm's resources, even though they have different points of gravity and importance. They are discussed next.

The value-chain model

The most common and intuitive approach to defining the key components of a business model is the value-chain model developed by Michael Porter. Porter's approach represents

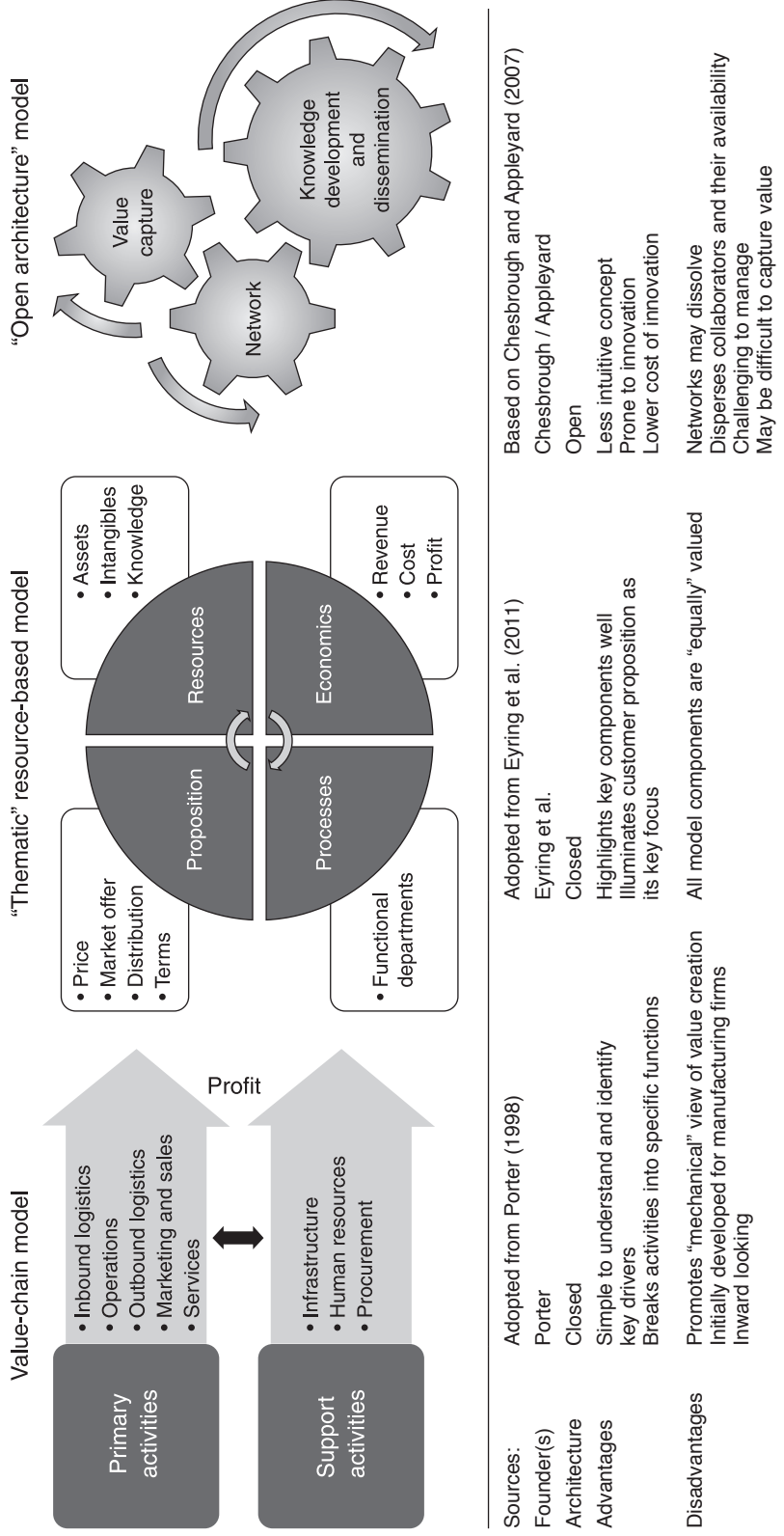


Figure 3.2 Three constructs of business models: value-chain, “thematic” resource-based, and “open architecture”

one of the most recognized definitions of a business model. According to the construct, a successful, value-creating business model is directly connected to an in-depth understanding of value creation activities at the firm. This framework of analysis is generally defined as a value chain. A typical value chain for a manufacturing business includes “primary activities” and “support activities.” The primary activities include inbound logistics (i.e., raw material warehousing and handling), operations (i.e., manufacturing, assembly, testing), outbound logistics (i.e., storage and distribution of finished products), marketing and sales (i.e., advertising, promotion, customer relations, and pricing), and services (i.e., installation, repair, service). Support activities are divided among four main functions: company infrastructure (i.e., management, accounting, finance), human resources (i.e., recruitment, training, development), technological development (i.e., research and development, product or service improvement, process), and resource procurement (i.e., purchase of raw materials). The most critical part of the analysis is determining the firm’s “center of gravity” – the area of greatest expertise that forms the basis for a sustainable competitive advantage. In short, the entrepreneurial firm must understand where its competitive advantage comes from. Competitive advantage may be rooted in superior research (Merck), effective brand creation (Apple, Starbucks), simplifying the supply chain (Dell, Zara, and Zipcar), or another aspect of the firm’s operation.

The value-chain approach provides four additional insights. Entrepreneurs need to focus on projects that are profitable and dedicate necessary resources to the best opportunities. Entrepreneurs should also terminate unprofitable projects that do not show promise for the future. Entrepreneurs also need to undertake a detailed analysis of the primary and secondary activities in their ventures to determine which parts of the value chain need to be retained inside of the firm and which others can be subcontracted out through outsourcing or other co-operative strategies (other firms in the marketplace may perform certain specific tasks in a more efficient manner). Finally, entrepreneurs need to avoid “farming-out” any activities that constitute the critical core of their business.

The “thematic” resource-based model

This approach suggests that a business model is an active interaction of four “thematic” elements: commercial proposition, business economics (profit potential), resources, and internal processes. The creation of a competitive advantage rests in effectively integrating the four components to generate value for customers and the entrepreneurial firm. Commercial proposition means that the product or service either solves the customer’s actual problem or provides a tangible benefit for which the customer is willing to pay. The best commercial propositions are often simple and transparent. Business economics relates to an appropriate financial structure for the entrepreneurial venture to generate revenue, control costs, and earn profits. The key to this component of the model is to focus on the market opportunities that best convert into economic value for the entrepreneurial firm. Resources refers to a combination of assets, organizational competencies (both core and distinctive), skills, and knowledge (both tacit and explicit) possessed by the entrepreneurial venture. The key component of resource management is to classify the firm’s resources and then combine them into actual capabilities. Resources should also be durable (able to be sustained over a long period of time) and difficult for others to duplicate. Last, the “thematic” model stresses the importance of internal processes. This part of the model focuses on different functional departments in the business (i.e., human resources, marketing, manufacturing, finance, and research and development).

The “open architecture” model

The third approach to constructing a business model is to create an open structure model, or “open architecture” model. This model is based on the assumption that business models do not work in isolation; rather, they work in tandem with other models. The best business models are flexible and become a part of the firm’s business arrangements with other stakeholders. “Isolationist” business models may be less effective, as they do not tend to cast business network and synergistic nets especially wide. The best business arrangements are inclusive and based on a network approach that involves a symbiotic relationship between stakeholders and market participants. The most well-known examples to have deployed this model include Wikipedia, MySpace, YouTube, and Linux – firms that represent systems of collaborative and collective innovation, invention, co-ordination, and value optimization.

The model has three interlocking components: knowledge development and dissemination, the network, and value capture. The open architecture model involves pooling knowledge, organizing this knowledge in a unique manner, disseminating it to various stakeholders, and packaging the benefits in various ways and configurations to better address a specific target market. The resulting products and services are often “jointly owned,” but permit the individual contributors to capture their “own” value (i.e., profits). Contributors to a common “knowledge pool” are testers, users, and consumers all at the same time. The concept rests on the premise that the knowledge of a single individual or research unit cannot compete with the cumulative and combined knowledge of a potentially infinite pool of contributors. Additionally, the concept presupposes that product visionaries, inventors, and innovators may not necessarily reside in the firm’s R&D department; rather, they are housed elsewhere (i.e., university labs, research institutes, homes, and garages). The model also acknowledges that accessing knowledge and innovation has become easier due to the emergence of “secondary” innovation markets or innovation intermediaries. The reduction of research output in favor of “open innovation” is already visible in multinational firms such as Novartis, Microsoft, SAP, Merck, Pfizer, BMW, and Hitachi, which favor research partnerships and alliances. While this business construct began in the high-tech sector, it is now becoming commonly accepted in other sectors such as manufacturing, construction, and logistics. Second, the open architecture model is developed on the basis of a network system – a modern-age *keiretsu*-style network. This “ecosystem” represents a natural extension of knowledge development and dissemination; the network provides an appropriate venue and assures an increasing footprint of adoption and self-perpetuation. The network also provides a value system under which volunteer contributions can be made from contributors in the same or different industries. The third component of the model is value capture – namely, to profit from the model. This is an important component because the firm needs to be able to capture a portion of the enlarged “value pie” generated from knowledge development and dissemination. Each contributor develops its own applications, add-ons, incremental improvements, and so on, which are further developed on the basis of shared knowledge and networking.

Common business models

Entrepreneurs can operate their ventures using various business models. The business can be operated on a full-time or part-time basis by dedicating limited financial resources or by centering operations on the transfer of products through the use of internet technologies.

Entrepreneurs can also choose to solicit assistance from local business incubators or government agencies.

Different business models carry with them different advantages and disadvantages, risks and rewards, and start-up and operating expenses. Different models also offer different means by which to generate revenue.

The most common business model is the traditional “brick-and-mortar model” (BAM), in which the entrepreneur operates from a dedicated physical facility located outside of the home. The facility is used for production, storage, and distribution. The advantages of this business model are that customers perceive the operation as a “real business” and that a physical presence may translate into revenue. The disadvantages relate to financial matters, namely high start-ups costs and wind-up costs, financial commitment over a longer period of time, and poor scalability. The e-commerce business model is based on the usage of online technologies, where customer traffic comes mostly from the internet. The analysis of e-commerce models has been driven by the success of firms such as eBay, Amazon, and Google. Many of these models are based on delivering the best price or best deals (i.e., Priceline, Woot, LivingSocial, Moolala), aggregating product or service offerings (i.e., eBay, Amazon), or changing lifestyles (i.e., Apple, Google). E-commerce businesses can be operated from home or from a separate physical facility. The advantages of this business model are obvious: lower risk and costs, scalability, ability to test the market first, and rapid expansion potential. The disadvantages may include limited interaction with customers, high competition, and price rivalry. The home-based model predominantly focuses on product resale or special services. These businesses are run from their own dedicated facilities. The franchising business model is based on entering into a long-term agreement with a franchisor. The model is based upon a proven concept which has been tested in the marketplace over many years and offers a wide variety of opportunities to entrepreneurs in sectors ranging from manufacturing to retail. This business model offers lower operational risks, hands-on assistance from the franchisor, recognized and established brand, scalability, availability of new products – these advantages often translate into lower business failure rates. The drawbacks include expensive licensing and royalty arrangement, and operational restrictions. The licensing business model involves obtaining the rights to sell an existing product to other clients (businesses and individuals). Last, the multilevel marketing business model (MLM) effectively operates like a multilayer distribution platform for selling a wide range of products. This business model relies upon a network of various individuals.

Questions to consider

1. The various parts of the “six component” model are not isolated from one another, but rather cross-feed each other throughout the development of a successful entrepreneurial venture. Discuss the connection between the mode of operations and margins.
2. Imagine that you are looking to start a fitness club for seniors in your community. Given the demographic characteristics of your community, estimate the total size of the fitness market in your town and the size of the market for your target audience. Develop a basic sales model for your business for the next three years. Be explicit about your assumptions and calculations.
3. Interview a successful local entrepreneur. Your assignment is to focus on the characteristics of the management team. Your investigation should focus on the following questions: What traits and characteristics does the team exhibit? Do they have an industry background? What is their level of education and professional preparation? How long

- have they been working in this market? Have they developed any other entrepreneurial ventures?
4. Compare the strengths and weaknesses of the three major architectural frameworks for business models discussed in this chapter. If you are looking to developing a website connecting all students at your university, what architectural framework would you choose and why? Discuss your choice.
 5. Choose a specific retail market in your community (clothing, coffee, sportswear, pharmacies, books and magazines, toys, groceries, etc.) and focus on two different operations. Find one retailer that appears to use a low cost strategy and another that appears to use a differentiation strategy. Compare and contrast the approach of these “opposing” concepts and operations.

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4 Preparing financial projections for entrepreneurial firms

Chapter objectives

After reading this chapter, you should be able to:

- appreciate the process of developing financial projections;
- recognize the importance of financial projections to an entrepreneurial venture;
- understand the complexities of developing revenue and cost forecasts;
- comprehend the need for developing different sets of financial projections for various financiers;
- summarize the advantages and disadvantages of the main sources of financing for an entrepreneurial venture.

Entrepreneurial firms generate capital either internally or externally. Internally, firms rely on their own financial resources. If the entrepreneurial firm has been operating for some time and is profitable, it can support its own expansion. If the firm is not profitable, it can manage its working capital in such a way that it pays for liabilities as they come due. External capital can come from numerous sources: banks, venture capital, the government, business angels, public markets, strategic investors, private partners, and so on. Commercial banks traditionally represent the most important source of entrepreneurial financing, and can satisfy up to 80 percent of an entrepreneurial firm's capital needs. However, obtaining external financing from a bank can be a challenge. Banks do not tolerate risk well, and risks are inherent to the entrepreneurial process. Banks also tend to not be "friendly" towards entrepreneurs – particularly the owners of new firms that want to develop new products, embrace innovation, build new facilities, or develop markets outside of their home territory. In addition, banks require collateral that can exceed the value of the initial loan by two to three times. If entrepreneurial firms experience financial or operational challenges, banks may abandon their involvement altogether or – at best – refer the troubled case to a workout department (often located outside of the entrepreneurial firm's target region).

Bank financing alone may not be sufficient to finance the innovation and growth of an entrepreneurial venture. Additional financing can come from venture capital, which focuses on the provision of risk capital to those firms that have above-average growth prospects and a complete management team. Venture capital traditionally provides financing to a small percentage of entrepreneurial firms. A number of challenges are inherent to this type of financing. Venture capitalists are highly selective in their choice of investee firms. Traditionally, venture capitalists provide financing to one or two out of every 100 business plans they review; many entrepreneurial firms are simply not suitable for this type of

financing. Venture capitalists may also place significant impositions on business owners. Venture capitalists focus on the exit, which provides them with an opportunity to cash out of their illiquid investment; this forces the entrepreneurial firm to be sold to strategic investors or list its shares on the public market. Venture capitalists may also take an active role in approving key operational, strategic, and financial decisions that may be disruptive to business owners who value their independence. Finally, venture capital financing is relatively expensive when compared with other forms of financing.

On the equity side, entrepreneurial firms can sell their shares in public markets. While this route is theoretically open to all firms at various stages of development, the odds that a young or medium-sized firm will obtain public listing are worse than those of the firm obtaining external financing from venture capitalists (notable exceptions exist, of course).

Government assistance programs also assist firms with access to finance.

Other methods by which entrepreneurial firms obtain financing include business angels, bootstrapping, factoring, pledging. Some of these methods will be discussed in more detail in Chapter 6.

The mechanics of preparing financial forecasts

No matter what avenue the entrepreneurial firm ultimately chooses to secure financing, the fundraising process cannot be completed unless the firm prepares financial projections – an assessment of the firm's financial fortunes moving forward. Numerous academics and practitioners focus on the overall preparation of a complete business plan, of which financial forecasts are an integral part; here, we will focus only on the mechanics of preparing financial forecasts.

Financial forecasts are an important tool for entrepreneurial firms for a variety of reasons. For one, they provide the basis on which a vision for the firm can be developed moving forward. The mere act of preparing financial forecasts forces the entrepreneurial firm to develop its market and competitive strategy, to focus on pricing considerations, to understand what resources are needed to fulfill its market and revenue objectives, to understand its capital requirements (i.e., equipment, machinery, land, intangibles, and others), to consider various financing alternatives, and so on. Financial forecasts are also a means by which the firm can develop a valuation for the business. The information found in financial forecasts is key for business valuation methods such as the discounted cash flow method (DCF) or earnings multiples (i.e., earnings before interest, taxes, depreciation, and amortization; EBITDA multiple or price-to-earnings (P/E); or P/E multiple – these valuation techniques are discussed in more detail in Chapter 8). Preparing a business valuation is important for any entrepreneurial firm that wishes to engage venture capitalists (who provide capital in exchange for an equity stake in the business), business angels (who provide equity or debt), and banks (who provide debt and often wish to understand the underlying value of the entrepreneurial business and its assets, because shares may be pledged as part of the collateral package). Financial projections are also commonly part of the legal documentation signed between the entrepreneurial firm and its capital providers (whether in the form of a loan agreement or shareholders' agreement). Additionally, financial forecasts measure the actual progress of the entrepreneurial venture over time throughout the value creation process. Financial forecasts may also serve as a benchmark for comparing actual and budgeted financial performance. The actual-versus-budget comparison is an important source of feedback for entrepreneurial firms (many of which aspire to be learning organizations).

There are two basic methods used by entrepreneurial firms to complete their financial forecasts: the cash basis and the accrual basis. The cash budgeting method focuses on cash receipts (cash inflows) and cash disbursements (cash outflows). This process is simple and intuitive for entrepreneurs, but the downside is that cash forecasting is not accepted as a basis for obtaining external financing (especially from venture capitalists and banks). Additionally, financial reports prepared on the basis of cash budgeting are difficult to compare with financial statements prepared by accountants. The accrual method of financial forecasting requires a complete set of financial statements (i.e., income statement, cash flow statement, and balance sheet) to be prepared. In both instances, entrepreneurs must imagine the future development of the venture and record their major assumptions about the market, the competitive strategy of the firm, product pricing, cost structure, financing, and so on.

There are different methods of preparing financial forecasts. The method recommended in this chapter is based on a five-step approach (see Figure 4.1 for an overview of the financial forecasting process). The most difficult task is preparing the pro-forma income statement (step 1), which is the first major building block of the financial forecasting process. The next phase (step 2) involves preparing so-called transition calculations, which help to deal with the most important aspects of working capital (inventory, accounts receivable, and accounts payable). This step assists in preparing the cash flow statement. Next, the cash flow statement is prepared (step 3). The cash flow statement is the most important financial report because it captures how the entrepreneurial firm generates and uses cash (which assures business survival and growth). Paying attention to the cash flow statement is critical because running out of cash is one of the most significant contributors to business failure. The next step (step 4) involves the preparation of the pro-forma balance sheet – a rather mechanical exercise that is based on the previous steps. The final step (step 5) is critical for preparing a realistic set of financial statements and involves the final verification of the financial numbers obtained in the previous steps. This step involves calculating the key financial ratios and analyzing the entrepreneurial firm's projected financial performance in view of its future ambitions and historic achievements.

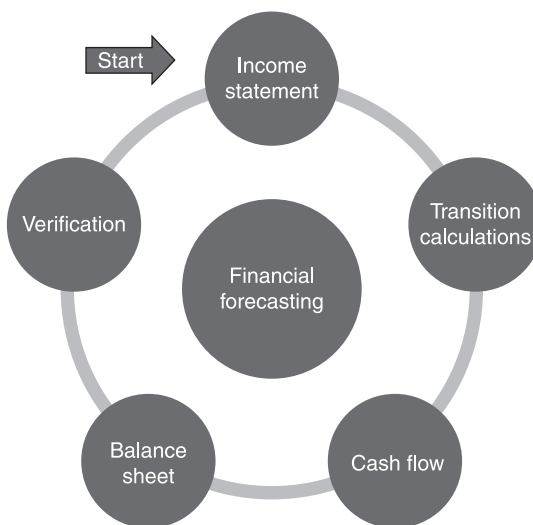


Figure 4.1 The five steps of financial forecasting

It is important to note that financial forecasting is not a one-time process, but rather an iterative exercise aimed at revising business assumptions in such a manner that the most realistic set of financial numbers can be achieved. The iterative nature of the forecasting process illuminates the fact that the various components of most financial forecasts are interconnected; a change in one assumption automatically causes a revision to another part of the financial forecast. For example, a significant increase in revenue cannot be accomplished without investing into additional machinery and equipment; this additional investment, in turn, necessitates additional operating costs (i.e., labor, maintenance, depreciation, and so on). Additional fixed assets may require additional financing in the form of debt; this, in turn, means an increase in financial costs. Additional revenues will likely require additional raw materials (i.e., an increase in inventory) and more credit to customers (i.e., an increase in the balance of account receivables); these components of working capital also require further financing. As previously mentioned, the objective of the financial forecasting “wheel” is to effectively go through all the steps of the financial forecasting process until a realistic assessment of the entrepreneurial venture can be achieved in the context of its historical performance and industry trends.

The forecasting process is discussed in this chapter in the context of Bavarian Auto Parts (BAP), a distributor of replacement automotive parts for German-made vehicles (i.e., Mercedes-Benz, BMW, Audi, and Porsche). BAP deals with branded and high-quality replacement parts from leading suppliers such as Sachs and Federal Modul; their products are not inexpensive, counter-fit alternatives. The firm began operations in 2010 and it currently achieves revenues of \$36.4 million. Based in San Francisco, BAP currently distributes products to many parts of California through informal associations and strong local operators. The firm has grown rapidly in recent years and has aspirations to become a market leader in German automotive replacement parts. New German vehicles are covered by manufacturers’ warranties and owners rarely use independent repair shops. BAP targets vehicles ranging in age from three to ten years old. This market segment is the most attractive for two reasons. First, parts for these vehicles carry higher margins than the equivalent parts for local vehicles; the firm achieves a gross profit margin of 27 percent, compared with 15 percent for its local counterparts. Second, this segment of the total vehicle population is expected to increase in size faster than any other market segment over the next few years. In recent years, there has been high growth in the number of new German vehicles registered in California – a trend that looks set to continue.

BAP was founded by Heinrich Klinsman, who owns 50 percent of the firm. During his early years, Heinrich (who holds a Masters degree in Philosophy from the University of San Francisco) was involved in a number of small automotive businesses. While he now focuses increasingly on strategic issues, he is the ultimate management decision maker within the firm. Heinrich’s brother, Heinz, owns 30 percent of the firm and has been actively involved in the day-to-day operational management of the venture since its inception. The remaining part of the firm is owned by a local business partner who is not active in the business. As the firm has grown, the two brothers have developed an impressive and empowered middle management team to assist them in running the business. Management has drawn heavily from business practices in Germany, where many of the firm’s suppliers are based.

The venture is very profitable and cash generative; the owners could continue to trade without major investment (or expansion) and would still enjoy a very high standard of living for the foreseeable future. However, if the owners were to expand BAP to become the leading German parts distributor in California, they could achieve revenue in excess of \$100 million (placing BAP among the largest independent distributors in the state). The

owners have two choices: develop the business on their own, relying on BAP's internal financing and moderate levels of debt, or seek another form of external financing to accomplish their goals earlier, solidify their distribution footprint in California, and discourage new entrants into the market.

Let's look at the specific steps by which we can develop the financial forecasts for BAP.

Step 1: Preparing the income statement

The pro-forma income statement captures the firm's capacity to sell and promote its products in the marketplace, to control various operational costs, to optimize its financing structure, and so on. The operational success of the entrepreneurial firm is captured in the two most important lines of the pro-forma income statement: EBITDA (earnings before interest, taxes, depreciation, and amortization) and EBIT (earnings before interest and taxes). The pro-forma income statement is based on numerous assumptions, some of which are fine-tuned only during the final stages of preparing the financial forecast.

An understanding of the life cycle of a firm can be useful for determining the pattern of growth of revenue and profits (see Figure 4.2). An entrepreneurial firm's growth can be divided into five stages: introduction, development, growth, maturity, and decline. In the introductory stage, the entrepreneurial firm struggles to generate revenue while incurring the significant costs of operating and developing the business (net losses normally grow from month-to-month at an increasing rate). In the next phase of business incubation, development, the entrepreneurial firm begins to get "traction" and generates new revenue at an increasing pace. The firm also gains visibility in the marketplace – first in niche markets, then among the larger market audience. Revenue growth is strong in percentage and absolute terms, albeit from a low base. A steadily growing revenue line and operating efficiencies lead to a reversal of the profit-loss trend, and the entrepreneurial firm heads to a break-even point at the net-profit level (some firms achieve profitability at this stage). Once the entrepreneurial firm reaches the net income break-even point, it is assumed to enter the growth stage. During this period, revenue continues to grow significantly until it passes a "tipping point" in which a geometric progression of revenue occurs (a sort of viral reaction occurs in the marketplace with respect to ordering the firm's products). Net profits continue to improve as

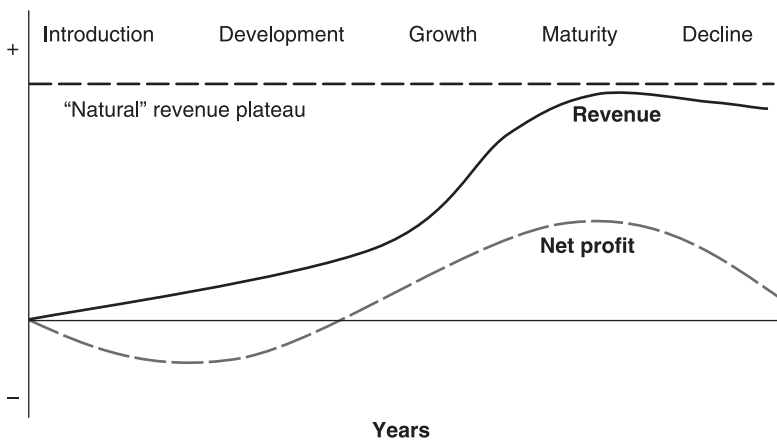


Figure 4.2 Development stages of the firm (the firm's life cycle)

further operating efficiencies arise, and the entrepreneurial firm grows its market share in a meaningful way while establishing a clearly visible market presence. During the maturity stage, the entrepreneurial firm continues to grow its business. It is important to note here that the revenue of many entrepreneurial firms reaches a natural plateau – a point of market saturation as determined by the size of the market, the number of competitors, the number of potential customers, and so on. To avoid reaching this plateau, entrepreneurial firms must develop new products, improve existing products, or offer products in new market destinations. During the maturity stage, net profit continues to grow, but also begins to decline in the later part of the cycle. The final stage is the decline itself, where both revenue and net profit sharply decrease.

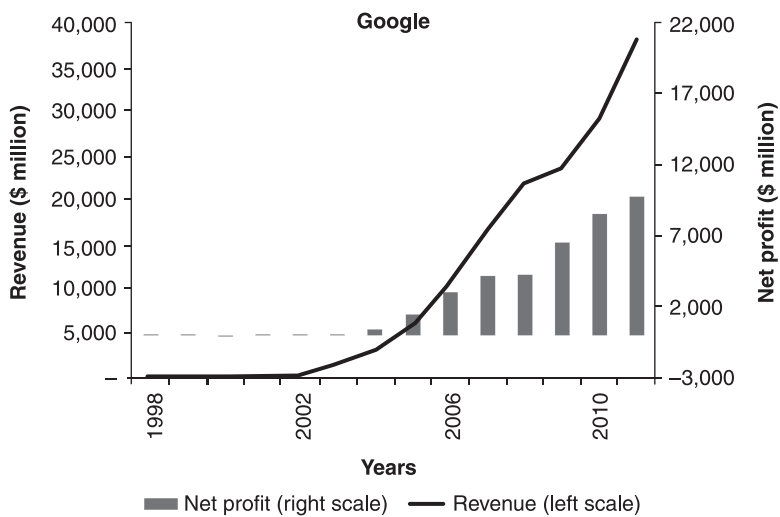
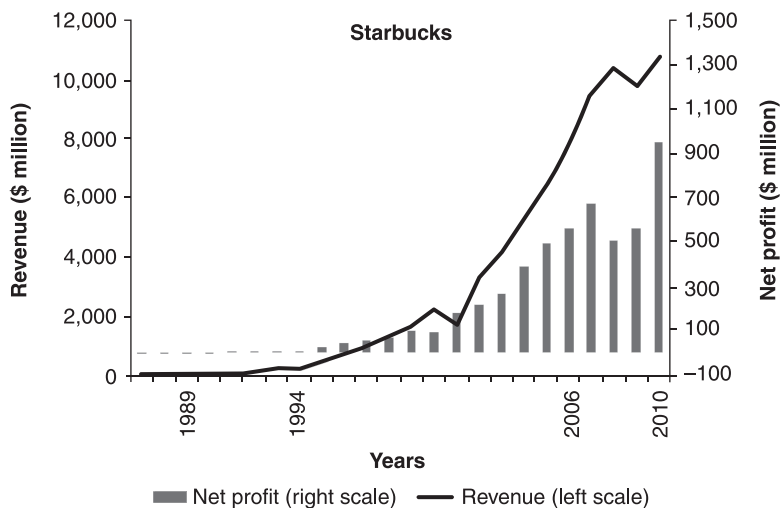
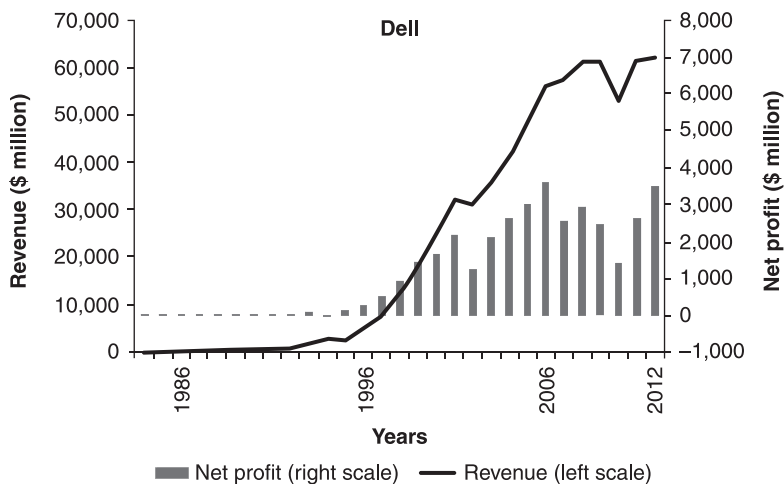
Management literature treats each of these five stages as more or less equal in duration, which is not correct. For example, some firms experience rapid expansion where the introductory and development phases are short and the net-profit break-even point is reached quickly. To demonstrate this point, we can look to the examples of four entrepreneurial firms (all of which are now sizeable). Three of the selected firms are easily recognized ventures: Dell (computer distribution), Starbucks (coffee shops), and Google (web search and advertising); the other, Euronet (automated teller machines and business software), is less known. Figure 4.3 shows a graphical depiction of the development patterns for revenue and net profit as well as some of the basic financial statistics for each firm. While the graphs at first appear similar to one another, they differ on numerous fronts. As an example, the length of each phase of development in the life cycle varies depending on the firm. Starbucks took over 22 years to pass through its initial development stage, while Google passed through the first two stages of development after only four years. The firms also differ with respect to when they reached the break-even point (the point at which the firm is able to sustain a positive net income on a repeatable basis): Dell – 1 year; Google – 2 years; Starbucks – 22 years; Euronet – 10 years.

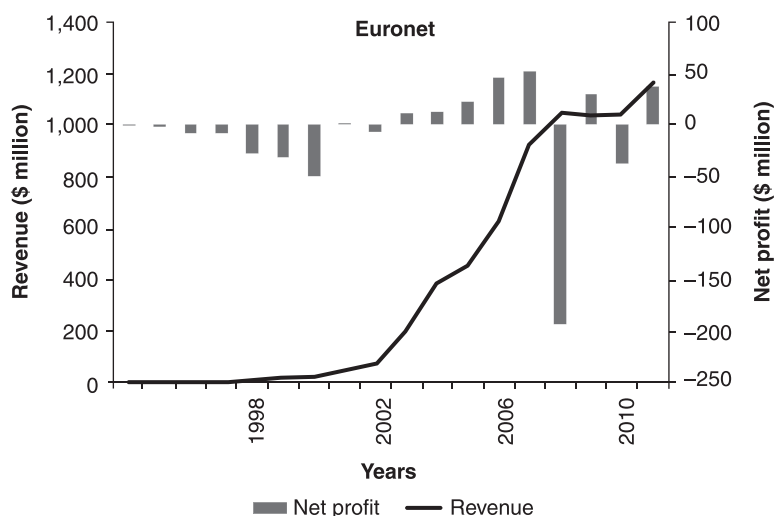
Entrepreneurial firms operating in various industries can experience different development life cycles (growth rate, development trajectory, time needed to break-even, etc.). The most prudent ways to understand the revenue curvature and break-even potential of any entrepreneurial venture are to analyze various competitors in the industry and to superimpose the industry life cycle onto an entrepreneurial firm operating in the sector. Additionally, revenue and profit curvatures are rarely as smooth as shown in Figure 4.2. Academic literature and business practice suggest that the pattern of growth in entrepreneurial firms is often non-linear; this is consistent with the experiences of the four example firms.

Revenue forecasting

The most simple approach to revenue forecasting is to assume that the entrepreneurial firm is likely to develop along its historical revenue growth trajectory, that no new entrants are to enter the entrepreneurial firm's competitive market space, that no new technologies are on the horizon that could disrupt the current market dynamics, and that the entrepreneurial firm is unlikely to introduce new products. The simplest revenue forecasts assume that the future revenue line may be developed by extending the historical revenue growth patterns. In other words, future revenue will reflect the entrepreneurial firm's historic revenue trajectory.

Luckily, financial projections go far beyond simply mimicking the historical revenue performance of the firm. Entrepreneurial firms develop new products and services, expand





Company	Dell	Starbucks	Google	Euronet
Sector	Computer manufacturing	Coffee shops	Web search and advertising	Automated cash machines and software
Firm's life cycle (time/years):				
Introduction	1984–6/2 years	1971–89/18 years	1998–9/1 year	1994–9/5 years
Development	1987–96/9 years	1990–4/4 years	2000–01/1 year	2000–02/2 years
Growth	1997–2006/9 years	1995–2006/11 years	2002–11/9 years	2003–06/3 years
Maturity	2007–11/4 years	2007–10/3 years	n/a	2007–11/4 years
Decline	n/a	n/a	n/a	n/a
Introduction & development	11 years	22 years	4 years	7 years
Time to break-even	1 year	20 years	2 years	10 years
Revenue	\$62.1 billion	\$10.7 billion	\$37.9 billion	\$1.2 billion
Average revenue growth	36.4%	32.9%	129.7%	74.6%
Net profit	\$3.5 billion	\$0.9 billion	\$9.7 billion	\$0.0 billion
Net profit margin	5.6%	8.9%	25.7%	3.2%

Figure 4.3 Revenue, net profit, and other characteristics of selected entrepreneurial firms

Source: Data from www.google.com; www.dell.com; www.euronetworldwide.com; www.starbucks.com (information retrieved on August 5, 2012).

their operations by opening new production facilities, acquire other firms, enter exciting new markets (including emerging markets), develop strategic alliances and partnerships, and so on. These initiatives all contribute to growing the firm's revenue line. At the same time, such initiatives make it more complex to develop financial projections because new factors and circumstances – the market, the competition (i.e., the market share), the local business environment, consumer preferences – are less predictable. In circumstances where new products are expected and new sales of existing products in new markets are forthcoming, the best method of building revenue projections is to break the revenue line into “old revenue” (sales generated from existing products and services) and “new revenue” (sales generated from new activities). While it is acceptable to forecast the “old revenue” as one block and assume it to grow according to historical trends, the task of forecasting “new revenue” is driven by assumptions and detailed calculations.

In Chapter 3, we briefly discussed the two main methods of forecasting revenue – the “top-down” and “bottom-up” methods. The top-down method focuses on creating general assumptions about the macroeconomic and aggregate factors and derives the revenue potential for the entrepreneurial venture from this analysis. The bottom-up approach is a more complex and precise method of forecasting revenue because it is based on the operational underpinnings of the entrepreneurial firm (the number of employees, the type of equipment and machinery, the firm's ability to service its customers, other operational limitations) and external considerations (the competitive structure of specific geographic regions, the degree of market consolidation, pricing considerations and consumer preferences, market growth dynamics, and so on). This way of generating revenue involves breaking the entire market into small and discrete “sub-markets” and then asking a variety of questions (What revenue level can be achieved? What is the most prudent pricing strategy to adopt? How can customer expectations best be met? Is it possible to take market share away from other competitors and under what conditions?) The basic idea when forecasting revenue is to break the entire market into smaller and smaller segments to make it easier to anticipate the revenue of each sub-market or geographic region. The total estimate of revenue for each region ultimately creates the forecast for the entire entrepreneurial venture. This method of forecasting is considerably more manageable when the entrepreneurial business has access to research statistics describing market demand, customer preferences, and the key competitors in each region (including their revenue, market share, pricing, and product availability). Predicting future revenue becomes an even easier task if future market growth estimates are available (perhaps done by an independent research firm, or – better yet – commissioned by the entrepreneurial business itself).

Let's see how this exercise can be done for the case of Bavarian Auto Parts (see Table 4.1). BAP divides its target market into three regions: North, Central, and South. The total market has increased by double-digit growth rates in recent years (2014 – 10.6 percent; 2015 – 11.3 percent). The regional markets differ with respect to their growth rates, competitive intensity, consumer preferences, pricing tolerance, distribution structure, and so on. The Southern region is the most attractive in terms of growth rates and volume of business, but it is also the most competitive. At the end of 2015, the firm will have a small market share equal to 2.2 percent. BAP's most immediate market is the Central market, which has no entrenched competition and has shown moderate growth in the last few years (equal to about 9 percent). BAP has steadily grown its market share in this region to 9.8 percent due to its close relationship with local repair shops and service stations. The Northern region is the least attractive, as it displays the lowest growth rates and market size. At the same time, the market is fragmented, the distribution chain is cluttered with a great deal of “middlemen,”

Table 4.1 Developing revenue forecasts based on market analysis (regional growth rates, competition, and market share)

(In \$'000)	Historic				Projected					
	2012	2013	2014	2015	2016	2017	2018	2019	2020	
Northern California										
BAP's revenue	4,894	7,262	10,752	12,003	15,689	21,686	27,340	32,909	35,694	
Percentage growth		48.4%	48.1%	11.6%	30.7%	38.2%	26.1%	20.4%	8.5%	
BAP's percent of revenue	35%	34%	36%	33%	36%	33%	30%	30%	28%	
Total regional market value	85,000	89,250	92,820	98,389	103,309	109,507	116,078	124,203	130,413	
Market growth rate		5%	4%	6%	5%	6%	6%	7%		
BAP's market share	5.8%	8.1%	11.6%	12.2%	15.2%	19.8%	23.6%	26.5%	27.4%	
Central California										
BAP's revenue	8,390	11,320	14,934	18,550	20,483	29,572	40,099	43,878	53,540	
Percentage growth		34.9%	31.9%	24.2%	10.4%	44.4%	35.6%	9.4%	22.0%	
BAP's percent of revenue	60%	53%	50%	51%	47%	45%	44%	40%	42%	
Total regional market value	145,000	162,400	177,016	189,407	206,454	222,970	240,808	260,072	286,080	
Market growth rate		12%	9%	7%	9%	8%	8%	8%	10%	
BAP's market share	5.8%	7.0%	8.4%	9.8%	9.9%	13.3%	16.7%	16.9%	18.7%	
Southern California										
BAP's revenue	699	2,777	4,181	5,820	7,409	14,457	23,695	32,909	38,243	
Percentage growth		297.1%	50.6%	39.2%	27.3%	95.1%	63.9%	38.9%	16.2%	
BAP's percent of revenue	5%	13%	14%	16%	17%	22%	26%	30%	30%	
Total regional market value	175,000	192,500	221,375	259,009	297,860	345,518	407,711	489,253	58,104	
Market growth rate		10%	15%	17%	15%	16%	18%	20%	20%	
BAP's market share	0.4%	1.4%	1.9%	2.2%	2.5%	4.2%	5.8%	6.7%	6.5%	
BAP's total revenue	13,984	21,359	29,867	36,372	43,581	65,715	91,133	109,696	127,477	
Growth rate		52.7%	39.8%	21.8%	19.8%	50.8%	38.7%	20.4%	16.2%	
Total market value	405,000	444,150	491,211	546,805	607,622	677,995	764,596	873,528	1,003,596	
Growth rate		9.7%	10.6%	11.3%	11.1%	11.6%	12.8%	14.2%	14.9%	
BAP's total market share	3.5%	4.8%	6.1%	6.7%	7.2%	9.7%	11.9%	12.6%	12.7%	

BAP: Bavarian Auto Parts

and no clear market leader has emerged. With a 12.2 percent market share, BAP is considered to be one of the top three distributors in this region.

The firm's major efforts are placed on Southern California and the North. BAP aims to grow its market share in the South and become a well-recognized distributor by developing partnership agreements with a number of repair shops. The firm begins to develop its service network of independent repair shops (called "Q-service"), which focus on repairing German vehicles. The Q-service is the firm's network of affiliated workshops. An independent manager owns each outlet, but they adhere to common branding, operational guidelines, and sales and service procedures; they also participate in joint advertising and promotional activities, both locally and regionally. BAP develops this network in order to secure a captive customer base after observing this development in the German market. The firm's strategy in the North is to become a clear market leader by growing its market share to more than 25 percent by 2020. The firm aims to achieve its objective by acquiring two smaller distributors in the area and by building its business organically. BAP expects to continue its current development strategy in the Central region by introducing three regional distribution centers.

Cost forecasting

The next step in preparing the income statement involves a focus on costs. Similar to the detailed process undertaken for revenue forecasting, determining the future cost structure of the firm begins with an understanding of the underlying historical trends. The historical analysis of cost can be expressed as two forms: horizontal analysis and vertical analysis. Horizontal analysis involves understanding the factors that drive a specific cost item (for example, understanding the percentage growth of a specific cost item and determining what drivers best describe the percentage increase). As costs are most commonly driven by sales, this relationship is investigated first. Costs can also be driven by capital expenditure (i.e., more equipment often leads to more costs for materials, energy, maintenance, labor, and so on). Increases to cost items can be related to revenue growth or reflect revenue growth to a certain degree (i.e., 30 percent, 50 percent, 80 percent, and so on). The second type of analysis, the vertical analysis, involves expressing costs as a percentage of revenue in an attempt to determine whether there is a recurring relationship between revenue and cost. If there is a trend (a spread between percentages from one year to the next), then we can assume that such a relationship is likely to continue into the future. For example, if marketing costs consistently equal what they were in the past, then it is fair to assume that such a relationship will continue unless other deliberate activities are undertaken.

Such underlying relationships found in the historical analysis are only partially useful for determining future trends; it is also important to investigate each cost item specifically and to decide whether there are any fundamental means by which specific cost items can be expressed. For example, a purchase of equipment may reduce raw material waste, minimize labor costs, and increase the quality of the final product. Such a purchase could not only reduce specific production costs, but may also allow the entrepreneurial firm to command premium pricing for its products due to their high quality. Entrepreneurial firms need to be detailed and deliberate in their understanding of the cost structure of the venture. If savings in any cost items are forecasted, they need to be specifically calculated, checked, confirmed, and deemed achievable over the long term. If the entrepreneurial team cannot produce a detailed explanation for the reduction of a specific cost, the future cost structure should be presumed to reflect historical trends.

Let's focus on Bavarian Auto Parts and see how a historical analysis of cost trends can be useful in determining future cost patterns (see Table 4.2). The first point of analysis would be to understand the historical costs expressed as a percentage of revenue. This analysis reveals that certain costs items (such as materials and supplies, services, business travel, and maintenance) are variable costs and can be expressed as a percentage of revenue based on historical trends (see Table 4.2 for specific analysis). Local taxes appear to be fixed at the

Table 4.2 An investigation of historical trends in key operating costs and formulas

<i>Costs items expressed as a percentage of sales (in percentage)</i>							
<i>Cost items</i>	<i>2012</i>	<i>2013</i>	<i>2014</i>	<i>2015</i>	<i>Range/ Average</i>	<i>Observation</i>	<i>Assumptions</i>
Materials/ supplies	2.0	2.0	2.0	1.9	1.9–2.0/2.0	Variable cost	2% of revenue
Services	5.3	3.5	3.0	3.0	3.0–5.3/3.7	Variable cost	3% of revenue
Local taxes	0.2	0.1	0.1	0.1	0.1–0.2/0.1	Unrelated	Fixed cost
Salaries	10.2	7.8	6.4	5.7	5.7–10.2/7.5	Sales volume related	SEE BELOW
Business travel	0.2	0.2	0.1	0.1	0.1–0.2/0.2	Variable cost	0.2% of revenue
Maintenance	0.4	0.2	0.3	0.2	0.2–0.4/0.3	Variable cost	0.3% of revenue
Other services	0.4	0.4	0.4	0.4	0.4–0.4/0.4	Sales volume related	SEE BELOW
Marketing	0.5	0.4	0.3	0.3	0.3–0.5/0.4	Sales volume related	SEE BELOW
Other costs	4.0	2.5	1.2	1.3	1.2–4.0/2.2	Variable cost	2% of revenue
<i>Percentage increases in costs items from year to year</i>							
<i>Cost items</i>	<i>2013</i>	<i>2014</i>	<i>2015</i>	<i>Observation</i>		<i>Assumptions</i>	
Materials/ supplies	52.2	38.8	17.0	Related to revenue		SEE ABOVE	
Services	1.5	19.0	23.2	Unrelated		SEE ABOVE	
Local taxes	40.0	22.9	23.3			SEE ABOVE	
Salaries	16.9	13.3	9.0	Increases by 1/3 of revenue increase		$\text{Salaries}_{n+1} = \text{Salaries}_n \times (1 + \text{sales increase} / 3)$	
Business travel	23.5	–16.7	2.9	Unrelated		SEE ABOVE	
Maintenance	–15.7	125.6	–38.1	Unrelated		SEE ABOVE	
Other services	53.7	41.0	22.2	Increase by about the level of revenue		$\text{Other services}_{n+1} = \text{Other services}_n \times (1 + \text{sales increase})$	
Marketing	20.6	21.1	22.8	Increase by about the level of revenue in 2015 (this trend is assumed to continue)		$\text{Marketing}_{n+1} = \text{Marketing}_n \times (1 + \text{sales increase})$	
Other costs	–5.8	–34.7	32.3	Unrelated		SEE ABOVE	
Sales growth	52.7	39.8	21.8				

same level and reflect adjustments for inflation. Other cost components such as salaries, services, and marketing seem to be related to a percentage increase in BAP's revenue (see Table 4.2 for specific formulas used to derive these expenses).

In the above analysis, we focused on operational costs and omitted depreciation expense, interest expenses, and taxes. The reason for excluding depreciation and interest expenses in the first round of estimating costs is that these cost items are connected with other financial statements – namely the balance sheet and the cash flow. In the early stages of developing the pro-forma income statement, preliminary decisions about these items are commonly made and then fine-tuned later. Capital expenditure and decisions pertaining to financing are only determined once the cash flow statement and the balance sheet have been built and one can see the full impact of the decision making across all financial statements. As an example, an entrepreneurial firm may forecast the purchase of an expensive piece of machinery, only to find out later in the process that it is not able to secure financing for it. The negative consideration on the expensive equipment would force the entrepreneurial business to reduce its capital expenditure plans, which would further reduce the level of depreciation expense. On the other hand, the level of bank financing determines the level of interest expense; such an expense could only be determined if the entrepreneurial firm had a preliminary discussion with the bank about their possible level of support. For BAP, it is assumed that fixed assets are depreciated on a straight line basis at 10 percent per annum (this level reflects the historical depreciation trend at BAP). The interest expense is assumed to be equal to 10 percent of the average of ending balances on short- and long-term debt. Taxes are assumed at 40 percent.

The net effect of revenue and cost assumptions is the firm's profitability. BAP is expected to increase its profitability at all levels of the pro-forma income statement, both in terms of profit growth (in value terms) and margins. The net profit margin is anticipated to grow from \$2.8 million in 2015 to \$13.6 million in 2020. The pro-forma income statement for BAP is presented in Table 4.3.

Step 2: Transition calculations

This interim step in the process of financial forecasting allows for a smooth transition from determining the pro-forma income statement to building the cash flow statement. The calculation focuses on the most important components of working capital: inventory (INV), accounts receivable (A/R), and accounts payable (A/P). The objective of transition calculations is not to derive days INV, days A/R, and days A/P, but rather to determine the end balances for these components given the historical trends in days. For example, if we know that the formula for calculating days A/R is equal to the A/R balance divided by revenue multiplied by 365 days, we can convert this formula to calculate the end balance of A/R at the end of the year if we assume days A/R as an input into the calculation (the formula is: $\text{A/R balance} = [\text{days A/R} \times \text{revenue}] / 365$). In the case of BAP, calculation for the A/R balance for 2016 is equal to \$3.6 million ($\$3,582,000 = [30 \times 43,581,000] / 365$). The end balances for INV and A/P can be calculated using the same approach and formula (please note that both INV and A/P use costs of goods sold, or COGS, as the basis for the calculation). Table 4.4 presents detailed calculations for working capital components for the period between 2016 and 2020.

Other items of working capital that are normally a part of the balance sheet include pre-paid expenses, marketable securities, notes, and accrued expenses (among others). The general rule with respect to these items is that they are left at the existing levels (and balances)

Table 4.3 The pro-forma income statement for Bavarian Auto Parts for the period between 2016 and 2020 and historical financial data (2012–15)

(In \$'000)	<i>Historic</i>					<i>Projected</i>				
	2012	2013	2014	2015	2016	2017	2018	2019	2020	
Revenue	13,984	21,359	29,867	36,372	43,581	65,715	91,133	109,696	127,477	
% revenue growth		53%	40%	22%	40%	30%	25%	20%	15%	
Cost of goods sold (COGS)	10,467	15,498	21,893	26,388	31,371	46,928	64,879	77,601	89,687	
Gross profit	3,517	5,861	7,974	9,984	12,210	18,787	26,254	32,095	37,790	
Gross profit margin (%)	25.2%	27.4%	26.7%	27.4%	28.0%	28.6%	28.8%	29.3%	29.6%	
Materials and supplies	278	423	587	687	872	1,314	1,823	2,194	2,550	
Services	740	751	894	1,101	1,307	1,971	2,734	3,291	3,824	
Local taxes	25	25	25	27	54	54	54	54	54	
Salaries	1,432	1,674	1,897	2,067	2,203	2,576	2,908	3,106	3,274	
Business travel	34	42	35	36	87	131	182	219	255	
Maintenance	51	43	97	60	131	197	273	329	382	
Other services	54	83	117	143	143	144	145	145	145	
Marketing	63	76	92	113	135	204	283	341	396	
Other costs	559	527	344	455	872	1,314	1,823	2,194	2,550	
Earnings before interest, taxes, depreciation, amortization (EBITDA)	281	2,217	3,886	5,295	6,406	10,882	16,029	20,222	24,360	
EBITDA margin (%)	2.0%	10.4%	13.0%	14.6%	14.7%	16.6%	17.6%	18.4%	19.1%	
Depreciation	180	180	250	355	755	1,155	1,455	1,555	1,655	
Operating profit (EBIT)	101	2,037	3,636	4,940	5,651	9,727	14,574	18,667	22,705	
EBIT margin (%)	0.7%	9.5%	12.2%	13.6%	13.0%	14.8%	16.0%	17.0%	17.8%	
Interest expense	90	180	180	309	437	437	218	0	0	
Earnings before taxes (EBT)	11	1,857	3,456	4,631	5,214	9,290	14,356	18,667	22,705	
Taxes	4	743	1,382	1,852	2,086	3,716	5,742	7,467	9,082	
Net profit (loss)	7	1,114	2,074	2,779	3,128	5,574	8,614	11,200	13,623	
Net profit margin (%)	0.1%	5.2%	6.9%	7.6%	7.2%	8.5%	9.5%	10.2%	10.7%	

Table 4.4 Transition calculations for Bavarian Auto Parts for the period between 2016 and 2020

	<i>Historic</i>		<i>Projected</i>				
	<i>2014</i>	<i>2015</i>	<i>2016</i>	<i>2017</i>	<i>2018</i>	<i>2019</i>	<i>2020</i>
Assumptions (days):							
Accounts receivable	28	29	30	30	30	30	30
Inventory	123	130	100	90	80	70	60
Accounts payable	60	59	60	60	60	60	60
Ending balances (\$'000):							
Accounts receivable	2,291	2,857	3,582	5,401	7,490	9,016	10,478
Inventory	7,378	9,434	8,595	11,571	14,220	14,882	14,743
Accounts payable	3,599	4,255	5,157	7,714	10,665	12,756	14,743

unless there is a fundamental reason for them to change. For example, the entrepreneurial venture may decide to cash some marketable securities (i.e., bonds, shares, investment certificates, private investments, and so on), reduce insurance coverage (and insurance payments), or cancel pre-paid subscriptions. Business practice suggests that changes in these items normally have a minimal impact on working capital. Not changing these items means they have no impact on cash flow.

Fixing issues related to working capital is important because cash shortage can be a primary reason for the failure of an entrepreneurial venture. If the entrepreneurial firm misses its revenue targets, the effects can be disappointing or negligible; if the firm misjudges its assumptions on working capital, it will be out of business in a very short period of time. As noted in Chapter 3, many items of working capital – such as inventory, A/R, and A/P – are only partially controlled by the firm itself; most of these components are market-driven.

Step 3: Preparing the cash flow statement

Completing the transition calculations represents a significant step towards completing the cash flow statement. A common cash flow statement comprises three parts: operating activities, investing activities, and financing activities. The first two lines of the cash flow statement come from the pro-forma income statement (net profit and depreciation expense). It is important to note that the depreciation expense is added back to net profit (i.e., depreciation expense is a non-cash expense), as the firm does not actually pay depreciation expense (depreciation expense represents the year's allocation of fixed assets; fixed assets provide a benefit to the firm over a number of years, and their costs are allocated in the form of a depreciation expense). Note also that the depreciation expense can be found in the income statement or calculated as the difference in the end balance of accumulated depreciation from one year to another. For example, depreciation expense for the year 2017 is equal to \$1,155,000 on the basis of the pro-forma income statement. The same amount can be obtained by calculating the difference between accumulated depreciation balance for 2017 (equal to \$2,875,000) and the balance equal for 2016 (equal to \$1,720,000; so, \$2,875,000 minus \$1,720,000 = \$1,155,000).

The remaining part of the operating activities cash flow relates to working capital items that are considered as a part of transition calculations. However, in order to generate a cash

flow statement, we do not need the final cash balances for these items, but rather the difference between them – the cash flow. For working capital items on the asset side, any increases in the ending balance from one year to another represents a cash outflow (meaning that more cash is actually tied up in assets and is not available to the firm). As an example, the ending balance for A/R_{2017} is equal to \$5,401,000 and the ending balance for A/R_{2016} is equal to \$3,582,000; the balance of A/R increases by \$1,819,000, which represents a cash outflow since customers were extended further credit by this amount and BAP has not been able to capture the cash (see Table 4.5). The basic rule for working capital items on the asset side (for items such as inventory, accounts receivable, marketable securities, pre-paid expenses, and so on) is as follows: assets increase from one year to another → “bad news” for the firm’s cash flow → cash outflow (a negative impact on cash flow). The opposite rule also applies: assets decrease from one year to another → “good news” for the firm’s cash flow → cash inflow (a positive impact on cash flow). The basic rule for working capital items on the liabilities side (for items such as accounts payable, accrued liabilities, taxes payable, notes payable, as well as short- and long-term debt) is as follows: liabilities increase from one year to another → “good news” for the firm’s cash flow → cash inflow (a positive impact on cash flow).

Let’s work through an example: the ending balance for A/P_{2017} is equal to \$7,714,000 and the ending balance for A/P_{2016} is equal to \$5,157,000. The balance of A/P has increased by \$2,557,000; this represents a cash inflow for BAP for 2017 since BAP’s suppliers have effectively extended credit to BAP (in other words, this is the amount of cash BAP actually did not have to pay).

Table 4.5 The cash flow statement for Bavarian Auto Parts for the period between 2016 and 2020

(In \$'000)	2016	2017	2018	2019	2020
Operating activities:					
Net profit	3,128	5,574	8,614	11,200	13,737
Depreciation	755	1,155	1,455	1,555	1,655
Decrease (increase) in accounts receivable	–725	–1,819	–2,089	–1,526	–1,462
Decrease (increase) in inventory	839	–2,976	–2,649	–662	139
Increase (decrease) in accounts payable	902	2,557	2,951	2,091	1,987
Cash provided by (used in) operating activities	4,899	4,491	8,282	12,658	15,942
Cash received from (used for) investments:					
New fixed assets purchases	–4,000	–4,000	–3,000	–1,000	–1,000
Cash used in investment activities	–4,000	–4,000	–3,000	–1,000	–1,000
Cash received from (used for) financing activities:					
Proceeds from (repayment of) debt	0	0	–4,367	0	0
Cash provided by (used in) financing activities	0	0	–4,367	0	0
Net increase (decrease) during the year	899	491	915	11,658	14,942
Beginning cash balance	129	1,028	1,519	2,434	14,092
Net change in cash balances	899	491	915	11,658	14,942
Ending cash balance	1,028	1,519	2,434	14,092	29,034

The next section of the cash flow statement is relatively straightforward and deals with the firm's investment activities. In this part of the statement, any investments into land, machinery and equipment, or other fixed assets are recorded at a gross value (the actual amount of cash that was paid to acquire the asset, not the net value of assets, which is calculated as the difference between the total gross value of fixed assets and accumulated depreciation). In the case of BAP, the firm plans to continue its investment into new distribution centers or retail operations in its target regions (Northern and Southern California). The investment program includes investments of \$4 million for 2016 and 2017 and further commitments for the following years. The closing section of the cash flow statement captures the firm's financial activities, such as the issuing of any new shares, taking on additional debt or paying debt off, paying dividends, redeeming shares, and so on. BAP experiences limited financing activity between 2016 and 2020. The exception is the loan repayment in 2018. The owners of BAP could decide in due course to pay themselves a significant amount of dividends because the firm is expected to be cash rich.

BAP is expected to steadily generate a positive cash flow, which is good news for the business owners and future financiers. Cash is generated from operating activities (net profit plus depreciation) and as a result of good management of working capital. The cash balance is expected to grow from \$1,028,000 in 2016 to \$2,434,000 in 2018 (and explode higher soon after), leading to positive cash balances. One way to verify whether the cash flow statement has been prepared correctly is to check whether the cash flow (i.e., net change in cash) is equal to the difference between cash balances for the preceding year and the current one. For example, the net cash flow for the year 2018 is equal to \$915,000, which represents the difference between the cash balance for 2018 and the cash balance for 2017 (\$2,434,000 minus \$1,519,000 = \$915,000).

Step 4: Preparing the balance sheet

The transition calculations undertaken in step 2 are also important for the preparation of the pro-forma balance sheet (see Table 4.6). By this stage of the financial forecasting process, the major components of the pro-forma balance sheet have already been prepared and can be pulled from the pro-forma income statement, transition calculations, and the cash flow statement. The first part of the balance sheet, the cash balance, is developed when creating the cash flow statement. The working capital items on the asset side are calculated during the transition stage. The fixed assets (commonly known as property, plant, and equipment, or P, P & E) can also be easily constructed. The gross value of investment (as presented in the cash flow statement) is added to the gross value of fixed assets from the previous year to arrive at a new gross fixed asset balance. The depreciation expense for the year is added to the value of cumulative depreciation (which represents the value of depreciations since the inception of the firm) to create a new balance in this category. The net fixed assets are the difference between the gross fixed assets and the accumulated depreciation, as observed earlier. Taken together, these calculations effectively complete the asset side of the balance sheet.

With respect to liabilities and shareholders' equity, many of the key components have been developed through earlier calculations. The ending balance of accounts payable comes from transition calculations, and long-term debt needs to be decided when the firm considers the appropriate composition of financing for the firm (whether debt, equity, or some combination of the two); this effectively concludes the liabilities side. In terms of shareholders' equity, the firm needs to deal with common shares (for example, if the firm

Table 4.6 The balance sheet for Bavarian Auto Parts for the period between 2016 and 2020

(In \$'000)	2015	2016	2017	2018	2019	2020
Assets						
Current assets:						
Cash	129	1,028	1,519	2,434	14,173	29,229
Accounts receivable	2,857	3,582	5,401	7,490	9,016	10,478
Inventory	9,434	8,595	11,571	14,220	14,882	14,743
Total current assets:	12,420	13,205	18,491	24,144	37,990	54,255
Fixed assets, gross	3,545	7,545	11,545	14,545	15,545	16,545
Less: Accumulated depreciation	965	1,720	2,875	4,330	5,885	7,540
Fixed assets, net	2,580	5,825	8,670	10,215	9,660	9,005
Total assets	15,000	19,030	27,161	34,359	47,650	63,260
Liabilities and shareholders' equity						
Current liabilities:						
Accounts payable	4,255	5,157	7,714	10,665	12,756	14,743
Total current liabilities	4,255	5,157	7,714	10,665	12,756	14,743
Long-term debt	4,367	4,367	4,367	0	0	0
Total liabilities	8,622	9,524	12,081	10,665	12,756	14,743
Shareholders' equity:						
Common shares	10	10	10	10	10	10
Retained earnings	6,368	9,496	15,070	23,684	34,884	48,507
Total shareholders' equity	6,378	9,506	15,080	23,694	34,894	48,517
Total liabilities and shareholders' equity	15,000	19,030	27,161	34,359	47,650	63,260

sells equity whether as a part of the initial public offering, to venture capitalists, or other partners). The only technical aspect to be resolved relates to calculating the balance of the retained earnings. Retained earnings capture the cumulative value of profits since the inception of the firm less any dividends the firm has paid along the way. The retained earnings balance is calculated according to the following formula: $\text{Retained Earnings}_{n+1} = \text{Retained Earnings}_n + \text{Net Income}_{n+1} - \text{Dividends}_{n+1}$. Given that the closing balance for BAP is available for the year 2015 (which is also the opening balance for the year 2016), we can calculate the value of retained earnings for 2016 (this is equal to \$9,496,000, or \$6,368,000 + \$3,128,000; note that BAP pays no dividends). An alternative to using this formula is to extend the income statement to include a subsection which deducts the dividends (both common and preferred) from net profit to arrive at a figure called “additions to retained earnings”; this figure is added to the balance of the retained earnings from the previous year. In the case of BAP, this would be a straightforward process as the firm has never paid dividends (the value of net profit for the year is equal to the value of additions to the retained earnings). It is also important to note that the extended income statement (normally called the statement of income and retained earnings) is dependent on ratio analysis. If BAP holds preferred shares, then deducting preferred share dividends from net

profit would generate a line called “earnings available to common shareholders” (EATCS). This part of the statement of income and retained earnings is important because it is used to calculate the return on equity (ROE) and return on assets (ROA). Some analysts also use the EATCS line to determine the net profit margin, as this line represents the amount of profit available for distribution to common shareholders (common shareholders are more interested in net profit than the firm has generated for them than profit that they need to share with preferred shareholders).

Step 5: Verification

Verification is the last step in the financial forecasting process and is the assessment of the financial statements in the context of ratio analysis. Ratio analysis allows for a comparison of the results of the forecasting exercise with the firm’s historical financial performance (trend analysis) and industry trends (benchmarking analysis). Through the verification process, one can determine whether the financial forecasts generated any anomalies compared with historical trends and whether the forecast figures are consistent with the historical data. The verification process also provides a natural extension of these historical trends into the future and can be used to determine whether the financial forecasts represent any meaningful improvements over the past (and what specific areas of improvement are expected to come). Verification also allows one to determine whether the firm’s anticipated financial performance is in line with trends observed in the industry (as previously mentioned, any trends in the financial performance of a firm are likely to gravitate toward industry averages over the long term). Any confusion, doubts, or hesitations about the viability of the financial forecast provide an immediate impetus to review the entire financial forecasting process from the beginning. The forecasting process should be repeated as many times as possible until the financial forecasts look realistic and achievable.

Please note that our analysis in this chapter is based on common ratios, including profitability ratios, liquidity ratios, efficiency ratios, capital structure ratios, and so on. While using these “standard” ratios is the norm, a special stepwise analysis of financial performance is discussed in Chapter 7. This analysis is based on four steps: liquidity analysis, cash flow analysis, profitability evaluation, and growth assessment.

In the case of BAP, the ratio analysis reveals some interesting insights (see Table 4.7). As is always the case when performing financial analysis, the overall financial health of the business presents good news and bad news. In terms of profitability, the operating profit margin is estimated to increase from 13.6 percent in 2015 to 17.8 percent in 2020. The net profit margin is expected to increase from 7.6 percent to 10.7 percent over the same time period. The return on equity – a key measure of interest to owners – is expected to be equal to about 30 percent, but will decrease below this mark in 2020. In terms of liquidity, the current ratios look reasonable, but the quick ratio (which removes the effect of inventory from calculation of liquidity) appears below the desired level of 1 (ratio analysis is discussed in more detail in Chapter 7). The debt ratios also reveal some challenges. The debt-to-equity ratio is excessive at 100.2 percent in 2016, which implies that the total value of liabilities will exceed the value of shareholders’ equity plus retained earnings. This ratio is expected to decline to more reasonable levels by 2018, at which time the bank loan is expected to be repaid. The times interest earned ratio is sound and above the desired levels of 3. In terms of asset activity ratios, the level of inventory turnover increases steadily over time, which implies an improvement to inventory management.

Table 4.7 Ratio analysis for the period between 2015 and 2020

	2015	2016	2017	2018	2019	2020
Profitability ratios (%):						
Gross profit margin	27.45%	28.02%	28.59%	28.81%	29.26%	29.64%
Operating profit margin	13.58%	12.97%	14.80%	15.99%	17.02%	17.81%
Net profit margin	7.64%	7.18%	8.48%	9.45%	10.21%	10.69%
Return on assets	18.53%	16.44%	20.52%	25.07%	23.50%	21.53%
Return on equity	43.57%	32.91%	36.96%	36.36%	32.10%	28.08%
Liquidity ratios:						
Current ratio	2.92	2.56	2.40	2.26	2.98	3.68
Quick ratio	0.70	0.89	0.90	0.93	1.81	2.68
Debt ratios:						
Debt/equity	135.18%	100.19%	80.11%	45.01%	36.56%	30.39%
Debt/total assets	57.48%	50.05%	44.48%	31.04%	26.77%	23.31%
Times interest earned	16.0	12.9	22.3	66.9	n/a	n/a
Asset activity ratios:						
Average collection period	29	30	30	30	30	30
Inventory turnover	3.9	5.1	5.7	6.4	7.4	8.6
Total asset turnover	2.4	2.3	2.4	2.7	2.3	2.0

There are perhaps three main areas that warrant consideration or potential revisions to the financial forecast (as previously noted, revisions mean starting at the beginning of the financial forecasting “wheel” and revisiting all assumptions along the way). First, profit margins (expressed as a percentage of revenue) are expected to increase at all levels of the pro-forma income statement, including gross profit margin, operating profit margin (EBIT margin), and net profit margin. Business practice suggests that increasing profitability is one of the most difficult missions to achieve in any business venture. As mentioned in Chapter 3, profitability does not only reflect the inside construct of the business, but also competitive forces. In the case of BAP, the operating profit margin is expected to increase by 4.2 percent between 2015 and 2020. While such an increase is not impossible to achieve, the management of the entrepreneurial venture must have a specific plan as to how this margin can be improved. The best way to defend the margin improvement is to show how different business activities will contribute to the margin increase. For example, improvements to the margin may result from higher discounts on product sourcing, from finding more efficient uses for distribution centers, from reducing service delivery costs or hiring fewer people, etc. Second, as previously mentioned, the level of debt is excessive. While BAP appears to have no problem paying its interest, a sudden decline in revenue may immediately impact the business. BAP may wish to consider paying the bank loan sooner or reduce its debt to more reasonable levels (the debt-to-equity ratio should ideally be below 50 percent). Third, the liquidity – especially at the quick ratio level – is concerning. In this instance, the management of the working capital should be reviewed more carefully. An inability to settle cash disbursements as they become due may force the entrepreneurial venture into bankruptcy, or at the very least will provoke some unpleasant reactions from banks, suppliers, employees, and other stakeholders.

Final comments on financial forecasting

There are some questions that the entrepreneur needs to contemplate when preparing financial forecasts. First, the entrepreneur must decide whether the financial forecasts should be done internally or be outsourced to external advisors or consultants. This consideration is not only critical from the management point of view, but also from the point of view of potential financiers who aim to assess the integrity of the financial forecasting process. The preferred alternative is for the management team to prepare the financial forecasts themselves. The involvement of the managers in any consideration of the future of the entrepreneurial firm is invaluable. The forecasting process allows management to not only generate financial forecasts, but also to review, engage, debate, and undertake key strategic decisions related to customer service, pricing policy, competitive positioning, expansion opportunities, and so on. Forecasting also provides the opportunity to review those activities which have been unsuccessful in the past and determine whether or not they should be discontinued. Most importantly, involving multiple players in the process allows them to “buy into” the future of the firm and better align themselves with the firm’s desired objectives and goals. If possible, external consultants should be avoided when engaged in the process of financial forecasting. If external consultants must be involved, then they should only be concerned with the mechanical preparation of the financial model, where all assumptions and decisions come from the entrepreneurial venture itself.

Preparing financial forecasts is about making assumptions, and these should be as explicit as possible (as demonstrated in Tables 4.1 and 4.2). The forecasting process begins by determining the key driving forces of the business and creating an “assumption sheet.” The assumptions should reflect the key drivers of the business. Assumptions for the future need to be based on a detailed understanding of the historic trends of the firm, key market trends, and the performance of competitors in the sector (through the benchmarking process). The future of the entrepreneurial venture is then charted in the context of this detailed list of assumptions. Business practice suggests that entrepreneurial firms should focus on three to five key business drivers. A well-selected group of business drivers often accounts for the majority of the entrepreneurial venture’s success.

Financial forecasts are also invaluable tools for understanding key business risks (both internal and external) and the impact they can have on the entrepreneurial venture. A good understanding of these risks is also critical for completing a “sensitivity analysis” – an analysis of different expansion scenarios and their impact on revenue and profits. A sensitivity analysis allows the entrepreneurial venture to see how the firm will perform in the event of specific scenarios or a combination of scenarios.

When preparing financial forecasts, precision requires practice. When an entrepreneurial firm first begins to prepare its financial forecasts, the process will not be perfect. Rather, the process gets easier and grows more accurate as the entrepreneurial team prepares forecasts more regularly and over a longer period of time. Effective preparation of financial forecasts comes from good business judgment, and good business judgment can only come from an understanding of bad business judgment.

As previously mentioned, the financial forecasting process is iterative and not static. Achieving a sound set of forecasts means continuing to refine them until no incremental improvements can be made and the forecasts reflect the real-life potential of the entrepreneurial venture. A careful consideration of financial forecasts at the verification stage is an integral part of this process. The verification process in particular is the last point at which the entrepreneurial venture exists “on paper” prior to actual implementation. It is critical that the entrepreneurial firm makes any corrections to its logic and strategy at this point.

Financial forecasts for venture capitalists

In the previous section of the chapter, we explored the mechanics of developing financial forecasts for an entrepreneurial venture with the example of Bavarian Auto Parts (BAP). In the example, BAP chose to develop its business slowly and systematically, without any external financing. The entrepreneurial firm commenced operations in Central California and planned to grow its business into the northern part of the state (where it could secure a dominant market position) as well as the south (where the fastest market growth is expected). BAP is expected to grow its revenue through a moderate level of investment (\$13 million) into distribution centers, Q-service development, employee development and training, computer system upgrades, delivery vehicles, and so on. The firm relies heavily on its market reputation, word-of-mouth, customer loyalty, proximity to high-growth markets, and high-quality service.

The expansion scenario outlined in this “base case,” which does not involve additional external capital, is not an uncommon development path for an entrepreneurial firm – organic growth can be quite successful in the long run. Those entrepreneurs that prefer to grow their ventures in a slow, meticulous, and deliberate manner in one geographic area or a cluster tend to rely on internal finance. For example, it took Sam Walton of Walmart nearly two decades to perfect his single-store concept before embarking on an ambitious endeavor to expand throughout North America and, later, internationally. Many entrepreneurs believe that their ability to grow and expand their ventures is limited not by the amount of available capital, but rather by a shortage of talented managers to execute their expansion plans. A lack of talented managers poses a natural limitation to the venture’s growth. Many business practitioners and academics agree that organic growth can be one of the best methods of business expansion.

The case of BAP does not require any additional financing, so there is no role for venture capitalists or bankers to play in providing new capital to the venture (BAP has a bank loan, which is expected to be repaid by 2018). The exception to this scenario would be if venture capitalists buy an ownership stake in the venture (or buy the entire business outright) from one of the existing owners. For this to occur, the entrepreneurs would have to be willing to accept a new partner into the venture and have a need to partially “cash out” their ownership stake in the business.

Let’s imagine a different development scenario for BAP. The firm is approached by local venture capitalists who are impressed with BAP’s revenue growth and profitability. The venture capitalists believe that BAP can take its tested business model beyond California and apply it to other regions of the United States where German-made vehicles are popular. The geographic expansion is to include Florida, New York, and the Boston area. The venture capitalists are persuaded that a more aggressive expansion scheme is possible for BAP to execute (compared with the entrepreneurs’ initial plan, which included only California). The revised expansion plan envisages significant investment into distribution centers (\$31 million), staff (new hires, training, and development), marketing (competition is more intense and entrenched), and other expansion costs. The new expansion plan is presented in a pro-forma income statement for BAP to consider (see Table 4.8 for details). Compared with the “base case” scenario, BAP would be expected to reach revenues of \$234.9 million and a net profit of \$23.1 million by 2020 (this is well above BAP’s original forecast). In the early years of expansion, BAP is expected to generate losses at the net-profit level equal to \$0.1 million in 2016 and \$1.2 million in 2017 (losses are higher at the EBIT and EBITDA levels). BAP would not be able to execute this program by relying on its own financial

Table 4.8 The pro-forma income statement for Bavarian Auto Parts (BAP) for the period between 2016 and 2020 based on venture capital financing

(In \$'000)	2015	2016	2017	2018	2019	2020
Revenue	36,372	47,984	72,976	134,098	187,787	234,901
% revenue growth	21.8%	31.9%	52.1%	83.8%	40.0%	25.1%
Cost of goods sold (COGS)	26,388	34,453	52,032	95,344	132,953	165,370
Gross profit	9,984	13,531	20,944	38,754	54,834	69,531
Gross profit margin (%)	27.4%	28.2%	28.7%	28.9%	29.2%	29.6%
Materials and supplies	687	960	1,460	2,682	3,756	4,698
Services	1,101	1,919	3,284	2,682	3,756	4,698
Local taxes	27	167	198	245	245	245
Salaries	2,067	3,386	6,914	8,845	9,730	10,341
Business travel	36	240	672	510	376	470
Maintenance	60	240	365	268	376	470
Other services	143	744	748	751	753	754
Marketing	113	2,399	3,649	2,682	2,817	3,524
Other costs	455	1,919	2,919	2,011	2,253	2,349
Earnings before interest, taxes, depreciation, amortization (EBITDA)	5,295	1,557	735	18,078	30,772	41,982
EBITDA margin (%)	14.6%	3.2%	1.0%	13.5%	16.4%	17.9%
Depreciation	355	1,355	2,355	2,855	3,155	3,455
Operating profit (EBIT)	4,940	202	−1,620	15,223	27,617	38,527
EBIT margin (%)	13.6%	0.4%	−2.2%	11.4%	14.7%	16.4%
Interest expense	309	437	437	437	218	0
Earnings before taxes (EBT)	4,631	−235	−2,057	14,786	27,399	38,527
Taxes	1,852	−94	−823	5,914	10,960	15,411
Net profit (loss)	2,779	−141	−1,234	8,872	16,439	23,116
Net profit (loss) margin (%)	7.6%	−0.3%	−1.7%	6.6%	8.8%	9.8%

[Please note that negative values of tax in years 2016 and 2017 represent a tax loss carry-forward for BAP (i.e., a tax benefit for BAP to be used in future years)].

resources; it needs about \$20 million in new capital to affect its expansion plan. Given the size of the cash requirement, there is now a clear case for the involvement of external financiers such as venture capitalists.

We will discuss venture capital and the venture capital investment process in more detail in Chapter 5. Right now, it is important to draw attention to the fact that venture capitalists would be attracted to an investment case different from that outlined in BAP's original plan. BAP's revised expansion plan has a "cash hole" and offers potential for rapidly growing revenue, achieving high profitability, and expanding successfully to another region with a proven business model and proven management team. In addition, BAP would consolidate the fragmented market for automotive parts for German vehicles, become a market leader in different geographic regions, and build a national footprint. Most importantly, if BAP accomplishes its goals, it could become an attractive acquisition target for a strategic investor

(either a domestic player that wishes to expand its product offering, or new entrant looking to establish its distribution footprint in a new geographic market).

Financial forecasts for debt providers

Entrepreneurial firms can borrow capital from a financial institution such as a bank, trust, or co-operative. As previously mentioned, bank financing is one of the most common routes by which entrepreneurial firms obtain external financing. However, banks have not been as friendly to the entrepreneurial sector as many generally believe. Securing a bank loan for an entrepreneurial firm can be challenging for a variety of reasons. For one, banks are risk-intolerant; they tend to avoid start-ups and young entrepreneurial firms, steer clear of financing innovations and inventions, stay away from opportunities to finance “aggressive” expansion plans, and evade new product introductions in unknown markets. Bankers are generally unwilling to fund smaller, private firms if they lack an operating history, do not generate profits, have minimal or no collateral, and have an insufficient credit rating; instead, they prefer to fund larger and established businesses with an operating track record. Second, banks are reluctant to assist entrepreneurial firms even if the loan proves problematic or in default. Bankers are often regarded as less hands-on – or simply “no-hands-on” – operators compared with other capital providers. Bankers rarely provide guidance on improving the entrepreneurial firm’s financial forecast and business plans, but are quick to refer a potential business borrower to a consulting or advisory firm. The problem loans often get referred to workout departments staffed with people who have no knowledge of the specific industry or firm, but are trained to minimize losses. Business practitioners also observe that bankers are quick to “pull the plug” if the loan is non-performing. Third, many loan officers are not comfortable analyzing entrepreneurial firms with products and services in modern sectors of the economy (i.e., internet-related sectors, new technologies, biotechnologies) where limited fixed assets may exist, the markets are difficult to define, and market demand is difficult to ascertain. Loan officers also lack the training to assess areas related to research and development, intangible assets, and intellectual property. Last, lending to entrepreneurial firms (especially start-ups, which typically require between \$50,000 and \$100,000) may not be profitable for banks given the amount of time spent processing the application, evaluating the business plan and financial forecasts, and negotiating the loan agreement.

Banks can provide a variety of “single-purpose” loans to firms related to accounts receivable (the bank buys the A/R and later collects payment directly from the entrepreneurial firm’s clients), inventory (financing between 50 and 70 percent of the value of inventory), equipment purchases (financing up to 80 percent of the value of the equipment), and real estate (a similar arrangement to equipment purchases). Single-purpose loans require collateral such as business assets (i.e., buildings, equipment, and land), personal assets (i.e., house, car, marketable securities, and life insurance policies), or a third party guarantee. The banks can also extend a line of credit to the entrepreneurial firm (for a “commitment” or “standby” fee), where the general strength of the firm’s cash flow serves as the bank’s security (an unsecured loan).

The bank’s analysis of the loan application is normally performed by a loan officer or the credit committee. A general loan assessment involves a set of characteristics generally known as the “five Cs” of loan analysis: character (credit history and trustworthiness of the firm and entrepreneurs), capacity to repay (quality of earnings and cash flow to repay the loan), capital contributed by the entrepreneur and required by the bank, collateral (size and quality), and conditions (i.e., requirements for reporting, terms, interest rate). The most

common form of lending is interest-only loans, where interest is only paid throughout the life of the loan (the principal is paid at maturity). The amount of payments is limited in the interim period, which has a positive impact on the entrepreneurial firm's cash flow (this is critical for start-ups and young firms).

For BAP, the bank is likely to struggle with the revised financial projections developed for venture capitalists, for two reasons. First, the bank will view BAP's expected net losses in 2016 and 2017 negatively. Even though these losses occur for only two years and are minimal in value, many banks are "forbidden" by their internal by-laws and policies to provide loans to entrepreneurial firms expecting a loss (as these firms are perceived to be too risky to lend to). Additional banking sector regulations may also restrict lending to unprofitable businesses. If banks lend to such firms, they need to make additional provisions for losses on loans, which can make the cost of borrowing too expensive for the bank to carry such loans on its books. Second, many banks rely on "automated" or mechanical verification of financial forecasts. The investigation is done by financial programs which effectively run a ratio analysis. These programs are designed to raise "red flags" rather than to identify exceptions. While the analytical process is considered to be prudent by bankers, it can often lead to the automatic rejection of the loan application. For example, if BAP wishes to borrow \$20 million from the bank to finance its expansion plans, a number of ratios would be immediately flagged as negative.

It is fair to conclude that banks would not be receptive to financing the expansion of BAP based on the pro-forma income statement presented in Table 4.8. Another set of financial projections would need to be developed for the purpose of obtaining a bank loan. Banks would be more interested in financing the expansion case, which is similar to the original BAP "base case." A well-known business proverb summarizes the banking sector's appetite for risk: "A bank is often interested to lend to firms, which do not require any financing." The "bank case" would be significantly downgraded in terms of operating and financial risks from the financial forecast prepared for venture capitalists. The new set of financial projections is likely to be based on slower revenue growth, adherence to strong liquidity measures, and a manageable level of debt-to-equity ratios (including the times interest earned ratio). As previously mentioned, banks prefer to make "safe bets"; this means lending to entrepreneurial firms that pose limited operational and financial risk and will reliably pay off their obligations. The best prospects for banks are entrepreneurial firms, as they possess a strong and clean balance sheet (no off-balance sheet liabilities), limited or no leverage, tested management, positive profits, and a strong and repeatable cash flow. Paradoxically, banks are most comfortable lending to entrepreneurial firms that do not need financing. Table 4.9 presents an amended pro-forma income statement that would be appealing to a bank.

Financial forecasts for other financiers

An entrepreneurial firm can attempt to secure financing from other sources. Capital providers may include government institutions, strategic partners of the business (i.e., suppliers), non-affiliated business partners, strategic investors, business angels, public markets, and so on. Capital vendors have the option of providing the entrepreneurial firm with a loan, equity (in the form of common shares, convertible preferred shares, or preferred shares, provided in exchange for a stake in the venture), or some type of hybrid arrangement (a combination of debt and equity). Some financiers may also be interested in receiving dividends or charging fees (for advice, consultancy, management, or participation on the board).

Table 4.9 The pro-forma income statement for Bavarian Auto Parts for the period between 2016 and 2020 based on bank financing

(In \$'000)	2015	2016	2017	2018	2019	2020
Revenue	36,372	43,581	65,715	96,741	113,676	142,967
<i>% revenue growth</i>	<i>21.8%</i>	<i>19.8%</i>	<i>50.8%</i>	<i>47.2%</i>	<i>17.5%</i>	<i>25.8%</i>
Cost of goods sold (COGS)	26,388	31,371	46,928	68,783	80,483	100,649
Gross profit	9,984	12,210	18,787	27,958	33,193	42,318
<i>Gross profit margin (%)</i>	<i>27.4%</i>	<i>28.0%</i>	<i>28.6%</i>	<i>28.9%</i>	<i>29.2%</i>	<i>29.60%</i>
Materials and supplies	687	872	1,314	1,935	2,274	2,859
Services	1,101	1,307	1,971	2,902	3,410	4,289
Local taxes	27	54	54	54	54	54
Salaries	2,067	2,203	2,576	2,981	3,155	3,426
Business travel	36	87	131	193	227	286
Maintenance	60	131	197	290	341	429
Other services	143	143	144	145	145	145
Marketing	113	135	204	300	353	444
Other costs	455	872	1,314	1,935	2,274	2,859
Earnings before interest, taxes, depreciation, amortization (EBITDA)	5,295	6,406	10,882	17,223	20,960	27,527
<i>EBITDA margin (%)</i>	<i>14.6%</i>	<i>14.7%</i>	<i>16.6%</i>	<i>17.8%</i>	<i>18.4%</i>	<i>19.3%</i>
Depreciation	355	755	1,155	1,755	2,155	2,555
Operating profit (EBIT)	4,940	5,651	9,727	15,468	18,805	24,972
<i>EBIT margin (%)</i>	<i>13.6%</i>	<i>13.0%</i>	<i>14.8%</i>	<i>16.0%</i>	<i>16.5%</i>	<i>17.5%</i>
Interest expense	309	437	537	737	837	837
Earnings before taxes (EBT)	4,631	5,214	9,190	14,731	17,968	24,135
Taxes	1,852	2,086	3,676	5,892	7,187	9,654
Net profit (loss)	2,779	3,128	5,514	8,839	10,781	14,481
<i>Net profit (loss) margin (%)</i>	<i>7.6%</i>	<i>7.2%</i>	<i>8.4%</i>	<i>9.1%</i>	<i>9.5%</i>	<i>10.1%</i>

The financial forecasts these capital vendors may accept will vary, and typically reflect the financiers' appetite for risk, the desired investment horizon, and their knowledge of the sector.

Matching financial forecasts to capital providers

No one set of financial forecasts will satisfy a wide plethora of possible financiers or capital vendors who are willing to support the entrepreneurial venture. Some capital providers may be interested only in providing capital (i.e., banks), while others may wish to provide a more comprehensive offer (i.e., capital and know-how) in exchange for higher returns. Table 4.10 provides a brief summary of the main methods of financing entrepreneurial firms and discusses their requirements for financial projections, advantages, disadvantages, and suitability.

Table 4.10 The main sources of capital for entrepreneurial firms

	<i>Debt</i>	<i>Equity</i>		
		<i>Public listing</i>	<i>Venture capital</i>	<i>Business angels</i>
Requirements	Interest payments on day one Collateral Low risk Proven track record	Preparation Strong market position “Financial success”	Above-average sales and profit growth potential Market leader or potential to become one Strong management Willingness to exit	Various expectations depending on personal characteristics Young firm with limited experience
Advantages	Interest obligations expire No dilution of ownership Interest is tax deductible	Prestige and credibility Access to further financing	Access to capital without interim obligations Active partner and hands-on assistance Stable capital	Active assistance or limited assistance No need to exit investment Flexible arrangement which may evolve further
Disadvantages	Need to meet fixed obligations Changing interest rates Limited hands-on assistance Problems if loan is underperforming	Financial reporting and cost Cost of going public and complex process Pressure to produce results and “please” investors Pressure to pay dividends Undue “punishment” if the firm underperforms	Dilution of ownership Co-sharing control of business Complex process Need to allow for a “liquidity event” Time to negotiate a deal	Unclear strategy – strategies can diverge May charge fee Can take dividends Potential for conflict of interest Limited attention from angels due to other interests
Best for firms with	Strong assets Repeatable cash flow Profits	Well-known products Market successful	Fast growth potential Ability to develop market leadership role	Various levels of development, but preferably young firms
Desired characteristics of financial forecasts	Limited risk expansion Positive profits and cash flow	High growth expectations Positive profits and cash flow	Focus on profit growth Incremental risk taking Venture capitalists accept periods of unprofitability to maximize growth later	Expectations can range

There is no single “right way” for an entrepreneurial venture to select the most appropriate method of financing. The choice can depend on the type of partner the entrepreneurial firm is seeking (hands-on versus passive; short-term versus long-term), whether the founders are willing to assume a new owner into the venture, whether the expansion plan is steady or more aggressive, or whether the founders are willing to sell their venture or allow a “liquidity event” to occur. While debt financing is normally considered a cheaper alternative, the low cost is null if banks are not willing to lend to the entrepreneurial venture.

Questions to consider

1. Discuss the differences between financing an entrepreneurial venture through debt or equity. What are the advantages and disadvantages of each method?
2. How is the iterative nature of preparing financial forecasts significant? How long does the financial forecasting “wheel” need to turn before the financial forecasting process is complete?
3. Why are the financial projections prepared for different financiers likely to differ from one another? Why is it important to provide more than just one set of financial projections?
4. Discuss the importance of the verification process and outline its key components.
5. Discuss the suitability of bank loan financing for an entrepreneurial venture.

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5 Venture capital financing and value creation

Chapter objectives

After reading this chapter, you should be able to:

- describe the main characteristics of venture capital;
- compare venture capital to other forms of financing for entrepreneurial firms;
- outline the key terms common to venture capital contracting;
- understand the advantages and disadvantages of venture capital financing for entrepreneurial firms;
- discuss with venture capitalists the key aspects of an effective presentation.

Financing alternatives for entrepreneurial firms

Entrepreneurial firms can generate capital either internally or externally. The desire to raise a specific form of capital depends on the entrepreneurial firm's level of development, profitability, revenue and growth trajectory, market share, risk tolerance, the industry, and strategic planning. While entrepreneurial firms in the later stages of development can take advantage of a wider array of financing alternatives, the choices for younger firms are more limited. If the firm has been operating for some time and is profitable, it may be able to support its expansion using its own financial resources. If the entrepreneurial firm is not profitable, it may be able to manage its working capital in such a manner that it is able to settle its liabilities (including the capital expenditure program) on time. External capital can come to entrepreneurial firms from multiple sources: banks, the government, public institutions, private markets, friends and family, business angels, suppliers, venture capital, etc. (note that many of these sources are discussed in more detail in the following chapter).

Commercial banks traditionally represent the most important source of entrepreneurial financing and may satisfy up to 80 percent of an entrepreneurial firm's capital needs. However, obtaining external financing from a bank can be challenging. Banks do not tolerate risks well and risk taking is inherent to the entrepreneurial process. Banks are also sometimes "unfriendly" towards entrepreneurs, particularly to the owners of new firms who want to commit capital into research and development, expand their product offerings, or develop markets outside of their home region. Banks are also unlikely to regularly or consistently assist entrepreneurial firms with addressing their start-up or expansion problems. If an entrepreneurial firm was to experience financial or operational troubles, the bank may completely cease their already limited involvement ("hands-on" assistance is rare), pull-the-plug on the

financing, or refer the troubled entrepreneurial firm to a workout department (often located far from the firm's region of operation). Additionally, banks require collateral that can exceed the value of the initial loan by two to three times.

Government assistance programs also provide access to finance. Entrepreneurial firms are vulnerable and very few manage to survive more than five years. Public authorities, perhaps recognizing both the importance and the frugality of entrepreneurial firms, often create agencies or business support and assistance measures to help entrepreneurial firms obtain better access to finance and to encourage business formation. Most of these government programs broadly focus on improving access to finance, stimulating innovation, and providing advisory services. Typically, the programs focus on industrial sectors (such as manufacturing, agriculture, and mining), different types of business activities (such as export, innovation, and research and development), the provision of financing (through guarantee programs, public venture capital funds, and micro-lending agencies) or assisting entrepreneurial firms to become investment-ready. Evidence is at best mixed about the role of government assistance programs targeting the entrepreneurial sector. As there is little evidence that these public programs have an effect on the growth and prosperity of the entrepreneurial sector, there is a growing sentiment that capital markets are adequate for entrepreneurial firms and that there is no need for government programs and the provision of "soft" capital.

Another option for entrepreneurial firms is to go public and sell a stake in their business to the public on the stock exchange; this process is known as an initial public offering (IPO). The IPO route is unavailable to the vast majority of entrepreneurial firms; of course, notable exceptions exist, but the odds of raising this form of capital are significantly lower than raising capital from commercial banks or venture capitalists. Entrepreneurial firms in the later stages of development that have been operating for some time, are profitable, and are leaders in their markets tend to be more attractive IPO candidates. Entrepreneurial firms may also seek to sell their shares to another firm, or to a "strategic investor" (i.e., a large multinational firm from the same sector or another operator seeking to diversify their portfolio of firms). This route of raising capital for entrepreneurial firms possesses its own unique challenges. Strategic investors prefer to buy smaller entrepreneurial firms outright rather than maintain an ownership stake in them. Other private operators may prefer a majority control of the firm (or at the very least significant influence over it) or may seek to align the strategic objectives of the firm with their own plans.

Raising capital from friends and family is another possible route for entrepreneurial firms to raise financing. Family and friends can be business "lifesavers" for a firm if alternative routes of financing fail and existing financial resources are exhausted. This financing avenue is usually the easiest and quickest to complete and usually involves financing between \$20,000 and \$150,000. Small amounts of capital may be loaned or effectively "given" (as a gift) to entrepreneurs by immediate or distant family members (financing from a single wealthy individual is quite common). These contributions may arise if entrepreneurs are well known to their family and friends (and have credibility and are trustworthy), have done well at school or other endeavors (such considerations are important for family members and provide some credibility), are perceived as intelligent and likeable, and have passion for their business idea.

Business angels are private investors who typically provide start-up capital to entrepreneurial ventures in the early stages of development. Business angels take an ownership interest in a venture created by someone else (i.e., other entrepreneurs) – they do not typically initiate a business idea or concept. Angels can assume an active role in the management of the funded entrepreneurial firm, or can be passive. While they generally prefer to exit from

the venture after being involved with it for some time, they may be equally satisfied by retaining an ownership interest for a longer period of time (especially when dividends are being paid).

Equipment manufacturers and product suppliers can also be important avenues for raising capital. Capital in this scenario commonly comes in the form of an extension of credit to the entrepreneurial firm (this effectively constitutes a bank loan). Equipment manufacturers or product suppliers have a vested interest in offering financial assistance to their clients (i.e., entrepreneurial firms), as they can increase their own revenue by selling more equipment, products, or raw materials to a larger client group; extending credit to new clients effectively becomes the cost of doing businesses. This unconventional form of financial support may also be extended to entrepreneurial firms at later stages of expansion. Firms at this stage have revenue, are profitable, and possess an operating track record and a loyal customer base – in short, they are financially stable. Once again, young entrepreneurial firms are at a significant disadvantage for obtaining this indirect form of financing.

Finally, there is venture capital. This entire chapter is dedicated to venture capital financing, for two reasons. First, venture capitalists are effective at closing liquidity gaps in entrepreneurial firms in the marketplace. Second, venture capitalists provide “hands-on” assistance to entrepreneurial firms; this is the true hallmark of venture capital, which represents a unique combination of capital and “know-how.” Venture capitalists have a strong orientation towards building a solid and “perpetual” business venture; they also strive for value maximization and work to monetize their holdings in due course.

An overview of venture capital financing

Definitions, characteristics, and performance

The definition of venture capital has changed over the years, but is generally understood to refer to capital provided to private firms. Various English language dictionaries define “venture” as an undertaking involving chance, risk, or even danger. On the other hand, dictionaries characterize “venture capital” as money invested or available for acquiring shares, especially those of new and speculative enterprises. The more sophisticated business dictionaries identify venture capital as a pursuit for significantly above-average and long-term investment returns through equity ownership and involvement with risky start-ups and emerging or expanding firms.

In understanding the meaning of venture capital, it is important to distinguish between the different terms used to describe the act of investing in private firms. To clarify the differences, it is useful to draw upon definitions provided by the two most well-known venture capital organizations: the European Private Equity and Venture Capital Association (EVCA, which was founded in 1983) and the National Venture Capital Association (NVCA, founded in 1973). The definitions of venture capital provided by these institutions vary and reflect historical, geographic, and developmental antecedents. EVCA classifies venture capital as capital co-invested alongside the entrepreneur for the purpose of providing capital and know-how to early stage firms. EVCA also defines venture capital as a subset of private equity that refers more to investments made during the launch or early stages of an entrepreneurial venture. In the European context, private equity is more broadly viewed as equity provided to firms not quoted on a stock exchange; such capital can be used to deal with ownership and management issues through leveraged transactions (including

management buyouts and buy-ins). NVCA labels venture capital as a method of financing and building young entrepreneurial firms within the fastest growing sectors of the economy (this characterization also includes investments in later stage entrepreneurial firms). Venture capital is viewed as a catalyst for innovation, technological improvement, and scientific discovery. Private equity is used in the context of larger expansion transactions and leveraged buyouts. Private equity also encapsulates investment opportunities in infrastructure, real estate, distressed debt and assets, natural resources, heavy industry, and government-owned firms.

Overall, venture capital can be defined as a unique combination of capital and know-how that is provided to entrepreneurial firms by institutional investors and aimed at accelerating their development and exploiting available market opportunities to obtain long-term capital gains. While venture capitalists are often involved in a wide range of growth financings, some of which may not fit the traditional definition of venture capital, venture capital can be distinguished from other types of capital provision in several ways. Venture capital is risk-equity investing; venture capital firms predominantly invest in equity as opposed to debt instruments. Venture capitalists are characterized by their high tolerance for risk and understand that well-managed risks can often translate into above-average returns. Venture capital is also the business of building and nurturing entrepreneurial firms. Most venture capitalists are highly selective in their choice of projects, investing in one or two out of every 100 investment opportunities they review. Such statistics capture the extraordinary scrutiny that potential investee firms must subject themselves to, as well as the length of time that it often takes to close deals (the deal-closing process includes preliminary discussions, due diligence, negotiations, and so on). Venture capital is also illiquid. Venture capitalists make medium- to long-term investments into entrepreneurial firms. The duration of the investment is usually between three to five years, although it can be longer if the entrepreneurial firm requires significant development or if it underperforms. Time, effort, and capital are sometimes needed to rectify operational or financial underperformance. The lack of liquidity is often reflected in the higher rate of return that is expected by venture capitalists to compensate for their inability to dispose of shares in a timely manner at any point during the investment process (as is possible in public markets). Another characteristic of venture capital is that venture capitalists generate returns from growth in the value of an entrepreneurial firm rather than from collecting any ongoing payment, coupons, or charges. Venture capitalists are also reluctant to receive dividends; cash is customarily reinvested for supporting business growth. Venture capital is often subordinate to other types of financing. While the most common financial instrument for venture capitalists is the convertible preferred share, venture capitalists often hold common shares, which have the lowest priority of claim on assets in a case of liquidation or bankruptcy; in fact, venture capitalists may recover very little or nothing at all from their invested capital (common shares are repaid after debt, preferred shares, taxes, and so on). Additionally, venture capitalists get actively involved in their investee firms to accelerate their growth along a desired path. Venture capitalists are typically appointed to the board of directors and often take a hands-on approach with their portfolio firms. Last and most importantly, after incubating and nurturing the entrepreneurial firm, venture capitalists aim to dispose of their ownership stake in the entrepreneurial venture. The exit is a “must have” for venture capitalists; they do not wish to be “stuck” in investments, even if the entrepreneurial firm is a good performer. In fact, venture capitalists often do not engage with entrepreneurial firms in which no clear exit path is likely to crystallize. For this specific reason, venture capitalists often claim that “not all good firms are good investments.” Exits usually occur either by offering shares in the public market (in the form

of an IPO, or in a subsequent secondary aftermarket) or by selling shares to strategic investors in a trade sale.

Venture capital can flow into entrepreneurial firms at different stages of development (the provision of venture capital financing is often referred to as stages of financing). Venture capitalists can provide capital in the form of “new venture” financing or expansion financing. New venture financing is provided to young entrepreneurial firms and is deployed to finance market research, product feasibility studies, or the development of a complete business plan – this is often referred to as *seed financing*. Early stage financing may also be provided to more established entrepreneurial firms that have been working on prototype products and are ready to test their market potential; if the test proves successful, the process of developing a management team begins (a management team is often a prerequisite for obtaining subsequent rounds of financing). Capital provided at this stage of entrepreneurial development is often referred to as *start-up financing*. *First stage financing* is provided to entrepreneurial firms that have successfully passed the market test and are ready to commence production. At this stage, the entrepreneurial firm needs all of the operating components of a fully functioning business, including production equipment, staff, management, a distribution structure, back office operations, marketing and promotional activities, customer service, etc. The category of expansion financing, on the other hand, is directed towards entrepreneurial firms beyond their “teething years” of development. *Later stage or expansion financing* is often provided to firms that are already up and running and have proven the viability of their products or services in the marketplace. *Second stage financing* is directed towards entrepreneurial firms operating at more advanced stages of development. Such firms already enjoy strong growth in revenue, but may not yet be profitable. Capital is normally directed towards working capital (rapid growth in revenue often necessitates investment in working capital), product development, geographic expansion, business acquisitions, additional product development, the balance sheet (i.e., improving debt-to-equity ratios), and so on. Other types of financing include mezzanine financing, bridge financing, and buyouts. *Mezzanine financing* comes in the form of debt or equity and is normally provided to finance expansion. This form of financing is often provided on short-notice (with limited due diligence undertaken), but is aggressively priced and can require interest or coupon payments (similar to debt instruments). *Bridge financing* is temporary financing directed towards firms looking to go public. *Buyout financing* is provided either to management to purchase the business (*management buyouts*) or to allow independent managers from outside of the firm to purchase shares in the business (*management buy-in*). *Leveraged buyouts* refer to deals where a significant amount of debt is used to purchase a part of or the entire business. Debt raised for the purpose of leveraged buyouts often encumbers the balance sheet of the firm being purchased.

Venture capitalists do not manage their own capital; instead, they manage capital on behalf of limited partners (LPs) who contribute capital to the limited partnership (LP). LPs are normally passive investors who share in profits; however, they may elect to be more active by participating in the venture capital firm’s decision-making bodies, namely the investment committee and the supervisory board. The manager of the venture capital firm is the general partner (GP) in the LP structure and is responsible for day-to-day management of the fund. Limited partnerships are commonly established for a period of ten years. The GP is compensated for their service to the LPs in two ways: by charging a management fee (collected on an annual basis and equal to, on average, 2 percent of the value of the fund) and through carried interest. Carried interest is a system of reward-for-performance compensation, where upon full realization of the fund (i.e., converting all the investments into cash),

LPs receive 80 percent of proceeds above their initial cash contribution and the GP receives 20 percent; this is the most interesting and potentially rewarding part of the GP's compensation scheme.

Venture capitalists aim to achieve a positive “batting average” in their investment decisions rather than to get every investment right. Venture capitalists can sometimes make “wrong bets.” Even though they are often regarded as “smart money,” venture capitalists are not immune from making inappropriate investment decisions; some investments supported by venture capital will become business failures. Most venture capital firms pursue either a “two-six-two” batting average (two superior investments, six single-digit or no-return deals, and two complete write-offs) or a “two-four-four” achievement (two superior investments, four single-digit or no-return deals, and four complete write-offs). The record shows that, on average, venture capitalists are able to achieve annual percentage returns equal to between the high teens and low twenties. Evidence suggests that venture capital returns from early stage entrepreneurial firms have declined over the last decade from the mid-twenties in the early 2000s to the low teens or even single-digit returns today (the only private equity investment subset which has more or less maintained a strong record of performance is buyouts). Venture capitalists aim to achieve returns above those generated from public markets. A very long-term average from public markets is around 10 percent; venture capitalists aim to provide additional premiums (normally between 5 and 10 percent) to their LPs for illiquidity.

Venture capital firms rarely wish to speak to entrepreneurs about the percentage of returns that they seek from their investments, as this can be a very “sensitive” area of venture capital contracting. The reason for this is that inexperienced entrepreneurs often have a tendency to compare the percentage of returns sought by venture capitalists to the rate of interest charged by bankers on loans. Not surprisingly, such comparisons do not resolve in the venture capitalists' favor – a bank can provide an entrepreneurial firm with a loan at 5 percent interest, while venture capitalists may seek a rate of return equal to 25 percent. Instead of speaking about the percentage of returns that they seek, venture capitalists will tell entrepreneurs that they wish to increase the value of the entrepreneurial firm by three to four times over a period of three to five years; this discussion is much more pleasant because it focuses on the value of the firm rather than the anticipated rate of return for venture capitalists. Of course, multiplying every dollar of venture capital investment by three times over four years (or by four times over five years) translates into a return of about 32 percent per annum. A knowledgeable entrepreneur can easily determine what the venture capitalists' expected rate of return may be from the anticipated increase in the value of the firm.

The entrepreneur's perspective on venture

Venture capital financing can have many advantages and disadvantages for entrepreneurs (a summary of the major points is included in Table 5.1). In the first part of this section we focus on the advantages of venture capital, or the value added contributions of venture capital to entrepreneurial firms. These actions have the potential to become “value levers” to entrepreneurial firms, in that they work to mitigate the financial, operational, and legal risks associated with entrepreneurial ventures. Most importantly, through active interaction with entrepreneurs, venture capitalists promote entrepreneurial learning, discovery, problem solving, and measured experimentation. The second part of this section focuses on some of the challenges associated with venture capital. The disadvantages of venture capital for entrepreneurs include diluting their ownership of the firm, having a long-term partnership

Table 5.1 Advantages and disadvantages of venture capital financing from the entrepreneur's perspective

<i>Advantages</i>	<i>Disadvantages</i>
Permanent capital	Dilution of ownership
Additional financial leverage possible	Venture capital "more expensive" compared with other financing types
Increased credibility	Long-term partner orientation
No repayment (or no dividends)	Operating approvals (and sometimes giving up control)
No personal collateral	Time commitment
Invaluable "sounding boards"	
Networking	
Strategic and financial planning	

with limited possibility of "divorce," working with a partner who may have different aspirations for the venture, and the need to seek exit.

Advantages of venture capital: value creation through growth orientation and frequent interaction

Venture capital is a "permanent" capital that does not require repayment. Venture capital also does not encumber entrepreneurs with requirements for collateral, personal guarantees, and other liabilities. There are no expectations of dividends or other interim payments. On occasion, venture capitalists may choose to take dividends from the business; this tends to occur only in circumstances where entrepreneurial firms generate cash flow in excess of that anticipated in the business plan, when the financial demands of the capital expenditure program are met, or when there are no other apparent areas where capital can be effectively employed. The primary objective of venture capital is to achieve above-average revenue growth through some combination of internal growth, strategic partnerships, mergers, and acquisitions. The expectation for robust growth not only includes the time period when venture capitalists are actively involved in the venture, but also beyond the point of exit (a potential buyer must see future growth opportunities in the underlying business). Consequently, the entire free cash flow generated by the entrepreneurial firm is dedicated to investment.

The injection of equity creates additional leverage potential. Venture capital equity improves the balance sheet of the entrepreneurial firm (in terms of debt-to-equity composition) and allows the firm to secure further debt financing. Venture capitalists instinctively realize that firms with a reasonable level of debt financing are worth more than firms that shy away from debt; an optimal level of debt in the capital structure of the entrepreneurial venture can further enhance its value since additional capital can be directed towards further growth (additional debt financing can be directed towards acquisitions, capital expenditures, hiring new management, and so on). The involvement of venture capitalists also makes it easier for the firm to raise further equity financing from other venture capitalists. Arranging subsequent rounds of equity financing is especially important for entrepreneurial firms that are on a "fast-growth" revenue trajectory where all financing needs could not have been anticipated upfront (evidence confirms that venture-capital-backed firms grow more quickly than their market counterparts). Venture capitalists often maintain good working relationships with other equity providers (deals are often syndicated and venture capitalists frequently

co-operate with one another) and most are capable of raising additional equity financing in a timely fashion (much faster than would otherwise be possible). Subsequent rounds of financing confirm that value is being created in the firm. Venture capitalists expect that subsequent rounds of financing will occur at higher pre-money valuations than those initially assigned. The benefits of increased valuation are welcomed by all: the higher the valuation, the lower the dilution suffered by all existing shareholders. Raising capital at increased valuations also pleases entrepreneurs, as they receive verification that their chosen market strategies, operational activities, and financial objectives have been met and that the firm is on track in the value creation process. Of course, value destruction is also possible; this tends to be reflected in lower valuations for subsequent rounds of financing.

Venture capital also improves the credibility of entrepreneurial firms in the eyes of clients, business partners, suppliers, and other stakeholders. Venture capitalists are perceived to be a “verifier” or “guarantor” of the quality of the underlying entrepreneurial business. They can also enhance the firm’s credibility during the period of an IPO. Entrepreneurial firms backed by venture capital often receive a “certification premium” which is reflected in a higher valuation than would otherwise be possible. Venture-capital-backed firms also outperform non-venture-capital-backed firms in the IPO setting and suffer less under-pricing in public markets; this is because venture capitalists tend to invest in firms that are financially stable, cash generative, market dominant, and growth focused.

There is strong evidence to suggest that venture capital and innovation go hand-in-hand. In fact, the size of the venture capital industry in an economy often acts as a good barometer of the innovation activities occurring throughout the entire economy (especially in the entrepreneurial sector). While there has been some debate over whether or not innovation and technological development drive the demand for capital or whether access to venture capital finance allows a firm to engage in innovation, there is a strongly positive relationship between venture capital, increased investment, and innovation. No matter what the direction of the causal effect is, entrepreneurial firms backed by venture capital tend to be more innovative; this may be because venture capitalists are superior at screening portfolio firms and are better at selecting those firms that are most prone to innovation. By extension, venture capitalists are also competent at evaluating the quality of existing innovations and encouraging new ones (venture capitalists often contribute to increasing the efficiency of spending on research and development, creating new products and services, and so on). Although venture capitalists are often not technical specialists (though an increasing group of venture capitalists entering the marketplace possess previous operating and technical experience), they contribute to the timely commercialization of innovation. Consequently, venture-capital-backed entrepreneurial firms are often leaders in patent applications and their patents are generally perceived to be of higher quality (i.e., more commercial).

Venture capitalists introduce entrepreneurs to their network of contacts (i.e., consultants, advisors, industry specialists, financial analysts, clients, etc.), and may also introduce entrepreneurial firms to end users, clients, and corporate partners. Venture capitalists are attuned to finding new marketing channels and distribution structures for the products and services of the entrepreneurial firms that they are involved with. Many venture capitalists also promote close co-operation between their portfolio investee firms and encourage shared knowledge, transfer of management practice, and exchange of ideas. As described earlier, venture capitalists also maintain strong ties in the financial community (i.e., intermediaries, underwriters, financial analysts, banks, venture capital firms, etc.). By using their network of contacts (including a network of serial entrepreneurs), they also promote the development

of value added advisory boards; these are especially valuable to new start-ups and young entrepreneurial firms.

Last and most importantly, venture capitalists demonstrate an active and hands-on participation in the entrepreneurial venture. Venture capitalists participate on the board of directors and can be invaluable sounding boards for management teams and entrepreneurs. Venture capitalists instinctively know that close, hands-on involvement is likely to improve the operations and financial performance of an entrepreneurial firm. Venture capital activism not only enhances performance, but also minimizes business failure; investee firms are carefully monitored. Entrepreneurial firms can count on timely interventions from venture capitalists when adjustments are needed or when deviations from the original business plans occur. Venture capitalists also actively participate in the strategic planning process, in any revisions that are made to the financial forecasts, in the recruitment of senior management (strong management is the heart of value creation and risk mitigation), and in raising capital. In some cases, venture capitalists actually have more knowledge, industry experience, and expertise than the management team of the entrepreneurial venture. In short, the active and regular interactions of venture capitalists with the firm translate into the professionalization and corporatization of the entrepreneurial venture.

Disadvantages of venture capital: entrepreneurial irritants and drawbacks

The involvement of external financiers such as venture capitalists, who take an ownership stake in the entrepreneurial firm, can dilute the entrepreneur's ownership of the firm. Instead of retaining complete ownership of the venture, entrepreneurs now share it with a new partner. Venture capitalists generally aim to acquire a meaningful minority position in the venture equal to 20 to 30 percent (by contrast, there is no dilution when the entrepreneurial firm issues debt); as a result, venture capital is often regarded as one of the most expensive forms of financing. As previously noted, venture capitalists expect to see above-average returns from the firm which significantly exceed the financial costs charged by commercial banks or other institutions for the provision of debt. However, the argument around the "excessive" cost of venture capital financing can sometimes be exaggerated, particularly since venture capitalists may be the only group of financiers willing to provide capital to young and risky entrepreneurial firms. In other words, if not for venture capital financing, entrepreneurial firms may not be able to raise external capital and realize their expansion plans.

Venture capital financing also requires a long-term relationship between entrepreneurs and venture capitalists; the legal arrangement between the two parties can only be terminated at exit. While many relationships between entrepreneurs and venture capitalists are effective and nurturing, certain situations, arrangements, "interpersonal chemistry," and behavioral patterns of both parties can become unbearable and intolerable – this can result in severe strategic, operational, and financial distress, or decision-making gridlock, operational paralysis, and loss of value.

A partnership with a venture capital firm often requires that entrepreneurial firms must seek approval for certain operational, financial, human resource, and legal decisions. Entrepreneurs often argue that because of this additional layer of approval (venture capitalists may have the right to veto certain actions), the involvement of venture capitalists can make the entrepreneurial firm inflexible and slow. In rare situations, the partnership with venture capitalists can result in the founders effectively losing control of the entrepreneurial venture through a variety of legal means (i.e., under the terms of "voting flip-over events";

this aspect of venture capital contracting is discussed later in the chapter). However, while such possibilities are often written into the legal documentation, they are only invoked in cases of severe financial underperformance, illness, criminal behavior by the founders, or other extraordinary circumstances.

The venture capital investment process

The completion of a successful venture capital deal requires the deal to progress through a multi-stage process. This progression is no easy task for venture capitalists as they have to deal with a number of unique challenges. First, venture capitalists often need to educate entrepreneurs, who frequently confuse venture capital with other types of financing (i.e., debt). The initial interactions between the two sides are difficult, especially for venture capitalists, who need to simultaneously act as educators and negotiators. Second, entrepreneurs are seldom ready to receive venture capital financing. They may not have formal documentation describing their businesses, and, most importantly, they often do not have business plans and financial forecasts, which are the cornerstones of venture capital evaluation.

The venture capital investment process is usually described as a five-stage model consisting of deal origination, screening, evaluation, deal structuring, and post-investment activities. These stages of the venture capital investment process are briefly described in Figure 5.1.

Deal origination: Access to information about high-quality investment opportunities, or deal flow, is crucial to venture capital firms, who rely on their relationships with investment bankers, brokers, accountants, lawyers, and consultants to obtain leads on deals, and also count on referrals from firms they have successfully financed in the past. Venture capital firms also compete directly with other agents (i.e., investment advisory firms or brokerage houses) to locate suitable candidate investee firms. Some of the most popular deal generating techniques include self-generation (where entrepreneurial firms seeking capital generally identify venture capital players through professional advisors or themselves directly) and

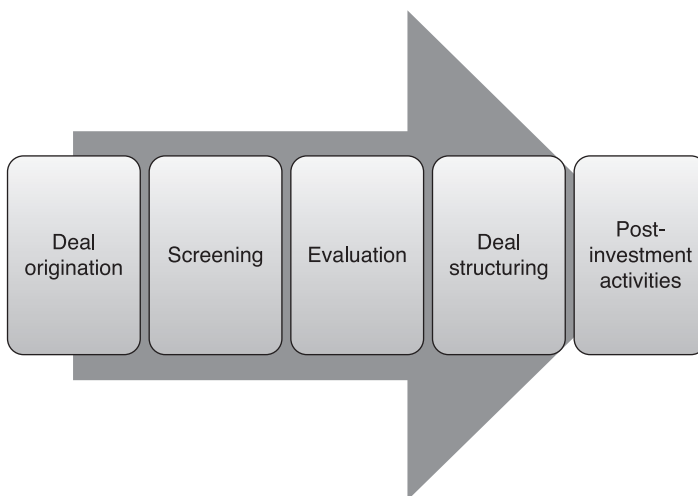


Figure 5.1 The venture capital investment process

direct marketing (where the venture capital firm's efforts are focused on identifying deals in the desired size range, industry, stage of development, and so on).

Screening: Venture capitalists commonly receive many business proposals, of which less than 5 percent convert into actual investments. In order to filter out the majority of proposals, venture capitalists use a process known as screening. They eliminate the proposals that are unable to meet the venture capital firm's investment criteria, have been previously unsuccessful in certain sectors, seem generally unpromising, or are unsuitable to the venture capital firm (for example, some venture capital firms have restrictions on investing into specific sectors such as military equipment, alcohol, tobacco, and so on). A significant amount of proposals are rejected during this stage of the process.

Evaluation: The proposals that have successfully passed the initial screening phase are more heavily scrutinized. Information included in the provided documents is confirmed and financial forecasts are investigated. The key evaluation criteria include product, management, market, and returns. Though a general objective of this due diligence process is to gain a thorough understanding of all business aspects, the focus of investigation may vary from deal to deal. The venture capitalist's professional experience is crucial to the general effectiveness of the evaluation process. There are two key aspects to the evaluation process aimed at locating potential "deal breakers" as quickly as possible in the investment process. First, venture capitalists attempt to investigate the attractiveness of the underlying investee firm or its commercial proposition. An evaluation is performed on all commercial areas of the business (i.e., management, product, market competition, finance, returns, and so on) as quickly as possible in the investment process. This assessment is performed on the basis of available information (i.e., the business plan from the investee firm) and the internal "knowledge base" of the venture capital firm. The assessment is a relatively straightforward exercise as many of the venture capitalists appointed to the team are likely to have relevant industry experience and are able to make an informed assessment without dedicating a significant amount of time to the process. Second, venture capitalists attempt to ascertain the likelihood of closing a deal. A preliminary discussion is held with the entrepreneur about the basic terms the venture capitalists are likely to require in order to complete the deal. This discussion is usually held early in the investment process to assess the chances of closing the deal. Such an exercise also helps to identify any potential legal "deal breakers." The key areas of discussion relate to exit provision, valuation, corporate governance, and circumstances or events that can lead to change in control of the entrepreneurial venture.

Deal structuring: If due diligence does not identify any major areas of concern, venture capitalists proceed to negotiate the deal. As we note in the latter part of the chapter, deal structuring involves concluding the negotiations of detailed documents of the transaction with the entrepreneur. Unanticipated legal issues often arise as the general terms of the deal captured in the term sheet are converted into detailed legal documents.

Post-investment activities: Venture capitalists' active involvement in their investee firms is related to information asymmetry and an extended period of illiquidity. Any information asymmetry venture capitalists face can cause significant agency risks. An extended period of illiquidity, in turn, can result in a questionable exit scenario and poor returns. In order to reflect the current market conditions and changes in business opportunity, business plans, operational goals, and shareholders' agreements need to be regularly evaluated and revised, from time to time, after the initial deal is closed. While venture capitalists' participation in an investee firm varies from deal to deal, new ventures generally require more assistance than developed ventures.

Achieving an exit, or divestment, is the most important part of the post-investment activities. Divestment is driven by venture capitalists' need to generate a profit for their capital providers and partners. This process can be achieved through two common routes: an IPO, or a trade sale to a strategic investor. Regardless, each exit route has different consequences for both venture capitalists and entrepreneurs. For venture capitalists, a public offering rarely concludes their relationship with the investee firm, as the underwriters can prevent venture capitalists from disposing of all shares at the time of an IPO. Trade sales, in comparison, will almost certainly end a venture capitalist's involvement with the investee firm.

Venture capital contracting and negotiations

Financial contracting in venture capital

Financial contracting between entrepreneurs and venture capitalists is complex for a variety of reasons. Venture capitalists often deal with entrepreneurs who are seeking this type of financing for the first time. In such situations, venture capitalists have to play the dual role of being educators (to entrepreneurs and to their advisors) and counterparts to a contract; this can create a conflict of interest and places venture capitalists in an uncomfortable and compromising position. The venture capital contract also includes many unique clauses and provisions that guide the relationship of the two parties from the beginning of their joint undertaking to the final exit of venture capitalists from the deal. Entrepreneurs, even those with an in-depth knowledge of legal matters and financial contracting, find venture capital arrangements difficult to understand, digest, and accept. The process of negotiating a venture capital deal can become significantly easier for entrepreneurs if they are assisted in the process by knowledgeable financial and legal advisors who have had prior exposure to venture capital (at least two deals completed).

Although entrepreneurs and venture capitalists eventually end up signing a complex legal document ranging in length from 100 to 300 pages (this typically includes the shareholders' agreement, subscription agreement, and amendments to the entrepreneurial firm's constitutional documents such as articles of association, statutes, or deeds), the basics of the deal are usually outlined in a much shorter document called the heads of terms, term sheet, or letter of intent. This milestone document captures the essence of the understanding between venture capitalists and entrepreneurs on the basis of which the two sides are willing to conclude the deal on a "best effort basis." The agreement includes all of the fundamental principles that guide the preparation of the more comprehensive legal documents leading to the execution of the deal. While the term sheet is not binding (although there are a handful of exceptions within it that could be binding, such as the confidentiality clause, the exclusivity statement, and the break-up fee provision), it is normally countersigned by the two parties. The term sheet must be both reasonably detailed (it is usually between five and ten pages in length) and sufficiently flexible to allow for any unanticipated events; every imaginable provision cannot be included because the document is not meant to be exhaustive, not all required provisions and eventualities are known or developed at the time when it is negotiated (i.e., legal or financial due diligence may not yet be completed), and certain discussion items may have been left "open" to be negotiated later (although an item not resolved during initial negotiations may not ever be resolved and could effectively become a "deal breaker"). The term sheet typically includes the following components: the name and detail of the investee firm, the amount being invested, the type and number of securities issued to venture

capitalists (and their resulting stake in the entrepreneurial firm), the purpose for the use of funds, the tranches of capital, the timing of capital draw-downs, various rights and provisions, and the conditions precedent to closing the deal.

From a venture capitalist point of view, the term sheet aims to address the major perceived operational, financial, implementation, and exit risks inherent to the deal. Venture capitalists' objective in drafting the term sheet is to devise a set of protections to address major foreseeable risks. A number of standard venture capital provisions (discussed next in detail) are also likely to be part of the deal. For entrepreneurs, the term sheet acts as a framework for co-operation, discussion, and decision making. The document also sets out any perceived impositions on entrepreneurs by venture capitalists.

The term sheet generally deals with three basic areas: deal pricing, security types, and venture capitalists' rights and provisions (see Appendix I for a sample term sheet; more sample term sheets can be viewed on the web page of the National Venture Capital Association – www.nvca.org – in the “Model Legal Documents” section).

Deal pricing

In Chapter 8, we will learn more about the basics of business valuation in the entrepreneurial context and develop an understanding of the principles behind the discounted cash flow and EV/EBITDA multiples methods. Business valuation is critical in establishing how much equity entrepreneurs will eventually surrender to venture capitalists in exchange for their capital (note that capital from venture capitalists normally flows to the entrepreneurial firm in the form of a capital increase; a straight purchase of shares from one or a group of existing shareholders can also sometimes occur). Of course, the higher the business valuation, the lower the percentage the entrepreneur would need to “give up” to venture capitalists. For example, if the business valuation is equal to \$8 million and venture capitalists contribute \$2 million in the form of new capital, then venture capitalists receive 20 percent of the venture ($2/[2 + 8] = 20\%$); if the business is valued at \$12 million with the same amount of contribution from venture capitalists, they receive 14 percent ($2/[2 + 12] = 14\%$). The initial business valuation (the value of equity as determined by the negotiating process) is often called the “entry valuation” or “pre-money valuation” (valuation of the entrepreneurial venture before venture capitalists' financial contribution). The valuation of the business that occurs after the new capital has been provided is known as the “post-money valuation.” The pre-money valuation is equal to the post-money valuation if venture capitalists purchase shares from existing shareholders; in this case, the equity base of the company stays the same.

Entrepreneurs can determine the equity value of their business in a variety of ways. Most commonly, entrepreneurs aim to grow their ventures without ascertaining their value on a regular basis; in most cases, the entrepreneurs are not aware of the value of their business. For entrepreneurs, value is usually “discovered” through four basic means. Entrepreneurs often obtain an initial “feel” for the value of their business when interested strategic investors appear and begin to prepare offers for the entrepreneurial firm. Such valuation exercises are often prepared on the basis of limited information provided to the interested buyer; this limited disclosure may include select financial information or even sketchier outlines of the future plans of the business. Even though these valuations are prepared on aggregate data, entrepreneurs tend to get emotionally attached to these preliminary valuation figures. Such values are raised in discussions with venture capitalists and serve as the basis for negotiating a transaction. Additionally, entrepreneurs can hire external consultants to prepare a formal

valuation analysis. Consultants are often employed when a strategic investor or a venture capital firm expresses interest in the business. The consultants will prepare a set of financial forecasts and, subsequently, a valuation analysis. The valuation reports are often more comprehensive, exhaustive, and inclusive. Consultants are typically invited to assist the entrepreneurial firm with negotiations when business value is being discussed. Entrepreneurial firms may also be willing to produce valuations of their own; this exercise is relatively simple if a full set of financial projections is available. Valuations are conducted by the finance or accounting department, especially if the entrepreneurial firm employs professional accountants who have undergone additional training as “certified business valuers.” Last, business valuation may be assigned by an underwriter or investment banker if the entrepreneurial firm wishes to pursue an IPO. In the early stages of the underwriting process, the entrepreneurial firm will invite a handful of underwriters or investment bankers to prepare their service offers (which include price considerations). While the final valuation of the business is only confirmed by the market during the “road show” and the book building process, the actual value may prove to be lower than initially anticipated by the underwriter during the initial pitch to the entrepreneurial firm. Ultimately, the market allows for the true “discovery” of a market price for any asset, including the valuation of the entrepreneurial firm.

Determining the appropriate deal price or valuation is more complex for venture capitalists. In addition to developing a preliminary estimate of the entry valuation, venture capitalists must also forecast what the entrepreneurial firm is likely to be worth at the end of the holding period; this is commonly known as an “exit valuation.” Determining the entry valuation and the percentage stake the venture capital firm takes in exchange for the capital it provides are the first steps in the process; shortly thereafter, venture capitalists must calculate the rate of return (i.e., the internal rate of return, or IRR) from the anticipated transaction. Venture capitalists can only offer an entry valuation that assures a desired rate of return (at least on paper) given the assumed exit valuation of the entire business and the proceeds resulting from the disposal of their stake in the entrepreneurial business. It is important to note that an exit valuation is usually developed on conservative assumptions. Precise financial forecasts are not available for future years of the entrepreneurial firm’s operations (i.e., beyond year five), so the discounted cash flow method (DCF) cannot be reasonably applied. If the “on paper” IRR (developed on the basis of the financial forecast and additional assumptions made by venture capitalists) is lower than the required rate of return on the deal, then the venture capital firm is likely to negotiate a reduction in the entry valuation until such time that the expected IRR is above the required rate of return (this involves reducing the entry valuation of the entrepreneurial firm and taking a larger stake in the business). In many cases, venture capitalists may need to reduce their entry valuation below the value expected by the entrepreneurial firm; in such cases, deal negotiations often fail.

Security types

Just like any other component of venture capital contracting, the type of security acquired by venture capitalists is agreed upon in negotiations. Venture capitalists may hold preferred shares, convertible preferred shares, common shares, or debt (in the form of convertible debt). The types of shares held by venture capitalists reflect the firm’s level of maturity (i.e., seed, start-up, or expansion), the negotiating skill of the entrepreneur, perceived business risk, the risk appetite of venture capitalists, and so on. Generally speaking, the less developed the entrepreneurial firm, the more protective instruments venture capitalists seek to obtain.

The most common security type held by venture capitalists is the convertible preferred share. A preferred share has a number of unique features. First, it is a hybrid security, meaning it is composed of characteristics related to common shares and debt. A preferred share resembles common equity because it is regarded as a part of the firm's equity base and is entitled to dividends (just like a common share) and votes. A preferred share also has a priority of claim over common shares upon any realization, liquidation, or winding up of the venture; this is the most valuable component of a share for venture capitalists. A standard preference share has debt-like features since it represents a fixed obligation on the part of the firm; this arises in the form of preferred share dividends (note that venture capitalists normally do not elect to receive any preferred share dividends). The conversion feature of the convertible preferred share allows venture capitalists to convert their holdings into common shares that rank at the same level of protection as those of the remaining shareholders.

Venture capitalists may also receive two types of shares simultaneously: common shares and preferred shares. Common shares are issued at a low nominal value (i.e., one cent); these shares allow venture capitalists to hold their economic and voting interests in the entrepreneurial firm. In addition to common shares, venture capitalists also hold preferred shares (which are recognized at the full value of monetary contribution); these effectively secure venture capitalists' priority in any realization, liquidation, and winding up of the entrepreneurial firm.

Venture capitalists can also hold their interest in the form of common shares. Venture capitalists reluctantly accept these types of shares, but may do so if negotiations with the entrepreneur have proven challenging (venture capitalists have to trade off taking this type of security for other, perhaps more important transaction clauses, such as exit provisions). Venture capitalists may also consider common shares if there is limited perception of risk related to the underlying business (in this case, any priority upon realization or liquidation may not be valuable, as such events may be unlikely), or if the firm is close to an IPO (in the IPO process, any preference shares are converted to commons).

Finally, venture capitalists may hold their shares in the form of convertible debt (though this is rare in the venture capital setting). The rationale for holding this financial instrument relates to the perception of extraordinary risk in the entrepreneurial venture. If such risks are removed, addressed, or mitigated, venture capitalists normally "downgrade" their holding to an instrument which offers less protection of capital (such as preferred shares or convertible preferred shares).

Rights and provisions for venture capitalists

When venture capitalists make their decision to inject capital into the entrepreneurial firm, they tend to rely on various rights and provisions to monitor their investments. From the moment of deal completion, venture capitalists focus on two main points: whether the entrepreneurial firm is performing in accordance with the original business plan, and whether the exit timing is on schedule (within the anticipated time horizon). Any changes to these parameters are likely to compromise venture capital returns.

It is important to note that the negotiated provisions represent venture capitalists' rights, but are not obligations; these rights provide venture capitalists with the ability to act under extreme circumstances and conditions. Some of the rights acquired by venture capitalists are also extended to other shareholders; these "symmetric" rights normally refer to the most basic protections such as pre-emptive rights, rights-of-first-refusal, and "piggy-back rights." Other rights are more "asymmetric" in that they are only extended to venture capitalists (for a summary of key venture capitalists' rights and provisions, see Table 5.2).

Table 5.2 A summary of key venture capital rights and provisions, as well as the likely areas of resistance from entrepreneurs

<i>Key terms</i>	<i>Venture capitalist's tool for:</i>	<i>Likely resistance by entrepreneurs</i>
Pre-emptive rights	Protection against ownership dilution Extension of upside profit potential	Low
Right-of-first-refusal	Protection against uncontrolled share disposal Protection against unwelcomed shareholders	Low
Co-sell or "piggy-back"	Protection against uncontrolled share disposal Protection against unwelcome shareholders Total disposal if new buyers attain majority	
Lock-in rights	Protection against sales of shares before venture capitalists' full exit	Low
Inspection and information rights	Timely access to information Use of external advisors	Low
Representations and warranties	Confirmation of legal, accounting, operational, environmental status of the entrepreneurial firm Compensation if representations prove untrue	Medium
Related party transactions	Assurance of arm's length transactions Prior approval of such transactions	Medium
"Voting flip-over rights" or change of control	Ability to assume control of the venture Ability to appoint new management	High
Drag-along rights	Right to sell the entire venture to willing buyers	High
Share adjustment mechanism or "ratchet"	Change in the firm's entry valuation dependent on financial performance or capitalization	High
Exclusivity	Protections against entrepreneurs negotiating with other parties	Medium
Confidentiality	Protection against disclosing contents of negotiation	Low
Break-up fees	Financial compensation for breaking up confidentiality and exclusivity Financial incentive to continue discussions	Medium

Pre-emptive rights, rights-of-first-refusal, co-sell or "piggy-back" rights, and lock-in rights are designed to restrict the movement of shares between shareholders. Pre-emptive rights allow venture capitalists to acquire new shares being issued by the entrepreneurial firm in direct proportion, or *pari passu*, to the level of ownership that they hold in the firm at the time the new shares are issued; this ensures that venture capitalists' level of shareholding cannot be diluted without their agreement. The exercise of these rights may occur when an emergency round of financing is provided to the entrepreneurial firm. Participation in this capital increase protects venture capitalists from diluting their ownership position in the entrepreneurial firm. Issuing shares at low nominal value in order to achieve a significant dilution of ownership to non-participating shareholders is normally called a "wash-out" round. Exercising pre-emptive rights in such circumstances would translate into a downside protection against dilution for venture capitalists. Pre-emptive rights can also be exercised

by venture capitalists in more positive circumstances where the entrepreneurial firm is developing well (maybe even better than anticipated); in such a scenario, venture capitalists may wish to increase their exposure to the deal in anticipation of strong returns (see a numerical example in Table 5.3 related to key venture capital provisions).

The right-of-first-refusal allows venture capitalists to purchase shares being sold by existing shareholders. In such a case, if any of the existing shareholders wish to sell their shares to a third party, venture capitalists have the right to acquire these shares on the same terms as offered by the third party. Venture capitalists generally exercise these rights to increase their exposure to the deal or to protect against a new party becoming a shareholder in the venture (the new shareholder may, for example, compromise the exit). Co-sell or

Table 5.3 Calculations of share movement between four shareholders (including the venture capital firm) under different rights and circumstances

Initial shareholding position

Here are the initial shareholding positions of three shareholders and a venture capital firm. There are 1,000 shares in total (see below).

Shareholder A	Shareholder A	Shareholder C	VC
100 shares	200 shares	400 shares	300 shares
10%	20%	40%	30%

Pre-emptive rights

There is a capital increase of an additional 2,000 shares. The venture capital firm receives an additional 600 shares, which is in proportion to their level of shareholding in the firm ($30\% \times 2,000 = 600$). In this event, the venture capital firm maintains its initial shareholding position of 30 percent ($[(300 + 600) / (1,000 + 2,000)] = 30\%$).

Shareholder A	Shareholder B	Shareholder C	VC
300 shares	600 shares	1,200 shares	300 shares + 600 shares = 900 shares
10%	20%	40%	30%

Rights-of-first-refusal

Shareholder B wishes to sell off its shares. In this event, shareholder B's shares are apportioned among the remaining shareholders. The venture capital firm receives 38 percent of the distributed shares. In total, they receive 75 additional shares. The venture capital firm now maintains 375 shares in total and its level of shareholding increases from 30 percent to 38 percent. Other shareholders also experience an increase in their level of shareholding (A=12 percent; C=50 percent).

Shareholder A	Shareholder B	Shareholder C	VC
125 shares	0 shares	500 shares	300 shares + 75 shares = 375 shares
12.5%	0%	50%	37.5%

In the example overleaf shareholder B wishes to sell its shares, but shareholder C does not want to purchase any shares. In this case, 200 shares are divided between shareholder A and the venture capital firm. The venture capital firm will receive 150 additional shares for a total of 450 shares; this accounts for 45 percent of the firm.

(Continued overleaf)

Table 5.3 (Continued)

Shareholder A	Shareholder B	Shareholder C	VC
150 shares	0 shares	400 shares	300 shares + 150 shares = 450 shares
15%	0%	50%	45%

Co-sell or “piggy-back” rights

Shareholder C has found a buyer for its 400 shares. Given that the parties have co-sell rights, each of the shareholders would be able to sell a number of shares in the transaction in accordance with the percentage stake each holds in the firm. The venture capital firm would be able to sell 120 shares ($400 \times 30\% = 120$) and reduce its holding to 180 shares, accounting to an 18 percent stake in the firm.

Shareholder A	Shareholder B	Shareholder C	VC	New buyer
60 shares	120 shares	240 shares	300 shares – 120 shares = 180 shares	400 shares
6%	12%	24%	18%	40%

“piggy-back” rights are similar to the right-of-first-refusal in that here also an existing shareholder can dispose of his or her share in the venture to a third party. If any of the existing shareholders of the entrepreneurial firm plan to dispose of any of their shares, venture capitalists have the right to co-sell the same proportion of shares. The terms of the offer for the shares being purchased are normally the same as offered to the shareholders soliciting the offer. Venture capitalists normally extend this provision by stipulating that if the selling shareholders wish to dispose of a sufficient amount of shares to allow a new shareholder to take a controlling interest in the firm, venture capitalists have the right to dispose of their entire pool of shares in priority to any other shareholders; this is based on the assumption that venture capitalists may no longer wish to participate in the entrepreneurial firm if a new owner appears on the scene with whom they do not have a relationship or share the same objectives.

The lock-in right is another provision restricting share movement; this right restricts the entrepreneur’s ability to dispose of shares without venture capitalist consent and applies only to the time period prior to the disposal of shares by venture capitalists (i.e., in the initial public offering). Lock-in rights are designed to keep entrepreneurs “fully invested” in the business. Venture capitalists assume that an entrepreneur with less financial exposure in a venture where the majority of the entrepreneur’s shares may be realized will have less incentive to perform well and therefore may be less motivated to achieve the objectives outlined in the business plan.

Inspection and information rights provide venture capitalists with the right to inspect the entrepreneurial firm’s premises and to review any materials or documents that they may find of interest (i.e., financial books, legal agreements, off-balance sheet transactions, and so on). Under this provision, venture capitalists also have the right to appoint external experts to investigate the affairs of the entrepreneurial venture. Any costs are normally covered by the investee firm; this extends to lawyers, accountants (including forensic or investigative accountants), operational specialists, environmental experts, and so on. Furthermore, under the terms of this provision, management and the entrepreneur are not only expected but required to co-operate with any requests to provide documents and must co-operate with

external advisors. Inspection and information rights generally reflect any asymmetry of information that exists between venture capitalists and insiders (i.e., the management team, founding shareholders, or entrepreneurs) who have a more intimate knowledge of the business. While venture capitalists hold a seat on the board of directors of their investee firms, they often only receive aggregated information in the form of quarterly reports and annual audited financial statements. Even audited statements may not fully disclose key information, as audit opinions are generally written in the same manner (only the “qualified opinions” of auditors provide any indication of problems, and these are rarely issued unless in circumstances where there may already be obvious problems).

There are two additional areas that relate to the disclosure of information to venture capitalists. The first is representations and warranties. Venture capitalists customarily expect standard representations and warranties (or full disclosure prior to completion of the deal) from entrepreneurs with respect to the firm’s activities, their own personal background (criminal records, for example), the legal standing of the firm (any legal disputes), and the state of assets and liabilities. These representations are requested by venture capitalists in addition to the due diligence that is conducted by their external advisors (note that due diligence does not discover or confirm every minute aspect of the entrepreneurial firm). Representations and warranties are generally outlined in the term sheet and are precisely outlined in the final legal documentation that the two sides sign. While representations allow for a full disclosure of pertinent information to venture capitalists, warranties effectively confirm that the entrepreneur is fully responsible for any liabilities and business affairs which may arise as a result of their activity prior to the involvement of venture capitalists. A good example for the use of warranties would be in the case of a tax dispute. A tax dispute may arise once venture capitalists have become co-owners of the entrepreneurial business; these tax liabilities came from the entrepreneurial firm’s past conduct when venture capitalists were not a part of the venture and venture capitalists should not be held responsible. If the representations and warranties prove untrue, entrepreneurs are expected to “cover” these liabilities and may be required to further compensate venture capitalists for any associated decrease in the value of the entrepreneurial firm. Related-party transactions involve entrepreneurial firms conducting business with other firms owned by the entrepreneur, his or her family members, or friends. Venture capitalists presume that such transactions are generally limited and should be done on an “arm’s length” basis (i.e., on market terms). Any related-party transactions should be fully disclosed during the negotiation of the term sheet (venture capitalists typically encourage entrepreneurs to seek their approval prior to entering into such dealings).

Approval rights enable venture capitalists to participate in key decisions related to the entrepreneurial firm. Through approval rights, venture capitalists can veto certain actions proposed by the management team or existing shareholders. Approval rights may extend to operations, financing, legal issues, compensation, and profit distribution (see Appendix I for a list of these provisions). Approval rights can be further extended to “voting flip-over rights” or change-of-control rights. Under these rights, venture capitalists may appoint additional members to the board of directors to take full control of the firm. Alternatively, venture capitalists may “automatically” be issued additional shares to allow them full control of the venture in voting terms. It is important to note that issuing additional shares normally means increasing voting rights; the economic interest of venture capitalists in the venture stays the same. Venture capitalists normally exercise these rights when management commits a crime or becomes incapacitated, or if the entrepreneurial firm has fallen significantly behind the terms outlined in the business plan (in terms of revenue and/or earnings before interest,

taxes, depreciation, and amortization (EBITDA)). The change of control can be either temporary (until the problems have been resolved) or permanent (until a full exit of venture capitalists from the business occurs). In most cases, venture capitalists choose to exercise these rights if they estimate that the exit timing and value of the firm have been jeopardized. The key change normally involves management.

One of the key provisions that venture capitalists are quite sensitive to is exit execution. Exit is always one of the most critical and sensitive issues to venture capitalists. One of the most user-friendly exit provisions is to achieve a listing of the entrepreneurial firm's shares on the public market (this works well for all parties, including management, entrepreneurs, and other shareholders). Through this elegant "liquidity event," venture capitalists are able to dispose of their entire stake in the firm at the time of the initial public offering, effectively ending their relationship with the firm. A less ideal but much more common scenario is for venture capitalists to dispose of a portion of their holding at the time of the IPO; then, after some time, venture capitalists dispose of the remaining shares (this "lock-up period" may last up to two years). The most common exit clause insisted upon by venture capitalists relates to "drag-along" rights. Drag-along rights provide venture capitalists with the means of forcing an involuntary exit by delivering full ownership of the entrepreneurial firm to the willing buyer. In effect, most drag-along clauses are constructed in such a way that if venture capitalists have not exited from their investee firm by a specific date, they are able to solicit an offer for the entire business (they can sell all the shares or deliver a sufficient amount of shares to satisfy the offer). In this case, the entrepreneurs have to go along with the offer or else they are effectively "dragged along" to participate in the sale of the entire venture. Of course, the other shareholders have rights-of-first-refusal and they can theoretically match the offer, even though arranging the proper financing to do so may prove difficult. Another exit provision involves share redemption rights. If venture capitalists have not exited from their investment by a particular date, they can force the entrepreneurial firm to redeem or buy back venture capitalists' shares either at market value, an agreed upon price, or according to a set formula.

An interesting area of venture capital negotiations is deal pricing. In an event in which the two parties are unable to reach an agreement on the value of the underlying entrepreneurial firm, venture capitalists may employ a mechanism called a share adjustment mechanism, otherwise known as a "ratchet." A dispute over valuation commonly arises if the two sides have different opinions on the future profitability of the venture (as measured at the EBITDA or EBIT levels), its growth trajectory, and or management's ability to execute the business plan. Common sense suggests that the lower the profitability of the business in the future, the lower its entry valuation should be. The share adjustment mechanism allows for a retroactive change to entry valuation on the basis of the actual financial results achieved by the entrepreneurial firm; hence, the change to the entry valuation results in a change to the level of shareholding venture capitalists hold in the business. The entry valuation is commonly adjusted according to an agreed upon formula that compensates venture capitalists fully or partially for any financial underperformance of the firm. Adjustments may be developed on the basis of changes in profitability or total capitalization of the entrepreneurial firm at exit.

There are four other areas that normally form a part of the term sheet: exclusivity, confidentiality, transaction fees, and break-up fees. These provisions are generally legally binding. In terms of exclusivity, the entrepreneur is not allowed to commence (or continue) discussions with any other venture capital firms or financial institutions. Confidentiality, on the other hand, aims to assure that the contents of the discussions between the two parties are confidential and will not be disclosed to a third party (entrepreneurs may be tempted to do this in competitive circumstances; for example, in discussing valuation). Transaction fees

require that if the deal has been completed, the entrepreneurial firm is expected to reimburse venture capitalists for any costs related to the transaction (these normally relate to, for example, legal and accounting due diligence, expert advice, research materials, out-of-pocket travel, legal documentation fees). The rationale is that these costs are presumed to also be of benefit to the entrepreneurial firm and not just to venture capitalists. Conversely, if the transaction falls apart, then these costs are covered by venture capitalists. Entrepreneurs normally place an upper limit on these kinds of expenses for venture capitalists (i.e., up to \$100,000). Last, venture capitalists insist that entrepreneurs must pay them break-up costs if the entrepreneur breaches confidentiality and exclusivity. Break-up costs are also charged if the entrepreneur ends negotiations with venture capitalists who wish to continue the investment on terms not significantly different from those included in the term sheet.

Venture capital negotiations

Deal negotiations occur at various points of interaction between venture capitalists and entrepreneurs. The early interaction between the parties often focuses on the general role played by venture capitalists in the entrepreneurial firm. At this early stage of the process, venture capitalists aim to identify any “deal breakers” – contractual terms unlikely to be accepted by the other side. While there are typically multiple points of disagreement and contention, the two sides are often likely to address the arising issues through multiple interactions, formal meetings, informal gatherings, dinners, sporting activities, and so on. Early interactions also serve to test the “interpersonal chemistry” between the parties (i.e., common appreciation for one another; ability to work together, especially under pressure; etc.); without this, it may be difficult to weather the many unanticipated situations, problems, and decisions that lay ahead. The initial interactions climax when the term sheet has been signed. The term sheet is the first major milestone document to be developed and therefore becomes a true test of the flexibility of both sides.

Both sides contend with various strengths and weaknesses during the negotiation process. Venture capitalists are well versed in legal and financial contracts, understand an entrepreneur’s sensitivities to various issues, and appreciate the most common trade-off zones in negotiations, but are often less familiar with the intricacies of the businesses that they attempt to invest in; they have a tendency to exaggerate risks, underappreciate the talents of management, and underestimate market demand. Entrepreneurs are strong negotiators, persuasive presenters, and superb salespersons; their intimate knowledge of their own venture provides them with a thorough understanding of the firm’s future operational challenges, financing needs, risks, products and services, and market potential (all of which are useful in negotiations).

As negotiations continue, the two sides consider value creation and exchange. Each side has its own unique points of focus; points of lesser value to one side may be traded against points of higher value to the other side, and vice versa. There are also areas of negotiation that are equally important to venture capitalists and entrepreneurs alike; these are seen as “must haves.” This kind of trading is especially difficult for both sides to conduct; the two sides must resort to creativity, flexibility, and compromise in order to reach a deal.

Entrepreneurs tend to focus on two important issues: operating freedom and business valuation. In terms of operating independence, entrepreneurs are concerned that various restrictions and approvals may negatively impact their decision-making process, the speed of implementation, and their operating flexibility and agility. Arguably, capable entrepreneurs are able to convert these attributes into a strong market position, sustainable market share, strong growth, and profitability. The valuation of the entrepreneurial firm is often regarded

as one of the most critical issues in any deal negotiation. An extraordinary attachment to the entry valuation (the valuation of the business before venture capitalists' participation) may be counterproductive in negotiations for entrepreneurs. If the entrepreneurial firm develops well and achieves market success, the entrepreneur will be satisfied with the ultimate value of the firm in due course. If, on the other hand, the entrepreneurial business fails, the initial value does not really matter, as the entry valuation will have been low anyway. Long discussions over the assignment of a specific value to the business can be counterintuitive.

Venture capitalists have different sensitivities; their primary concern is achieving a liquidity event, or, simply put, an exit. Venture capitalists do not want to get “stuck” in even a very successful business venture where they are unable to monetize their ownership. Any potential challenges to exit are treated with the utmost seriousness by venture capitalists; this includes entrepreneurs changing their mind about achieving a liquidity event (either a trade sale or an IPO), wanting to leave their business to their children, staying in the business for a longer period of time (hence, no rush to exit), and so on.

Pitching for venture capital

Being able to successfully navigate the venture capital investment process is essential for entrepreneurs. Before approaching a venture capital firm, entrepreneurs should review these five important points:

1. Entrepreneurs should prepare a brief description of their business so that it can be later expanded into a more formal memorandum for venture capitalists; in venture capital circles, this is referred to as a “teaser.”
2. Entrepreneurs should aim to develop a complete set of financial projections. Financial projections are the cornerstone of venture capital evaluation. The income statement, the balance sheet, the cash flow statement, and the statement of retained earnings should all be included. Cash budgets are insufficient for the purpose of raising venture capital.
3. Venture capitalists rarely invest in solo entrepreneurs; businesses resting on a single individual are unattractive to venture capitalists. Entrepreneurs should aim to develop a complete management team before they pitch to venture capitalists.
4. Corporate governance is an important component of venture capital investing. Consequently, entrepreneurs should pay attention to financial monitoring and control, conflicts of interest, and off-balance sheet liabilities.
5. Entrepreneurs should rely on knowledgeable business advisors to help them navigate the venture capital investment process.

Many books, instructional manuals, conferences, seminars, and videos have been developed on the art of pitching to venture capitalists. The “elevator pitch” – a short presentation that can be delivered in the time it takes to ride an elevator up and down – is a useful reference point when developing an effective presentation to venture capitalists. The presentation should be short and take about 20 minutes from beginning to end. Venture capitalists prefer to hear short presentations rather than long ones. If they like the firm, they will want the deal to move quickly; if the storyline is not appealing, any additional time is unlikely to have an effect. The presentation should have no more than ten slides (Table 5.4 includes a brief description of the most important slides for a presentation); experienced entrepreneurs should also come prepared with “back-up” slides explaining the more complex points, but only use them if they are asked to elaborate further. The key when presenting to venture

Table 5.4 Slides used in the entrepreneurial “pitch”

<i>Slides</i>	<i>Key content</i>
Slide 1: Overview	Clearly identifies market need and how the firm aims to fill it; key business relationships; customers and order book; revenue and profits; funding needs
Slide 2: Team	Professional experience and track record of team members; team suitability to resolve existing market problem
Slide 3: Market problem	Major market problem clearly identified; why the problem exists and why it has not been corrected; arguments to be supported by research, statistics, market estimates, customer research; data to be proprietary rather than “second hand”
Slide 4: Solution	Present how the venture solves the problem identified in the previous slide; why other firms are not able to resolve this; customer benefits; special product or service features and characteristics
Slide 5: Customer value	Proof that the product or service actually works well in the marketplace; that there are orders or actual sales; confirmation that the solution can work for a large-scale operation
Slide 6: Competitive advantage	Key advantages over competition; why competitive advantages are sustainable; any technological advantages, intellectual property, patents, solutions
Slide 7: Business model	Architecture of business operations; business economics; key relationships and partnerships
Slide 8: Market size	Market size (volume and value); growth projections; promotional activities to capture and retain customers; customer characteristics
Slide 9: Financials	Financial projections (next three to five years; revenue, EBITDA, and cash flow); sensitivity analysis; cash burn
Slide 10: Milestones	Key financial milestones; cash needs and timing

capitalists is striking a balance between swiftly going through the presentation and being able to respond to questions if the audience is really interested in a specific topic (i.e., the basics of the deal, business valuation, and exit options). The presentation font size should be large and slides should include visually appealing material (i.e., graphs, tables, pictures). Of course, entrepreneurs should avoid “reading” the presentation; instead, they should attempt to walk the audience through the main points of the presentation in their own words. The presentation should focus on the main “selling” and educational points rather than attempting to cover all of the minute aspects of the venture. The presented concepts should be basic and the presentation as a whole should focus on “easy-to-repeat” stories rather than complex concepts; creating an “Aha!” moment for the audience can be invaluable (see Table 5.4 for an outline of a typical presentation to venture capitalists).

Questions to consider

1. Define venture capital and compare it to other forms of financing.
2. What are the key characteristics of venture capital?
3. What are the most controversial terms of the term sheet? Why are these terms considered to be controversial?
4. What are the trading zones in venture capital negotiations?
5. Describe the key ways by which an effective presentation can be made to venture capitalists.

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Appendix 1. A sample term sheet

Proposed terms and conditions of co-operations between auto parts distributor and venture capital fund

Share Capital Increase	In connection with the planned capital increase in Auto Parts Distributor (the “Company”), Venture Capital Fund (the “Investors”) will acquire 32.5 percent of the Company’s total common share capital in exchange for \$11 million (the “New Issue”).
Rights Under the Shares	All shares shall be registered shares. The Investors’ shares shall be privileged as to the vote as follows: one share shall be entitled to three votes at the General Shareholders’ Meeting in the scope of matters described in point “Voting Flip-over Events.” The privileges given by the registered shares shall expire upon the sale of shares. The rules of share transfer will be regulated in the Company Statute and the Shareholders’ Agreement, subject to the principles set out in this term sheet.
Use of Funds	The Company shall use the funds provided by the Investors, <i>inter alia</i>, for: 1. Construction of the central warehouse; 2. Increase of the working capital; 3. Development of the quick service network; 4. Development of the regional distribution network of its subsidiaries by the way of control take over in selected existing distribution companies, or construction of local spare parts warehouses; 5. Broadening of the product range by tinsmith parts.
Transfer of New and Existing Shares	<i>Pre-emptive Right:</i> All shareholders shall have pre-emptive rights to subscribe to any capital increase of the Company in proportion to the equity ownership interest held by each such shareholder in the existing share capital. This will be implemented by increasing the number of votes required to adopt a resolution to deprive a part of the subscription right. <i>Right-of-First-Refusal:</i> If any shares are offered for sale by any existing shareholder to a third party, such shares must be offered first to the other shareholders in proportion to the equity ownership interest held by each shareholder at the time and on the same terms as offered to the third party. The other shareholders shall have the right to buy such shares on the same conditions. The right-of-first-refusal and the “piggy-back” right shall not apply to any transaction in share in the Company, which will be completed between the Founders of the Company and their immediate relatives (i.e., spouses, children). <i>“Piggy-back” Rights:</i> If Mark Right and Joe Smith (the “Founders”) sell any of their shares, the Investors will have the right to co-sell their shares, in proportion to the equity ownership interest held by

each such shareholder at the time and on the same terms as offered to the Founders. If, as a consequence of a contemplated share sale by a Founder, a third party acquires in excess of 50 percent of the shares of the Company, or the right in excess of 50 percent of votes at the General Shareholders' Meeting, then, the Investors shall have the right to sell their shares in priority to the Founders.

Each pre-emptive right, the right-of-first-refusal, and the "piggy-back" right will be evidenced in the Company Statutes.

Exit Incentives

The Founders accept that the Investors need to ensure an exit from the Company in a reasonable time period in order to meet their obligations towards their own investors (i.e., limited partners). Accordingly, the parties agree:

1. The Founders and the Investors shall duly endeavor to obtain a listing of the shares of the Company on an appropriate stock exchange through public sale of existing shares and/or capital increase ("IPO") within not later than three years since the New Issue. A detailed timetable and conditions of such listings have to be approved by the Founders and the Investors.
2. The Founders agree that the Investors shall have priority in selling their shares in any IPO.
3. Simultaneously with the preparation of the Company for the floatation, the Investors and the Founders will also consider an offer of the shares to a strategic investor if the terms and conditions offered by the strategic investors are more favorable than those which can be obtained at IPO. In such a case, if the Founders or the Investors do not obtain a satisfactory offer from such an investor, in order to solicit offers of the strategic investors, the Founders and the Investors will agree upon mandating a renowned investment bank or a consulting firm selected by the Founders from amongst three candidates presented by the Investors to deliver the process of presenting the offer to sell shares. The parties are obliged to mandate the selected investment bank or a consulting firm if IPO does not occur by the end of the four years since the New Issue.

Drag-Along Rights

If at any time after the end of the five years since the New Issue the Investors procure a genuine offer for not less than 51 percent of the Company, the Founders agree that they shall within 60 days, together with the Investors, sell a sufficient amount of shares which, taken together with the Investors' shares, will provide the buyer with not less than 90 percent of the Company. The Investors shall provide the Founders with a right-of-first-refusal to match any such offer.

Management Options

Following the New Issue capital increase, both the Founders and the Investors agree that a management option program will be established of up to five percent of the equity of the Company. Such program shall dilute the shareholders and the Founders in proportion to the equity ownership interest held by each such

shareholder at the time of establishing such program. These options will vest conditional upon the Company's achieving specific performance targets and in accordance with an agreed time schedule.

Board of Directors

The Investors shall have the right to nominate two members and the Founders have the right to nominate up to three members to the Board of Directors.

Special Shareholder Approvals

A majority of four fifths (4/5) of votes cast at a General Shareholders' Meeting will be required for any action which:

1. Results in any amendment to the Articles or by-laws of the Company's Board of Directors;
2. Changes the rights and privileges of the Investors;
3. Authorizes, creates, or issues any new equity-linked securities including new shares, options, warrants, other rights to shares, and convertible debentures;
4. Results in any change to the principle business of the Company;
5. Results in the announcement of the dividend or other form of distribution of the Company's profits in any years or its activity over and above 15 percent of the Company profit in any given year.

Special Board of Directors' Approvals

A majority of four fifths (4/5) of votes present at the meeting of the Board of Directors will be required for resolution in respect of the following:

1. Changing the auditors of the Company;
2. Sales, any lease, establishment of lien on material assets of the Company, other forms of asset encumbrance or transfer of material Company assets except for the pledge on Company assets in order to finance the repurchase of Investors' shares by the Founders in the event described under "Exit Incentives" which will be provided for by separate provisions of the Shareholders' Agreement;
3. Setting up or modifying compensation programs and employment agreements for management board members unless this has not been provided for in the Shareholders' Agreement;
4. Acquisition or disposal of shares in any subsidiary;
5. Approval of any share options' programs;
6. Approval of annual operating budget;
7. Granting loans or other forms of financial assistance to Company employees above a total annual amount of \$50,000 or entering into any contracts outside of the normal course of business with employees, management board, Board of Directors, significant shareholders, a Founder, or persons related to individuals above (see "Related Party Transactions");
8. Investment in fixed assets not included in annual operating budget with a total value in excess of \$200,000;

	9. Merger or acquisition; 10. Approval of a Shareholders' Agreement related to a subsidiary; 11. Making any loans or purchase of any debt securities other than resulting from the ordinary course of business.
Voting Flip-over Event	The Investors will have the right to recall members of the management board in the event of: 1. Material underperformance (defined as actual revenues at least 25 percent below the financial forecast attached hereto or EBITDA at least 50 percent below the financial forecast attached hereto) of the Company; 2. Incapacity of a management board member to perform their duties effectively due to mental disability or in situations which, pursuant to public securities trading regulations, incapacitate a management board member in their function in a public company. New management board members will be appointed by majority voting at a General Shareholders' Meeting, whereby removed management board members may be reappointed.
Inspection and Information Rights	Each member of the Board of Directors shall have the right to inspect the Company's premises and financial books in normal business hours, up to 12 days each calendar year. Once per year, two members of the Board of Directors acting jointly have the right to appoint auditors or other company providing financial services selected at their sole discretion to evaluate the Company's financial condition. The costs of such inspection shall be borne by the Company and the results will be provided to all the shareholders, the Board of Directors, and the management board. On an ongoing basis, the Board of Directors will be entitled to receive: 1. Copies of all audited accounts and monthly management accounts to be prepared to a timetable and in a form to be agreed; 2. Notification within 24 hours of any litigation, lawsuits, or other legal actions which could have material effect on the value of the Company.
Conditions Precedent to Closing	Before the investment is completed, the following conditions must be satisfied; 1. Approval by the Investors of a financial and operational strategy, both short-term as well as medium-term. Such a strategy will be prepared by the management board, possibly with the necessary assistance of the Investors and with input of advisors acceptable to the Company and the Investors; 2. The receipt of any approval from any government authorities to allow the Investors to proceed with any investment in the Company;

3. The completion of commercial, legal, engineering, financial, and environmental due diligence on the Company;
4. Approval of the proposed transaction and all related documentation by the Investors' investment committee, in particular the subscription agreement, the Shareholders' Agreement, and agreed amendments to the statutes of the Company related *inter alia* to terms and conditions included in this term sheet;
5. Agreement of the Investors and the Founders regarding the management structure of the Company and on the choice of candidates for key positions in the Company;
6. Registration in the commercial register of agreed amendments to the Statutes of the Company.

Representations and Warranties

The Investors will require normal warranties and representations from the Founders with respect to the activities, assets, and liabilities of the Company.

Environmental Compliance

The management board of the Company undertakes to observe and adhere to environmental regulations as stipulated by the local law and shall provide periodic reports to the Investors regarding the Company's compliance with applicable environmental laws and regulations.

Exclusivity
(this provision is legally binding)

As of the date of this document the Founders grant the Investors exclusivity of 30 days to enable them to begin all necessary due diligence.

During the period of exclusivity, neither the Founders, the Company, nor any party controlled by or advisor to the Founders shall negotiate with any third party regarding the sale of any shares in the Company, or any increase in the Company's share capital, or debt, or disposal of any of the material assets of the Company with a total value in excess of \$100,000. The Founders shall procure that the Company affords all necessary co-operation with the Investors due diligence, whereas such due diligence will not cause any restrictions of the current activity of the Company and the access to trade information will be restricted.

After the initial 30 days exclusivity period and subject to a written confirmation by the Investors of their significant progress in the due diligence process, the Founder will grant an additional 30 days of exclusivity in order to prepare the documentation required to complete the transaction.

Confidentiality
(this provision is legally binding)

The documentation (including all due diligence reports, correspondence, business plans, and so on) provided by the Company and prepared during the exclusivity period will remain the sole property of the Investors. The Investors and the Company may make no copies of such documentation available nor can it be used by the Investors for purposes other than joint development of the proposed New Issue. Should the contemplated transaction not take effect, the Investors undertake to return all the documents received from the Company.

Expenses <i>(this provision is legally binding)</i>	In the case of a Founder's or the Company's entering into a forbidden transaction with a third party during the exclusivity period, the Investors shall have the right to have their costs (including legal and other external costs) reimbursed by the Founders.
Closing	The parties will make their best efforts to close this transaction within 60 days from the date of this document.
Expiration of Proposal	The terms and conditions presented in this proposal are valid for 60 days from the date execution of this document.
Governing Law	The document shall be governed by the local commercial law.
Arbitration	All disputes arising hereunder shall be submitted to the arbitration tribunal at the local commercial court.

ACCEPTED AND AGREED:

Date:	
On behalf of the Founders	 Mark Right and Joe Smith
On behalf of the Investors	 John Doe

6 Modes of entrepreneurial finance

Chapter objectives

After reading this chapter, you should be able to:

- describe all the modes of available entrepreneurial finance;
- discuss the advantages and disadvantages of the different modes of entrepreneurial finance from the point of view of the entrepreneurial firm;
- outline key bootstrapping strategies across various business-functional areas;
- differentiate between venture capitalists and business angels;
- describe crowdfunding as an innovative mode of entrepreneurial finance.

Introduction to other modes of entrepreneurial finance

As we noted in Chapter 5, venture capital represents a combination of capital and know-how provided by institutional investors to entrepreneurial firms aimed at accelerating their development and exploiting available market opportunities. Venture capital is risk-equity investing in which venture capitalists aim to achieve long-term, above-average returns across different business cycles. Venture capital can be distinguished from other types of financing in several ways. For one, it is equity oriented and illiquid. Venture capitalists make money from growth in the value of a business rather than through a pre-negotiated return with preset timing for the repayment of capital. Also implicit in the definition of venture capital is commitment to contribute more than capital to the process of working with a business. The most important characteristic of venture capital is exit orientation.

Venture capital is perhaps the best known, well understood, and most researched mode of entrepreneurial finance. It is the area of entrepreneurial finance to which the most academic research has been directed. The attention focused on venture capital can be at least partially explained by its significant contribution to the development of some of the most successful and prominent firms (i.e., Microsoft, Google, Intel, Dell, Federal Express, Office Depot, and many more). That said, it can be argued that academic coverage of venture capital is disproportionate to the actual contribution venture capital makes to entrepreneurial development. Quantitatively, venture capital makes only a modest contribution to the overall supply of entrepreneurial finance; it presents a partial depiction of entrepreneurship. This is because venture capital firms finance one out of every 100 business plans they receive. Venture capital finances exceptional cases, founders, and ideas – not “mainstream” entrepreneurial firms.

This chapter is dedicated to the modes of entrepreneurial finance other than venture capital. Our discussion includes the use of “bootstrapping,” business angel financing, bank financing, and other alternative means of financing (i.e., government assistance programs and business incubation). A significant part of this chapter is dedicated to crowdfunding, a relatively new mode of entrepreneurial finance. These modes of entrepreneurial finance have jointly made a significant impact on business formation and entrepreneurial perpetuation; however, they are generally less well known and understood than venture capital. The size of the informal finance market in the United States is estimated to exceed institutional investors in dollar terms by a factor of at least five times; in other markets, these disproportions are even greater.

Before we delve into our discussion, it is important to make one point. Even though we do not plan to explore these topics in detail in this book, we wish to stress that there are at least two unique groups of “capital demanders” who are evidenced to have more challenging access to finance: female entrepreneurs and entrepreneurial families. Women are strong contributors to entrepreneurship and economic development. Various studies in the areas of psychology, human resources, entrepreneurship, and strategic management show that women tend to think more contextually and comprehensively, evaluate alternatives more carefully, and have a greater orientation toward teamwork, co-operation, and inclusiveness. These studies also highlight that women are more risk averse, embrace and exhibit a readiness for change, and prefer long-term business sustainability to immediacy of profit. In addition, they are intuitive, imaginative, and flexible – characteristics that foster innovation and creativity in business. Women are typically late bloomers with respect to “business ownership” and entrepreneurship. Family businesses are also unique, in that they are normally characterized with various agency issues which can be difficult for external financiers to address. These two groups of capital demanders experience a decreased use of equity financing in comparison with other entrepreneurial ventures. They also differ in their use of bootstrapping and business angel financing.

Entrepreneurial firms and developmental capital

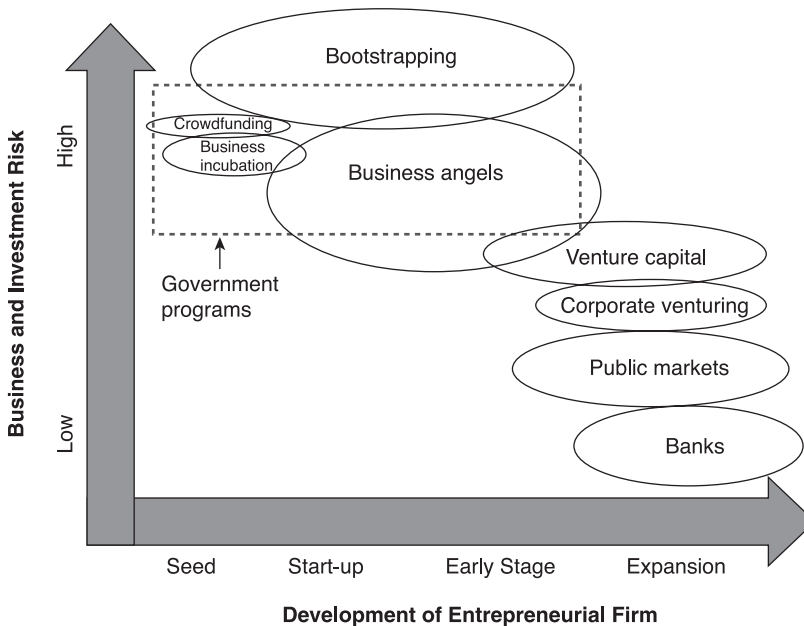
It is widely understood that entrepreneurial firms (even those that are value creating) struggle with access to finance – securing capital is the most challenging, exhaustive, and time consuming task for entrepreneurial firms. There are two key moments in an entrepreneurial firm’s life cycle when capital is required. The most pressing financial needs occur during the start-up phase and subsequent expansion. In the early developmental stages, entrepreneurial firms are “virtual” – there is only an idea, concept, vision, or invention driving the ultimate development of a full and complete business. The key problem to address at this stage is business survival. A lack of finance in the first phase of an entrepreneurial firm’s development can lead to its immediate downfall, a “freeze” of the entrepreneurial initiative, or a lack of propensity for taking risks. Challenges related to access to finance in later stages of the entrepreneurial firm’s expansion are likely to result in developmental stagnation (a lack of know-how often leads to limited investment, which in turn leads to limited employment growth), greater sensitivity to external economic shocks and disturbances, and unrealized business potential. In both cases, the unintended consequence of these challenges is a possible chain reaction of business failure that spreads throughout the entire entrepreneurial sector.

Liquidity gaps occur for entrepreneurial firms if they are unable to secure necessary capital. Liquidity gaps can arise for a variety of reasons, but most commonly relate to supply

and demand. In terms of supply, capital limitations may come from actual shortages in the marketplace where capital providers “hoard” capital and are unwilling to extend it to entrepreneurial firms (for example, there is evidence to suggest that banks engage in credit rationing to small entrepreneurial firms which are less likely to secure bank financing than larger firms). Such actions may be due to the high perceived risks associated with entrepreneurial firms, the entrepreneurial sector not being a strategic area of focus for financial institutions, or general unfamiliarity with the entrepreneurial sector. A liquidity gap may also result from intermediation, where the entrepreneurial firm is unable to connect to the “right” capital providers; this typically results from asymmetric information being shared between external capital providers and entrepreneurs. Either party may have weaker or superior access to information (access to information is rarely equal). For example, the entrepreneur may have superior information about the potential revenue stream of the business while investors may have more advanced knowledge about the market size and its potential. The problem of asymmetric information is especially pronounced in small entrepreneurial firms (due to a lack of publicly available information). From this point of view, entrepreneurial firms are normally regarded as the most information-opaque business entities. In turn, information asymmetry increases the transaction cost (the cost of the assessment of the investment opportunity is disproportionate to the actual amount of capital provided to the entrepreneurial firm by financial institutions). The increased cost of transacting with entrepreneurs is further exacerbated by adverse selection problems (low-risk entrepreneurial firms leave the market while high-risk firms enter the market). Financiers, therefore, face the adverse selection problem of choosing to finance entrepreneurial firms from a suboptimal set of investment opportunities. In terms of demand, entrepreneurial firms may not actually warrant financing; they may not meet the financing criteria set by capital providers related to profitability, liquidity, growth potential, or exit potential (this requirement concerns only some capital providers). Lenders seek businesses that are profitable, generate strong cash flow, and have sustainable collateral, while equity providers look for profitable ventures with high growth potential, the ability to generate increasing profits, and clearly identified exit potential. Some entrepreneurial firms may also not be investment-ready; reasons for this may include lack of a business plan, an incomplete management team, or untested products and services. The existence of problems related to access to finance is not static – entrepreneurial firms’ access to finance may change over time depending on general economic conditions, external market conditions, or the entrepreneurial firm’s internal circumstances and characteristics. Over time, capital constraints can expand, narrow, or even disappear. In this section, we wish to highlight that academics do not always agree on the existence or the extent of liquidity gaps, as well as whether these constraints actually “bind” entrepreneurs.

It is important to highlight that all modes of entrepreneurial finance are complementary rather than competing; each mode of entrepreneurial finance has its place in the life cycle of an entrepreneurial firm. All modes are intrinsically connected. For example: bootstrap finance can complement the entrepreneurial firm’s debt or equity acquisition strategy; effective bootstrappers with savvy technology or creative ideas can be attractive partners to business angels; obtaining equity can be a prerequisite for obtaining debt; and so on.

Figure 6.1 represents the capital choices available to an entrepreneurial firm throughout its development (from the seed phase to expansion stages); these developmental phases are defined in terms of venture capital financing discussed in Chapter 5 (i.e., seed, start-up, early stage, and expansion). Figure 6.1 also describes the two categories of risk relevant to entrepreneurs and capital providers: business (operating) risk and investment risk. The graph captures the capital providers with the most tolerance and appetite for risk (i.e., entrepreneurs,



	Probability of securing various forms of financing at different stages of firm development			
	Seed	Start-up	Early stage	Expansion
Bootstrapping	High	High	Medium	Medium
Crowdfunding	High	High	Low	Low
Business incubation	High	High	Low	Low
Business angels	Medium	High	Medium	Low
Government	Medium	Medium	Low	Low
Venture capital	Low	Medium	Medium	Medium
Corporate venturing	Low	Low	Medium	Medium
Public markets	Low	Low	Low	Medium
Banks	Low	Low	Low	Medium

Figure 6.1 The development of entrepreneurial firms, business and investment risks, and the probability of obtaining a specific type of entrepreneurial finance

business incubators, crowdfunders, business angels, and venture capitalists) and those capital suppliers who do not tolerate risk (i.e., banks). Ovals of various sizes represent the extent to which financing is available to entrepreneurial firms. It is also important to note that various financing methods can be “stretched” between different phases of an entrepreneurial firm’s development. The most elongated ovals are perhaps found in cases of equity providers (i.e., business angels and venture capitalists) who are capable of providing financing at various developmental stages. Bootstrapping can also be stretched as a method of financing, as it can become a manner of conducting business rather than a discrete strategy of generating and managing cash over an interim period of time. There are also government programs that aim to cast a wide net of financial and know-how assistance

to entrepreneurial firms; in the graph, the involvement of government is indicated by a rectangle in which various programs can be located (these programs do not uniformly fill the entire rectangle). These programs are often used to close specific liquidity gaps in the marketplace, albeit with mixed success.

Chapter 7 discusses the importance of cash flow and the various techniques that can be used to manage working capital in an entrepreneurial firm. This chapter serves as a prelude to that discussion as it provides context for the possible modes of entrepreneurial finance. It is important to highlight that entrepreneurial firms face a trade-off in their working capital policy: profitability versus liquidity. At one extreme, the entrepreneurial firm can seek to maintain high liquidity, holding excessively high cash reserves and other current assets in case money is needed immediately. At the other extreme, the entrepreneur can pursue profitability, holding low levels of current assets and investing in long-term, high-return assets. This scenario of low current assets and high fixed assets occurs quite frequently in businesses, as firms invest too heavily for the long term and end up in a liquidity crisis (this is especially true in cases where financial forecasts prove too optimistic). Under such a scenario, revenue performance, profitability, and cash flow are hampered by inventory stock outs and strained customer relations brought on by strict credit terms. In the next paragraph, we consider profitability-versus-liquidity trade-offs with respect to bank borrowing.

Banks generally prefer entrepreneurial firms to have an excess of current assets over current liabilities for strong liquidity. However, the entrepreneur may not necessarily reflect this view, as holding current assets does not generate high returns. Cash is generally held in a bank at a low interest rate. Accounts receivable earns no returns because this represents money that clients owe to the entrepreneurial firm (the firm is not able to use these financial resources yet). Inventory earns no return until it is sold. The current assets have the advantage of being easily liquidated, but holding them is not profitable for the entrepreneurial firm.

On the other hand, let's consider the entrepreneurial firm's other assets (i.e., land, buildings, equipment, machinery, and so on). These assets can earn considerable returns. For example, they can be used to convert raw materials into products, which are subsequently sold for a profit. Comparatively, long-term assets produce higher returns than short-term assets. The disadvantage of these long-term assets is that although they may be profitable, they are not especially liquid. Bankers are generally reluctant to let entrepreneurial firms use long-term assets as collateral for bank loans (especially these involving vehicles, machinery, and equipment; banks often accept real estate) because they will surely spend more time and incur more expenses trying to sell them if the entrepreneurial firm defaults on its loan and the bank becomes the asset owner.

Bootstrapping: creative entrepreneurial finance

Entrepreneurial firms can generate capital either internally or externally. The desire to raise a specific form of capital depends on the entrepreneurial firm's level of development, profitability, revenue, anticipated growth trajectory, market share, risk tolerance, industry, and strategic planning. While entrepreneurial firms in the later stages of development can take advantage of a wide array of financing alternatives, the choices for younger entrepreneurial firms in the seed, start-up, or early developmental stages are more limited. If the entrepreneurial firm has been operating for some time and is profitable, it may be able to support its expansion using its own financial resources. Self-funding is consistent with the "pecking order theory," which predicts the preference of entrepreneurial firms for internal finance ahead of other external forms of financing (i.e., debt or equity). If the entrepreneurial firm is

not profitable, it may have to rely on more creative approaches. In any case, entrepreneurs should not convince themselves that the only way to start a business venture or continue their operations successfully is to secure capital from external sources; it is possible to pursue entrepreneurial opportunities without owning a significant resource base.

“Bootstrapping” is the process of acquiring, allocating, and co-ordinating various resources (physical, social, and institutional) and developing the entrepreneurial firm without external capital; in short, it is the process of getting a young firm off the ground with limited resources. This strategy can be used when the entrepreneur is not ready for or comfortable with the participation of an outside investor. Bootstrapping is created through entrepreneurial imagination, creativity, cleverness, and “sweat equity” as opposed to borrowing debt or raising equity from external funders. It further includes the use of a wide range of common sense approaches to business development that rely on the entrepreneurial firm’s ability to utilize all of its resources, skills, capabilities, business contacts, networks, and so on. Methods of bootstrapping include relying on trade credit, customers (i.e., pre-payments, advances), equipment suppliers, bartering, personal resources (i.e., credit cards, real estate, and lines of credit), factoring, equipment sharing, leasing, etc. Bootstrapping is an important part of the entrepreneurial development process. In fact, it can be regarded as the purest form of entrepreneurial activity.

Bootstrapping is commonly used during early stage development of an entrepreneurial venture. Nearly all entrepreneurial firms in their early stages of development use bootstrapping techniques. Bootstrapping can also be successfully used in later stages of development when the entrepreneurial firm aims to stretch its investment until additional financing is secured (larger entrepreneurial firms are more sophisticated users of bootstrapping methods). While bootstrapping is not normally regarded as a “permanent solution” to entrepreneurial development, it can be successfully used for long periods of time. Effective bootstrappers often make their ventures more “bootstrappable” than their competitors in the marketplace. However, bootstrapping often means starting with a business that is somewhat or vastly different from the business the entrepreneur is ultimately aiming to create.

Not all entrepreneurial firms can be efficient bootstrappers. The best candidates are entrepreneurial firms that require low capital outlay, rely on word-of-mouth advertising, have “captive audience” customers (i.e., repeatable revenue and cash flow), and can rely on cash payments from clients while being able to stretch paying suppliers. Bootstrapping is often effective when start-up costs are excessive, the revenue stream is low, and the business is viewed by funders as having excessive risk.

Many entrepreneurs view bootstrapping not as a means, but rather as a philosophy, a way of operating an entrepreneurial business by conserving cash, limiting spending (or spending as frugally as possible), leveraging off available resources, “freeing” available capital (from various sources such as real estate), utilizing unused opportunities and resources, and saving. In a nutshell, bootstrapping is about cash flow management – reducing a “cash burn” rate to the bare minimum. Bootstrapping is about getting to a positive cash flow as quickly as possible and confirming that every penny is well used. This process is not only necessary, but often desirable. Some entrepreneurs even view bootstrapping as an acceptable substitute for external finance, especially in the early days of venture development. Firms such as Apple, Coca-Cola, Dell, Hewlett-Packard, Google, Microsoft, and many others commenced their operations as some of the most prolific bootstrappers before turning to other modes of entrepreneurial finance to finance further growth.

Bootstrapping is not a “fit-for-all” formula – it is a combination of various methods that can evolve over time as the entrepreneurial firm develops (some bootstrapping methods can

be more value generating than others; this determination is largely business-specific). Bootstrapping is the art of managing resources, rather than a precise science. The use of bootstrapping is firm- and entrepreneur-specific. Some entrepreneurs focus on delaying payments (i.e., suppliers, employees, lessors, and others), stretching receivables, and not paying themselves. Other bootstrappers tend to be “relationship exploiters” who rely on their business and personal networks to “generate” necessary financial resources. These bootstrappers rely on methods such as joint utilization of resources, group purchasing, resource sharing (i.e., equipment, employees, raw materials, and money), cross-subsidization, special deals with various professionals, barter arrangements, and so on. They also engage in cash generating customer relationships by relying on pre-payments, advances, pre-paid royalties, licenses, deposits, and consignments. In short, these entrepreneurs rely on social resource acquisition strategies. Yet another category of bootstrappers are the “cost reducers” or “frugal minimalists” – these entrepreneurs are “penny pinchers,” save cash wherever possible, limit expenditures, purchase only when bargains are available, and so on. Other bootstrappers rely solely on private resources provided by the entrepreneur; these may include credit cards, lines of credit, personal wealth (i.e., homes, boats, and cars), or revenue from other firms owned by the entrepreneur (used to subsidize a new venture).

There are numerous advantages to using bootstrapping strategies (these advantages are compounded if using similar techniques in other circumstances during the later stages of the entrepreneurial firm’s development). For one, bootstrapping is the most inexpensive and flexible method of generating capital. Bootstrapping is evidenced to have a positive impact on entrepreneurship and entrepreneurial perpetuation over time. It is also readily available for use by entrepreneurs without a business plan, collateral, other security, or documentation. Bootstrapping can enhance the performance of entrepreneurial firms by economizing available resources. Second, there are no financial obligations for the business in terms of loan payments, fees, and other financial obligations (note that the entrepreneur may incur some costs if he or she chooses to finance their operations through credit cards or other personal means). Some entrepreneurs feel that securing capital from a bank too early in the firm’s development can magnify risk; it is safer to start a business using the entrepreneur’s own capital. Bootstrapping allows entrepreneurs to test-drive an entrepreneurial venture without going in “too deep” – the business idea is tested on a limited scale before larger “business bets” are placed. Third, the entrepreneur does not relinquish any ownership stake in the business to external investors at the outset of the venture. Involving external investors can prove “expensive” to the founding entrepreneur, as a young firm’s valuation is low and the entrepreneur may have to relinquish a significant part of the business for a relatively small amount of capital. The entrepreneurial firm also ends up with a clean capitalization structure; no other shareholders need to be consulted in strategic or daily decision making (bootstrappers have full control of the venture). Too much capital too early in the development of the entrepreneurial venture can be detrimental to an entrepreneur’s inner discipline, efficiency, and flexibility. A lack of capital is likely to force the entrepreneur to resolve business problems sooner; the entrepreneur may even invent a different approach of doing business and become a more efficient operator. Fourth, entrepreneurial firms founded and operated on the basis of bootstrapping can be built as efficient, lean, and streamlined businesses. The entrepreneur’s ability to mobilize various resources can convert into a sustainable competitive advantage in the marketplace. Operating a lean entrepreneurial firm also makes it easier for the firm to secure capital at a later stage of development when its products are well developed and tested, clients are secured, repeatable business seems to exist, markets are checked, costs are under control, operational mistakes have been corrected, and the

business plan appears attractive. The ability to survive for a long period of time on limited financial resources is attractive to potential investors; limited financial resources may actually enhance entrepreneurial performance over time. Bootstrapping also keeps entrepreneurs sharp and alert to business issues at all times. Last, knowing how to bootstrap is one of the most critical and fundamental entrepreneurial skills. Bootstrapping can be an effective combatant to poor economic cycles and inefficiencies in capital markets.

There are also some disadvantages to using this technique. Bootstrapping can be very wearisome to the founding entrepreneur, the management team, and employees, as the business must rely on “improvised” business solutions to survive (having said this, improvisation often translates into creativity and innovation). Because of the risk involved, bootstrapping is not a suitable strategy for entrepreneurs with low tolerance for stress, anxiety, and frustration. Entrepreneurs can lose their own money or their family’s assets (i.e., homes, cars, cottages, and so on) if they are used to support the entrepreneurial venture – in short, the entrepreneur’s entire net worth may be at stake. Moreover, the implementation of bootstrapping methods can result in high opportunity costs. For example, the entrepreneur may spend a disproportionate amount of time on the minute details of achieving marginal savings or cost reductions while overlooking major strategic considerations. Last, while limited resources can lead to creative solutions, a permanent state of capital constriction can thwart innovation.

Bootstrapping across functional areas of the entrepreneurial firm

As previously noted, bootstrapping can be viewed as a philosophy of operating an entrepreneurial business; it can affect virtually all aspects of business operations and can influence the entrepreneurial firm’s cash flow. The activities of young firms can be viewed from a value added perspective where business activities are divided into primary and secondary activities (please note that we discuss the value-chain analysis in more detail in Chapter 3). In Table 6.1, we use a more simplistic approach and present bootstrapping techniques across key functional areas of the entrepreneurial venture (i.e., finance, operations and production, human resources, and research and development).

Specific bootstrap financing techniques for the entrepreneurial firm

As noted earlier, entrepreneurial firms can use a wide range of capital generating techniques to stay afloat in their business. The main techniques are now discussed in more detail.

Trade credit

Trade credit is the act of obtaining funds by delaying payments to suppliers (suppliers normally extend credit to firms). The longer the entrepreneurial firm delays paying for its purchases, the more trade credit the entrepreneurial firm is effectively said to be using. Credit terms are normally equal to 30 days, but can reach as much as 90 days, especially when the supplier wishes to increase revenue quickly, penetrate the marketplace, or increase its competitive position. From the cash flow point of view, trade credit represents a “cash inflow.” Trade credit is effectively one of the best measures to reduce an entrepreneurial firm’s investment into working capital. In many countries, the value of trade credit extended to entrepreneurial firms has vastly exceeded the value of bank loans.

Table 6.1 Specific bootstrapping techniques applied to various functional areas in the entrepreneurial firm

<i>Finance</i>	<i>Operations and production</i>	<i>Human resources</i>	<i>Research and development</i>
Retain current job	Start business from home	Hire young and inexperienced employees	Develop products and services on weekends and evenings
Offer related services to help pay for product development	Barter to acquire services and products	Under staff operations	Rely on external research and development
Purchase used equipment	Ship products early (without perfecting them)	Pay with stock or stock options	Focus on commercializing university-based research
Stretch suppliers and offer discounts for early payment to clients	Purchase used equipment	Hire relatives and friends at below market rates	Use clients to pay development cost
Lease instead of buy	Use resources jointly (i.e., production facilities, office, employees, etc.)	Rent employees and managers to other firms for a short term	
Rely on peer-to-peer, social lending	Co-ordinate purchases with other firms		
Take inventory on consignment	Borrow equipment		
Use personal savings	Focus on quick-to-break-even, cash generating products		
Avoid paying salary to entrepreneurs	Avoid investing in real estate		
Use government subsidies and grants			
Delay payment of value added tax			
Charge interest on overdue accounts			

If the entrepreneurial firm has been newly established, it may be difficult to take advantage of trade credit. Initially, suppliers sell goods in terms of “cash-on-delivery” (or c.o.d.) until the entrepreneurial firm establishes its credibility in settling payments regularly and on time. One of the methods used by entrepreneurial firms to secure good trade credit terms is to negotiate terms with suppliers; this is commonly achieved by interacting directly with the owner of the business or the individual responsible for credit approval. If the supplier is a small firm or if the owner still remembers the growing pains of developing a small business, he/she may be quite receptive to a plea for favorable credit terms. If the supplier is a more sizeable business, the entrepreneur can (if equipped with a set of financial projections) present how he or she intends to build the entrepreneurial firm (and indirectly, the supplier’s business) over time. No matter the final outcome, direct face-to-face contact is the key to establishing favorable credit terms. Even if the interaction fails to yield complete success, the entrepreneur can secure a part order on credit with perhaps the remaining part of the order payable upon delivery. Entrepreneurs must be mindful that excessive use of this approach can deteriorate even the best of relationships.

Even though trade credit is obtained by simply delaying payment to suppliers, it should not be viewed as free credit. As an example, let’s consider the cost of trade credit in comparison with a bank loan. Most suppliers do not charge interest on credit balances. Instead, they simply give customers a specific number of days to pay and offer a discount on the amount of purchase if they pay early. A typical example of such a credit term is 2/10, n30; this means that if customers pay within ten days from the invoice date, they will receive a 2 percent discount. If they do not choose to pay early, they will need to settle the entire

amount in 30 days. Let's assume that the entrepreneurial firm owes its suppliers \$1,000 on "3/15, n45" credit terms. This means that if the firm takes the discount, it can obtain use of \$970 (\$1,000 less \$30) for up to 15 days without any cost (we assume that the trade credit is free). Now, let's suppose that the entrepreneurial firm does not take the discount. Instead of paying \$970 on the 15th day, the entrepreneurial firm can pay \$970 at any time during the next 30 days as long it pays a "fee" of \$30 for delaying payment. In a nutshell, the entrepreneurial firm is "borrowing" \$970 for 30 days at a cost of \$30. Assuming that the entrepreneurial firm pays its bill on day 45, we are able to compute the effective interest rate of the trade credit (see equation 6.1).

$$k = \left(1 + \frac{\text{Discount}\%}{100 - \text{Discount}\%} \right)^{\left(\frac{365}{\text{Days to pay} - \text{Discount period}} \right)} - 1 \quad (6.1)$$

k = Cost of trade credit expressed as an effective annual interest rate

Discount % = Percent discount being offered

Days to pay = Time between the days of the credit purchased and the day the entrepreneurial firm must pay its bills

Discount period = The rate of return on the stock market

In our example, the discount percentage is 3 percent, the total number of days is 45, and the number of days in the discount period is equal to 15. We can use equation 6.1 to calculate the effective annual interest rate on this specific trade credit.

$$k = \left(1 + \frac{3}{100 - 3} \right)^{\left(\frac{365}{45 - 15} \right)} - 1$$

$$k = (1 + 0.30928)^{(12.16667)} - 1$$

$$k = (1.30928)^{(12.16667)} - 1$$

$$k = 1.4486 - 1$$

$$k = 0.4486 \text{ or } 44.86\%$$

As the calculations demonstrate, the entrepreneurial firm's trade credit (the use of \$970 for an additional 30 days) costs the firm an annual rate of interest equal to 44.9 percent. With this in mind, why would the entrepreneur consider paying such high interest? Most entrepreneurs would reject this idea instantly unless unfavorable circumstances forced them to pay or they did not realize the implications. A better solution, of course, would be to borrow from the bank (at a much lower interest rate). The entrepreneur could theoretically borrow \$970 from the bank and use the borrowed funds to pay the supplier on the 15th day (as required). Thirty days later, the entrepreneur would repay the loan with the interest (which would surely be less than \$30 dollars). Even though the example provided above is quite basic, it allows us to realize the full financial implications of the trade credit financial arrangement (it is obviously not always possible to arrange for such an "equivalent" transaction for the use of the bank). In our example, either way, the entrepreneurial firm can obtain the use of \$970 for \$30.

In our second consideration, we focus on the liquidity and profitability trade-off when the entrepreneurial firm is stretching to settle its accounts. The downside of stretching

accounts receivable is that by extending to pay the account, the entrepreneur is likely to forego any discounts available to settling the account earlier (the entrepreneur is foregoing the discount to use the supplier's money for an extra period of time). Suppliers normally offer a discount if the invoice is paid earlier. Effectively, the supplier offers to discount the sale by this amount every time the entrepreneurial firm makes a purchase. This could result in a significant amount if the entrepreneurial firm buys products regularly, but without the discount. Let's assume that the entrepreneurial firm is offered a 2 percent discount every time it makes a purchase and that the firm makes 12 purchases per annum. The costs of total annual purchases could be reduced by 24 percent on an annual basis (12 purchases times 2 percent discount). The entrepreneurial firm could also stretch accounts payable beyond the allowable limit and incur additional costs. However, while the entrepreneurial firm can potentially improve its profitability (by pocketing the discounts with early payments), it would sacrifice its liquidity by paying early. Stretching accounts payable (and incurring extra costs) may be worth doing if it allows the entrepreneurial firm to stay afloat. No matter what the ultimate decision may be, cash flow and liquidity should be the main considerations for an entrepreneurial business when making financial decisions.

Customer financing

The entrepreneurial firm's customers can also be a source of capital. Customers can be requested to pre-pay for products and services; this is often done in the construction industry, when a contractor asks for an advanced payment for the purchase of raw materials. Entrepreneurial firms can also request a work-in-progress payment or a deposit upon placing an order. They can also accept credit card payments – an often overlooked method of payment. Additionally, memberships, subscriptions, coupon books, and gift certificates can be sold. Any creative strategy that gets cash early is a lifeline to a growing entrepreneurial firm.

In a more elaborate contractual arrangement, a letter of credit (a letter from one financial institution to another requesting one financial institution to pay money to someone when certain conditions precedent have been fulfilled) can be issued by the customer (guaranteeing the payment at some future point in time). This, in turn, can be used by the entrepreneurial firm as a security or guarantee for purchasing necessary materials from the supplier.

Factoring

The entrepreneurial firm can dispose of its accounts receivable to specialized buyers called "factors." Factors can be financial institutions, commercial finance companies, financial intermediaries, agents, or banks. Of course, this bootstrapping method is available to entrepreneurial firms that already have revenue. The factors purchase accounts receivable at a discount to their "face" value (discounts usually range between 5 and 20 percent, depending on customer quality). These facilitators effectively become creditors to the entrepreneurial firm's customers and are responsible for collecting purchased receivables. Most factors not only collect the receivables, but are also responsible for any necessary paperwork (i.e., invoicing). The factor arrangement is often done in such a manner that the entrepreneurial firm's customers are not even aware that they now owe money to someone else (in this case, the factor).

Factoring provides an obvious advantage from the cash flow point of view. The money normally tied up with customers is available immediately for use by the entrepreneurial firm. The discount offered to the factor is a relatively small price to pay for maintaining the firm's liquidity, avoiding or reducing paperwork (and any human resources associated with it), and collecting payments.

Equipment suppliers and leasing

Equipment manufacturers are often able to offer favorable purchasing terms on their equipment sales; this arrangement effectively mimics a bank loan, as equipment or machinery is paid for over time on the basis of preferential credit terms (compared with the terms that the entrepreneurial firm can obtain on the open market). The manufacturer's loan can be structured in two ways. First, the entrepreneurial firm uses the equipment, but does not receive the title until the equipment is fully paid for; this is normally called a conditional sales contract. In the second arrangement, the entrepreneur owns the equipment, but the manufacturer holds a mortgage claim against it until the equipment is fully paid for.

From a cash flow point of view, it is always better for the entrepreneurial firm to reduce a high amount of cash to a more reasonable level (by stretching the payments over time); young firms can always use cash for other purposes. Reduced payments on purchases of real assets can also be achieved through a leasing arrangement. Leasing can be used for most real assets such as facilities and buildings, office space, machinery and equipment, and so on.

Personal financing

Entrepreneurs often rely on personal financing to bankroll their entrepreneurial ventures. There are several common strategies used by entrepreneurs. The first involves real assets owned by the entrepreneur. Real assets include homes, cottages, boats, automobiles, motorcycles, and so on. These items can be considered to "release" capital to the entrepreneur when required (for example, banks may provide a business loan to the entrepreneur of between 50 and 80 percent of the appraised market value of these real assets). Real assets can also be liquidated. Second, entrepreneurs can use their personal credit cards to weather cash shortfalls. The use of credit cards can also serve to build the entrepreneur's credit history if need be. Entrepreneurs can accumulate as much as \$100,000 in credit card debt when bankrolling a growing entrepreneurial business. An additional incentive for the entrepreneur is that most individuals benefit from the programs offered by credit card companies (such as low introductory rates, travel rewards, insurance options, and other features); such programs can effectively reduce the cost of credit card use. Good banking relationships and a strong credit history can also allow entrepreneurs to access unsecured personal lines of credit; these allow entrepreneurs access to cash whenever needed. Lines of credit, like credit cards, can be used to resolve short-term cash flow challenges.

Family financing

Family financing is typically used as a last-resort financing option by entrepreneurs. Some studies suggest that this capital source represents one of the largest sources of start-up financing. Family financing is perhaps most common in situations where the entrepreneur has no credit history, no business experience, and limited education. Financing from this

channel can come in the form of loans, equity contributions, or donations, and can be provided by a single individual or a collection of family members.

Families rely on a wide range of prerequisites to make capital available to family members. Before extending capital, some families (especially those that have previous exposure to business) seek to understand the business opportunity, the future market prospects of the planned venture, and the future capital requirements. In most cases, due diligence is “light,” but the business idea is somewhat scrutinized. Other families may be purely altruistic – family relationships supersede business prudence. In such cases, membership in the family is considered to be the key investment criteria and the only true requirement. Families also differ in how they monitor their inter-family deals. Monitoring is often informal, unscheduled, and infrequent; it may take the form of a “light” discussion during meals or holidays.

Financial contracting and investment decisions in family deals are highly variable. Capital contributions are often made on an informal basis, where no paperwork follows the actual passing of the money; deals are done on a “handshake” or on the basis of a personal commitment. In some cases, formal legal documents are drawn up before the transaction is actually consummated. It is important to note that the provision of capital by families to an entrepreneurial venture presents an interesting situational case study in which families must consider multiple trade-offs – family involvement in entrepreneurial financing occurs as a combination of altruistic and commercial rationales.

Disadvantages of family financing include the potential for interpersonal conflicts, frustration, and friction. Governance of family relationships in entrepreneurial financing can be complex, but is predominantly built upon trust.

Business angels: non-institutional equity providers

Business angels are private investors who provide capital (in the form of debt, convertible debt, or equity) to entrepreneurial ventures in the early stages of business development. Typically, business angels take an ownership interest in a venture created by someone else (i.e., other entrepreneurs) – they rarely initiate business ideas or concepts. Instead, business angels prefer to look at entrepreneurial firms beyond the seed stage; their aim is to take the venture to another level of revenue, profits, and market position so that the firm can be financed by other financiers (i.e., banks, venture capitalists, or public markets). While business angels are attracted to high-growth investment opportunities, their return expectations are more realistic and down to earth – they do not seek to be overcompensated via premium returns for taking the risk of investing in early stage firms. Having said this, it is not uncommon for business angels to receive cash-on-cash returns in excess of ten times, especially if the venture is successful and the business angel has entered when business valuation was low. Firms financed by business angels are characterized by enhanced performance, higher business survival rates, higher employment, and better exit chances.

Business angel investing is regarded as the most significant source of capital in start-up and early stage entrepreneurial firms; this is the single largest pool of external finance available to entrepreneurial firms. Business angel investing is often estimated to exceed institutional money (i.e., venture capital) by at least five times; this translates into more than 30 times as many entrepreneurial firms being financed by business angels. When compared with the value of venture capital and business investment across the start-up and early stage phases of development, business angel financing exceeds the amount of venture capital financing by a factor of between 20 and 40 times. Business angels may account for as much as 90 percent of all start-up funding.

The profiles of business angels vary. Most business angels are people who have an “addiction” to supporting new entrepreneurial superstars. A typical business angel is an affluent individual with a net worth well in excess of \$1 million and a six digit annual income. Business angels often have previous successful entrepreneurial experience gained in one or more business ventures which they have successfully disposed. They are also typically serial entrepreneurs. Most business angels tend to be between the ages of 40 and 60 years old. They invest between \$50,000 and \$150,000 per deal (although this amount can be increased to as high as \$600,000 through syndication with other business angels) in industries where they have been successful or in markets that they are familiar with. Business angels “drip-feed” capital to entrepreneurial firms against their achieved operational and financial milestones. They look for high-growth business opportunities where the founding entrepreneur and the management team are approachable, smart, coachable, open-minded, and willing to take some direction. They also have a high tolerance for risk; business angels instinctively know that a “bulls-eye” market idea may not materialize right at the outset of a new venture, but may crystallize along the way of building the right business. In other words, they recognize that the business may be adjusted or modified in several ways (other financiers, such as venture capitalists, have more difficulty accepting this orientation). Business angels also understand that markets change, competitors appear and disappear, and consumer needs evolve. A serial business angel engages in significant diversification (for business angels, this is regarded as “a spray and pray” approach) to reduce risk on their portfolio of investee firms (please note that “occasional” business angels have more limited opportunities for risk reduction or diversification). Business angels can also be professionals such as doctors, lawyers, accountants, former business associates, and business partners, or retired executives.

Business angels can assume active or passive roles in the management of a funded entrepreneurial firm. Active business angels are hands-on investors who offer expertise, experience, and contacts to their investee firms. A typical business angel may develop several successful firms under his or her leadership. Since active business angels tend to be more involved in new business ventures, they prefer to invest closer to home (usually within a 100 kilometer radius). Business angels are also typically local investors who maintain strong social, personal, and business affiliations with their communities.

While business angels generally aim to maximize value from their deals through a successful exit after being involved with the venture for some time, they do not often exhibit a strong preference for a specific exit route and may be equally satisfied with retaining an ownership stake in the business for a longer period of time (especially when dividends, management fees, consultancy charges, and other types of payments are paid or significant expenses reimbursed). Evidence suggests that exits for business angels are often unplanned and *ad hoc*. Having said this, evidence also confirms that the most common divestment method for entrepreneurial firms with business angel participation is the trade sale – this reflects business angels’ strong industry connections and relationships. Business angels’ orientation towards trade sales can also be explained by the fact that business angels normally get involved in smaller entrepreneurial ventures with valuations of between \$20 million and \$30 million – a part of the market where trade buyers are most active.

Business angels often show a strong track record of performance. On average, they realize returns of between 20 to 30 percent over a holding period of about five years. Most importantly, business angels manage to record fewer losses compared with venture capitalists, but have more mediocre investments (either breaking even on their investments or generating nominal single-digit returns). This strong performance can be at least partially explained by

the fact that most business angels are savvy business operators themselves who avoid the kinds of costly operational and strategic mistakes that lead to total write-offs or liquidations. Furthermore, as a result of their more limited financial resources (compared with venture capitalists), business angels may be more concerned about downside protection rather than “hitting winners.”

Accessing business angels is not easy; their desire for privacy makes them difficult to spot, identify, and contact. Entrepreneurs normally tap into business angels by way of referrals. The referral is usually made by an informal contact, such as a personal friend, a family member, a wealthy business contact, or a professional intermediary (i.e., a banker, lawyer, or accountant). Entrepreneurs may also identify business angels through more formal channels such as directories, conventions, conferences, business meetings, and incubation activities.

Entrepreneurs are often eager to develop a personal rapport with business angels. The relationship between these two groups is often positive and typically involves some form of mentoring, coaching, or nurturing. Entrepreneurs look for partners who have specific industry knowledge and specific skills and contacts, while business angels seek competent business partners.

Business angels and venture capitalists: a comparative analysis

Figure 6.1 provides a pictorial analysis of the placement of business angels and venture capitalists on the map of an entrepreneurial firm’s financing. On the one hand, the business activities of these two groups are competing; there is an area of the graph where activities overlap. On the other hand, the investment activities of business angels and venture capitalists are complementary; business angels invest in early stage firms and effectively act as “deal feeders” for venture capitalists. In this case, both funder groups move the entrepreneurial firm along its natural development path.

Let’s start by differentiating between the activities of business angels and venture capitalists along six main comparative categories: source of capital, types of firms funded, screening and due diligence, financial contracting, involvement in day-to-day management, and exit orientation. Such an analysis is outlined in Table 6.2.

Table 6.2 A comparison of venture capitalists and business angels

	<i>Business angels</i>	<i>Venture capitalists</i>
Source of capital	Personal	Pool capital from limited partners
Types of firms funded	Early stage (no track record)	Medium to large (proven track record)
Screening and due diligence	Minimal	Substantial (involving external consultants)
Financial contracting	Limited (an extended letter of intent; some business angels do not sign any agreements prior to a deal)	Extensive
Involvement in day-to-day management	Important	Less important
Exit orientation	Preferable, but not critical	Critical (a lack of exit is a deal breaker for venture capitalists)

There are numerous distinctions that can be made between business angels and venture capitalists. The first is that venture capitalists invest someone else's financial resources, while business angels are financially exposed to the business venture at a personal level. Business angels carry and accept the full consequences of their decision making at a personal financial level; venture capitalists can at most lose their jobs and reputational capital if they fail. This distinction is significant in terms of the level of personal motivation. At the same time, business angels do not need to succumb to timing pressures to invest; they can sit on their capital until suitable opportunities arise. The pressure to invest funds can sometimes lead to suboptimal investments for venture capitalists. Stresses to invest can also be compounded by pressures to show returns to limited partners; this often leads to venture capitalists selling off their investments at lower valuations than would otherwise be desirable in order to signal to the marketplace their skill before raising subsequent follow-on funds. No such anxieties affect business angels. Second, business angels prefer to invest in early stage entrepreneurial firms that have a limited track record, often when no other capital providers are willing to assist. Venture capitalists, on the other hand, prefer to invest in expansion deals (i.e., medium to large transactions). Venture capitalists prefer entrepreneurial firms with a proven track record, robust revenue growth, strong cash flow, and growing profitability. Third, business angels take less time to conclude a deal and run a smaller, but more efficient due diligence program. While business angels perform their screening and due diligence along the types of concerns similar to venture capitalists (see Chapter 5 for more details), the main decision-making considerations for business angels are the business opportunity and the characteristics of the entrepreneurs; they may be concerned about the business concept or business model. There is also more variability in terms of the criteria used to assess investment opportunities. Business angels are less concerned about financial projections, detailed business plans, and returns (they do not calculate returns prior to the deal as venture capitalists do). Business angels are often quite familiar with the industry, the available opportunities within it, and the potential challenges they face; consequently, they are able to reach a decision-to-invest faster and to close a deal in a more expedient manner. Fourth, venture capitalists normally rely on a complex financial contract to protect their rights; they place significant impositions on the entrepreneur and the venture (see Chapter 5 for a full list of rights, provisions, and approval mechanisms). Contrary to general perception, business angels do not write "blank cheques," close deals "on a handshake," invest on a "gut feeling," or require "fewer strings attached" – they require formal legal documentation including veto rights, approval rights, and non-compete requirements (they do not insist upon exit provisions). That said, business angels typically require less elaborate rights and impositions compared with venture capitalists; they rely on a good rapport, a greater degree of interpersonal chemistry and trust to resolve problems rather than formal legal documents (a tendency to "over-protect" with control mechanisms may be symptomatic in the case of less experienced business angels). In some cases, business angels do not require a formal investment agreement prior to investing (when eventually drawn up, their legal agreements are more flexible and accommodating). Business angels are also able to reduce the costs of due diligence and financial contracting to a minimum (comparatively, small deals are not economical for venture capitalists). Fifth, while business angels expect to invest in an entrepreneurial venture with a professional management team, they are willing to provide support if there are inherent weaknesses in the existing team. Business angels generally have more time on their hands to support their investee firms. They are also regarded to be "more patient" than venture capitalists – business angels can invest in the venture for a far longer period of time than venture capitalists. Being actively involved in the business venture is

important to business angels. Some of their key value added roles include providing strategic advice (i.e., formulating business strategies, providing ideas on value creation, and improving human resources), supervising activities within the firm (i.e., monitoring managerial activities focused on proper reporting and identifying and addressing corporate governance concerns), assisting in the acquisition of resources (i.e., advising on further capital raising and developing access to personal and business networks), and mentoring (i.e., acting as a sounding board and providing one-on-one informally structured consulting services). Business angels often try to instill their entrepreneurial philosophy and corporate governance regimes into their investee firms. Moreover, due to their more intimate relationship with the entrepreneur, business angels are more reluctant to change or replace entire management teams if the entrepreneurial firm is under performing and in need of turnaround or restructuring (venture capitalists often replace management teams in cases of underperformance). Finally, as discussed in Chapter 5, venture capitalists have a strong orientation towards exit; in fact, they are unlikely to make an investment if future divestment is unlikely or unfeasible. While business angels also like to see a clear and compelling exit option for the entrepreneurial firm they support (which they may or may not choose to exercise), their expectations with respect to the time horizon needed to complete the exit may be much longer (seven to eight years) and they are generally more flexible on this issue. Business angels can sometimes be content with being active or passive investors in a nicely growing business and may not wish to put undue pressure on the entrepreneur to seek a liquidity event.

Involvement with business angels also presents some disadvantages for entrepreneurs. First, business angels rarely make follow-on investments; this reflects their initial objective to build the venture to a level at which it can attract alternative funding (i.e., from banks, venture capitalists, or public markets). Business angels also have an intrinsic need for portfolio diversification – they wish to avoid financial overexposure to a single deal. Second, strong hands-on involvement can sometimes lead to operational and interpersonal conflicts. These frictions can occur if the business angel (having some control mechanisms and veto rights in the funded venture) unduly “pressures” the entrepreneur to make certain business decisions; frustration and resentment for the entrepreneur and diminishing commitment for the business angel can sometimes result from this. Third, while able to better tolerate the risks of investing into early stage firms than other financiers, business angels can be quite selective when choosing their investee firms. Some estimates place the level of deal rejection for business angels at between 60 and 70 percent (this is still significantly better than the rejection rate for venture capitalists, which reject over 95 percent of the business plans they review). Last (and, luckily, most infrequently), business angels sometimes invest in entrepreneurial firms for immediate monetary rewards. This category of business angels is less patient, and provides no or limited mentorship to the entrepreneurial firm. This last point underscores the need for the entrepreneur to perform a proper assessment and screening of their partners.

Business angel networks

A growing number of business angels are organizing themselves into formal or informal networks. Formal networks are organized in the form of internet websites that list business angels and investment projects (some accreditation or formal registration may be required for all parties). Once the deal is finalized, the parties may be required to pay a small fee, which is used to support the administration of the website and run the networking organization.

The central administration can pre-screen projects, organize face-to-face presentations, and offer other complementary or fee-based services both to business angels and entrepreneurs (such as training, advising, and mentoring). Many networks also dedicate significant resources to preparing projects from the point of view of investment readiness (i.e., preparing and improving business plans, assisting in the preparation of business pitches, advising on necessary accounting and legal documentation, etc.). One of the most common services is “investor matching.” Most countries offer an opportunity for business angels to belong to a national business angel network, which is often a part of regional or continental business angel networks. There are also smaller, regional business angel networks that service smaller economic regions.

Formal business angel networks also offer other complementary affiliations. One of the most common associations is with venture capitalists. As we noted earlier, the symbiotic connection between business angels and venture capitalists can be beneficial to both sides, as investor groups can act at different points along the life cycle of the entrepreneurial firm. For business angels, an intimate affiliation with the venture capital community provides a better chance to secure another round of financing in order to further perpetuate the entrepreneurial venture. For venture capitalists, an affiliation with business angels provides access to a deal flow of entrepreneurial firms that have tested the market, overcome their initial “teething” problems, enjoyed strong business growth, and undergone some professionalization. Most importantly, venture capitalists appreciate entrepreneurs who have learned how to effectively interact with external investors.

Informal business angel associations are often “closed” and organized around ethnic or religious backgrounds, professional affiliations, golf, a circle of friends, and so on. This form of networking allows the parties involved to reach investment decisions quickly, share information and research, pool financial resources, and brings together expertise from various industries or functional business areas (i.e., marketing, sales, finance, technical, etc.).

In some jurisdictions, there is a requirement that business angels become accredited with the local securities exchange commission. In order to receive accreditation, the business angel must have a specific level of personal net worth (usually in excess of \$1 million) and income (usually in excess of \$200,000 per annum). They also need to file their investment activities with the relevant government authority.

Bank financing

Commercial banks represent an important source of entrepreneurial financing, especially to those entrepreneurial firms that have obtained a track record of profitability, sales growth, and a steady cash flow. In fact, the level of bank financing that can be used as a part of the entrepreneurial firm’s capital structure increases over time as the entrepreneurial firm improves its track record across the three components. However, it is important to state upfront that there is mixed evidence about the influence of bank loans on the survival and success of entrepreneurial firms – especially for entrepreneurial ventures in the early stages of development. Some evidence suggests a negative correlation between bank loans and business survival for early stage entrepreneurial firms. Other studies confirm a positive correlation between non-bank financing and business survival.

In any case, obtaining external financing from a bank can be challenging. Banks often operate on the basis of a single-minded rule: “If you have a positive cash flow, you will get funded” (this excludes almost all firms in the seed, start-up, and early development stages;

such firms often also lack sufficient collateral and present a substantial risk of loss). Banks do not tolerate risks well and risk taking is inherent to the entrepreneurial process. Banks recognize that young entrepreneurial firms present a volatile pattern of growth, profits, and cash flow compared with more mature ventures. Banks may not be positively predisposed to entrepreneurs who want to commit capital into “risky” undertakings (such as research, development, and innovation) or expand their product offerings into unknown markets (i.e., foreign markets).

There are numerous preparatory steps for entrepreneurs seeking bank financing. First, most banks require a solid business plan. Approaching a bank without a business plan is a sure way to be rejected for financing. Loan officers normally scrutinize business plans (including any historical accounting records, if available). Some banks are simply satisfied with past financial records if the entrepreneurial firm has been in operation for some time (although such practices are increasingly rare). Banks pay special attention to revenues, costs, profits, and cash flow. Most importantly, the business plan needs to demonstrate that interest payments and the principal can be paid from cash flow rather than from liquidating collateral. Banks need to be assured that their money is safe with the entrepreneur. Bankers also tend to be concerned about high salaries being paid to founding entrepreneurs. If the entrepreneurial firm is a start-up, banks would prefer not to see the founder’s salary at all in the business plan – they simply do not wish to extend a loan that pays the entrepreneur. Bankers need to see a repeatable revenue stream and cash flow. More conservative banks need to see two years of profitable operations and positive cash flow. Second, bankers generally do not extend loans to sectors that have high failure rates (for example, restaurants, consulting firms, telemarketing, and retail). Operating or planning to operate a venture in an industry that is considered by bankers to be stable and safe is likely to increase the odds of obtaining bank financing. Banks tend to consider entrepreneurs with strong experience in their industry; this experience must go beyond one or two years operating the current entrepreneurial business. Banks are also more comfortable providing loans to professionals (i.e., accountants, lawyers, medical doctors, chiropractors). On the other hand, banks tend not to be comfortable with having to analyze the prospects of entrepreneurial firms in modern sectors of the economy (i.e., internet-related, new technologies, medical sciences, biotechnologies, etc.) where limited fixed assets exist, the markets are difficult to define, and market demand is difficult to quantify. Banks are generally uncomfortable with assessment in areas related to research and development, innovation, and intellectual property management. Limited knowledge of modern sectors of the economy seems to exist within many commercial banks. Third, most financial institutions prefer to see a strong personal commitment towards the venture by the entrepreneur; most commonly, this means a significant personal investment by the entrepreneur (in terms of the monetary contribution and the level of collateral). Most banks want to see entrepreneurs’ “skin in the game” before helping them with financing. Some financial institutions do not hesitate to openly state to entrepreneurs that if the entrepreneurial firm fails, the entrepreneur will be personally bankrupt. Fourth, a good credit rating is important when trying to obtain a bank loan or line of credit. Cleaning up the record and resolving any outstanding issues is critical – banks will surely check on this as part of their considerations and due diligence investigation. Fifth, banks often require strong security for their financing. Security tends to consist of a combination of registered pledges on the firm’s assets and shares, promissory notes issued by the borrower, and personal guarantees or collateral (collateral can exceed the value of the initial loan by a significant amount – in extreme cases, by two or three times). Last, banks are relationship-driven. A strong relationship between the bank and the entrepreneurial firm

has positive benefits for both sides and can result in tangible benefits for entrepreneurs (such as the ability to borrow at a lower cost).

The banking sector prefers to lend larger amounts of capital to established businesses. Banks prefer entrepreneurial firms that are incorporated – this signals to the bank credibility, growth potential, future earnings growth, and the commitment of the firm's shareholders. The preferred purpose of most bank loans is to purchase fixed assets; banks prefer fixed asset-based businesses with strong track records of profitability. In fact, there is a positive relationship between an entrepreneurial firm's fixed asset base and its ability to carry debt (more assets create a better base to create stronger collateral).

Banks are also unlikely to assist entrepreneurial firms with addressing their start-up or "teething" problems. Banks are even reluctant to provide guidance to entrepreneurial firms on how to improve their business plans. If a business plan appears incomplete or is missing information, bankers are reluctant to work with the potential borrowers to address these problems. The most common advice given to potential borrowers is to seek assistance from a consulting or advisory firm. If an entrepreneurial firm was to experience financial or operational challenges, the bank may completely cease their already limited involvement in the entrepreneurial firm (hands-on assistance is rare), "pull-the-plug" on the firm's financing, or refer the troubled firm to a workout department (often located far from the entrepreneurial firm's region of operation).

Dealing with banks can present an interesting dilemma for entrepreneurs. Banks often do not approve the amount of financing sought by the entrepreneur. The question for the entrepreneur becomes whether or not he or she accepts the smaller loan amount. This is a highly individual consideration. Some business advisors suggest that any amount is better than nothing. The entrepreneur can potentially adjust the business plan to reflect a scaled-down version of operations (i.e., less equipment and machinery), less promotional and marketing activities, less product development and innovation, fewer staff members, and so on. Such a suboptimal approach can nevertheless move the entrepreneurial firm along its path of development, or perhaps even to the next juncture of funding at which point the entrepreneurial firm can resume growth along its intended trajectory. Others believe that entrepreneurs should not automatically take the lower amounts typically provided by banks. Less capital can unduly compromise development to the point that taking the smaller amount may not make sense at all. Such a conclusion is based on the assumption that the entrepreneurial firm needs to reach its optimal scale as soon as possible; otherwise, there is a possibility that the venture becomes "a living dead" – a situation any entrepreneur wishes to avoid.

Entrepreneurs also have to decide what type of financial institution to approach for financing. The choices available include national banks, local banks, community banks, savings and loans companies, co-operatives, and so on. A local or community financial institution is often the best choice, but this depends on the nature of the entrepreneurial firm, its characteristics, and the industry in which it operates (or wishes to operate). The local choice may be best for a variety of reasons. First, a local financial institution is more in tune with the local business environment; it understands the local business climate and environment, appreciates the economic cyclicity of a specific region and its industrial composition, recognizes local business needs and requirements, and appreciates the challenges of building a successful local enterprise. Second, since their competitive approach is grounded in locality, local financial institutions are often keen to build long-term relationships (although all banks are equally good at reflecting this point in their promotional brochures). Local institutions are also more responsive to local entrepreneurs. While banks

are generally less active financial “actors,” local banks tend to find more time for entrepreneurial firms – especially if the firm is experiencing financial difficulties.

Alternative modes of entrepreneurial finance

In addition to the financing methods, techniques, and sources already described, entrepreneurs can access other forms of financing. One of these sources is strategic investors who are operating corporations (different from financial institutions) engaged in similar or related industries to the entrepreneurial firm. Strategic investors normally possess large revenues and are often multinational in scope; they also have strong financial capabilities, take a long-term investment orientation, and are capable of adding significant value to entrepreneurial firms. Strategic investors may be interested in investing into the entrepreneurial firm (this is known as “corporate venturing”), acquiring the entire firm outright, buying a majority or minority stake in the firm, or purchasing select parts of the firm that fit within their existing operations, structures, or strategies. In addition to being a source of interim financing, strategic investors can also become an important divestment avenue for entrepreneurial firms.

Entrepreneurial firms may also raise finance by selling an equity stake in the public markets. Similar to strategic investors, we treat public listing as a mode of entrepreneurial divestment rather than a mode of financing (see Chapter 13 for further discussion). This financing route is not available to the vast majority of entrepreneurial firms.

The remainder of this chapter focuses on three alternative sources of financing: government assistance programs, business incubation, and “crowdfunding.”

Government assistance programs for entrepreneurial firms

Government assistance programs can help entrepreneurial firms with access to finance. Entrepreneurial firms are vulnerable and very few manage to survive more than five years. Public authorities throughout the world, perhaps recognizing both the importance and frugality of the entrepreneurial sector, often create agencies and set up numerous business support and assistance measures to help entrepreneurial firms obtain better access to finance and to encourage business formation. Government programs generally focus on specific industrial sectors (such as manufacturing, agriculture, and mining), different types of business activities (such as export, innovation, research and development), the provision of financing (through credit guarantee programs, public venture capital funds, and micro-lending agencies), and assisting firms to become investment-ready. Public intervention in improving access to finance is based on the assumption that significant imperfections exist within the marketplace that preclude the private sector from correcting these market distortions. Such structural government programs are aimed at closing liquidity gaps, which result when entrepreneurial firms are unable to secure necessary capital. Other government programs are structured more broadly and focus on improving access to finance, stimulating innovation, and providing advisory services.

Academic evidence from developed countries is mixed about the role of government assistance programs targeting entrepreneurial firms. There is a growing sentiment among researchers that capital markets are adequate for entrepreneurial firms and that there is no need for government assistance programs to exist. Some researchers argue that there is no empirical confirmation that these public programs translate into growth and prosperity for the entrepreneurial sector.

Types of government support programs

Government support programs can normally be classified into six distinct activities: financial assistance, training and re-tooling assistance, advisory and consultancy services, marketing assistance, provision of infrastructure, and research and development. These service categories are described below.

Many governments have specifically established programs aimed at easing access to finance for the entrepreneurial sector. These programs offer a wide range of financial assistance, from loans to grants to bank guarantees. Government-sponsored financial assistance programs typically include two main initiatives aimed at developing entrepreneurial firms: the provision of relatively small amounts of capital, or the provision of large sums (i.e., \$100,000 or even millions) along with assistance. The first initiative is specifically designed to address concerns related to financing for early stage business ventures. Most of these programs offer small amounts of capital to entrepreneurial firms (around \$5,000 per project). While these amounts help entrepreneurial firms, additional conditions apply: many of the programs for early stage firms center on specific themes such as innovation, new technologies, and research and development. The second group of programs normally provides larger amounts of capital to ventures. In addition, these programs are often supplemented with a wider scope of assistance to entrepreneurial firms (financial assistance may only be a small part of these programs). These government programs are offered to a wide range of potential participants and are not targeted solely at entrepreneurial firms. Potential beneficiaries of these programs may include research and development units and agencies, training centers, incubators, private/public partners, universities, public institutions, and so on. It is worth noting that governments in many countries often have a pre-selected bank, institute, or agency focused on the provision of financial support to entrepreneurial firms; this institution is often charged with providing bank guarantees, loans, pre-financing loans, and first-business start-up loans, as well as providing government-sponsored private equity.

Most available training assistance programs are directed towards two types of audiences: business owners or young managers who need training in key functional areas of the business, and skilled workers looking to improve their technical skills in their areas of expertise. Some programs specifically aim to increase the competitiveness of the local industry by providing hands-on training and skill development. Additional training is often provided by “entrepreneurial service centers” (operating as local chambers of commerce, development agencies, business support programs, not-for-profit centers, and so on). These units provide training and support in the areas of innovation, intellectual property management, and start-up technology ventures.

Advisory services aim to provide management consultancy for entrepreneurial firms. The key areas of assistance relate to raising financing, preparing business plans, improving products, introducing quality control mechanisms, implementing financial reporting systems, introducing procedures for budgeting and the preparation of financial forecasts, and so on. These programs often offer entrepreneurial firms a network of pre-qualified and registered agencies offering free or pay-for-service advisory services aimed at new start-ups and more mature entrepreneurial firms. Under these programs, the entrepreneurial firm can apply for financing to purchase specific advisory services; these services may be offered through a “consultancy voucher,” or by applying for coverage of the consultancy fee up to a specific amount (normally not exceeding \$5,000, and in other cases, not exceeding 15 percent of the total value of the project). In addition to financing, marketing is one of the most neglected functions of business in the entrepreneurial sector. Entrepreneurial firms

need assistance with identifying markets and market demand for their products or services (including collecting data on market size) and outlining their key competitive dynamics and advantages.

Access to physical infrastructure and related amenities (telephones, fax, email, laboratories, and so on) are also among the key challenges for new and rapidly expanding entrepreneurial firms. These functions are traditionally filled by business incubators (which we discuss later in this chapter), which provide physical infrastructure and additional support services (accounting support, consultancy, business plan preparation, and networking) to firms. Most infrastructure-related programs are operated as public or public/private initiatives.

The level of research and development in entrepreneurial firms is often regarded as one of the key determinants of success. Innovation in entrepreneurial firms can occur at different levels. Governments offer financial assistance targeted at innovation – up to a certain amount (\$50,000) for younger firms, and up to \$500,000 for larger enterprises.

Challenges with government assistance programs

There are multiple challenges with government-sponsored programs aimed at entrepreneurship. These challenges may be organizational, structural, or relate to the entrepreneur. In terms of structural concerns, there are generally two that are dominant. First, many government assistance programs are duplicated across a number of different ministries, agencies, institutes, universities, and so on. Even though a large number of government-sponsored programs exist, many of the programs offered by one institution are duplicates of programs offered by another. Second, many government assistance programs are broad-based – they try to appeal to different stakeholders such as entrepreneurs, employees, public institutions and agencies, research centers, business and technology incubators, universities, public/private institutions, research and development institutes, and so on. As a result, it is often difficult to quantify the actual benefits the programs have on the entrepreneurial sector.

At the entrepreneurial level, there are at least four challenges. First, many entrepreneurs are critical of the bureaucratic nature of most government assistance programs and often cite this as the key reason for not pursuing further assistance. Entrepreneurial firms normally find the application process cumbersome, as applicants need to develop a comprehensive package that includes their application, numerous documents, certificates, confirmations, and financial statements. Entrepreneurs also indicate that government programs can be more demanding of information and written material than banks. Many entrepreneurs agree that the cost and time commitment required to prepare the necessary documents ultimately outweighs the intended benefits of the government program. Second, entrepreneurs often feel that the offered programs do not reflect their actual needs. Entrepreneurs indicate that their firms develop relatively quickly in terms of revenue and often outgrow the programs offered by the government. As the programs are often based on government-preferred themes (like innovation), they need to be better tailored to the stages of entrepreneurial development. Third, entrepreneurial firms have varying experiences with respect to the quality of service offered to them by the programs. While some entrepreneurs have continued their relationships with their external advisors or consultants beyond their initial assignments, many more have used the programs only because they are offered on a preferential cost basis (most entrepreneurs are unwilling to pay for such services on a full cost basis). Fourth, entrepreneurial firms often indicate that external advisors prefer to be involved in discrete tasks rather than in overall business development.

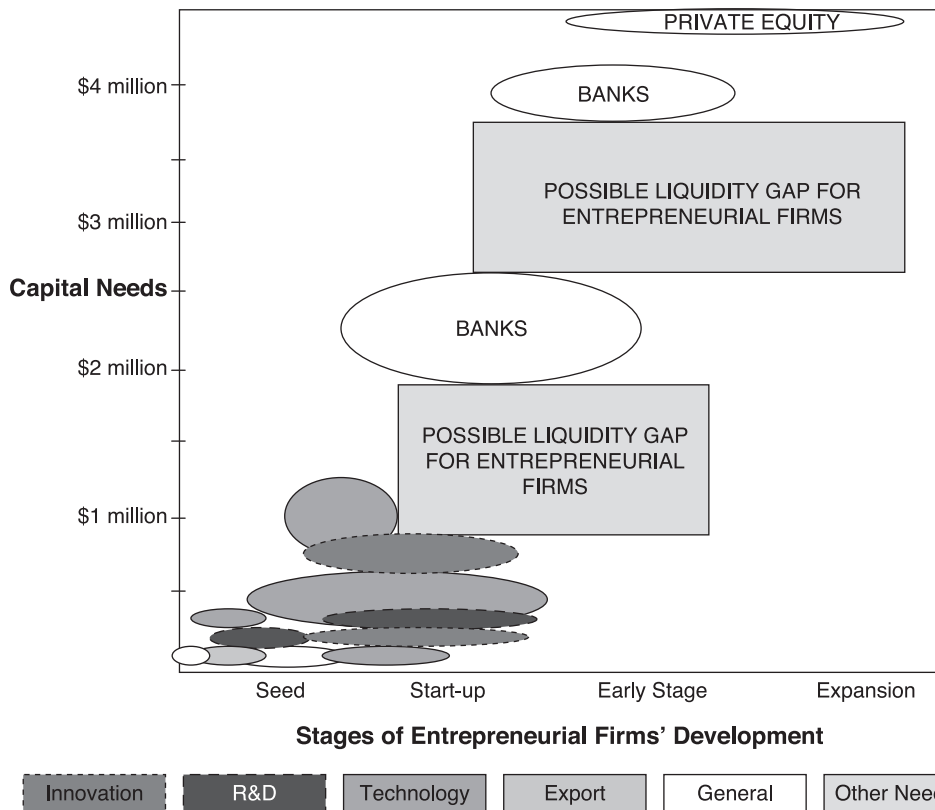


Figure 6.2 The perceptual map of financing options available for the entrepreneurial sector in a European country

Government assistance and liquidity gaps: an example

Figure 6.2 presents a perceptual map of the major financing programs available to entrepreneurial firms in a European country. The government programs dedicated to the entrepreneurial sector have a solid line to the oval while the programs dedicated to a wider audience (as described previously) are linked with a dotted line. There are three main conclusions to draw from Figure 6.2. First, there are numerous programs dedicated to micro and small firms (loans around \$50,000–\$60,000). Limited amounts of facilities are dedicated to larger projects, and many of these loans are classified as loans towards a special purpose or activity (i.e., directed towards R&D, innovation, patent creation, or technology). Second, banks seem to provide firms with one of two levels of capital: the first appears to be around the \$2 million mark, and the second is around the \$4 million level. Third, the averages desired by the venture capital and private equity sectors are well above what is outlined in the graph (in excess of \$10 million). There are two main areas that reflect possible liquidity gaps in spite of government intervention: one is in the \$0.6–\$1.5 million range, and the other is in the \$3 million range. Ideally, the government programs would be developed in such a manner that all empty spots on the perceptual map would be filled.

Business incubation

While the definition of business incubation has evolved in recent years to reflect the specific institutional, regional, and technological economic conditions of specific countries, the term generally denotes targeted programs developed to accelerate the development of entrepreneurial firms through a wide range of business support services. Business incubators provide low cost, real-estate-based facilities to nurture the development of new entrepreneurial firms. Business incubators also provide the temporary use of shared premises, capital equipment, business and technical services, and access to finance (through networking with venture capital firms, “business angels,” and other financiers) through an active and dynamic development process that occurs between the start-up entrepreneurial firm and the business incubator. Facilities are provided at below market rates and on flexible terms with the aim of reducing business start-up costs. The main objective of business incubation is to provide incentives for business start-ups and to support already existing entrepreneurial businesses to develop new and innovative products and services to help them survive through their most vulnerable stages of development and dramatically lower early stage business failure rates. It is important to note here that business incubators differ from research and technology parks in their approach to young entrepreneurial firms. Research and technology parks tend to be large-scale projects that house a variety of firms ranging from corporate, government, and university laboratories to small firms. Most research and technology parks do not offer business assistance services, which are the cornerstone of business incubation programs.

The concept of modern business incubation was initially developed in Europe and was rooted deeply in medical science. The development of the incubation concept in our more recent era resulted from efforts to revitalize declining manufacturing regions during the 1950s by providing entrepreneurs with the necessary resources to develop new ventures (thus enabling them to become instruments for promoting a more diversified industrial base for a regional economy). During the late 1970s, business incubators became methods of improving regional and national competitiveness by promoting the development of innovative and technology-oriented firms. In the 1980s, business incubators shifted to linking the incubation concept with academic institutions and publicly funded research institutes. In the 1990s, the trend was to develop business incubators around specific industrial and technological clusters such as biotechnology, information technologies, and environmental technologies.

Business incubation has become a permanent component of national small enterprise strategies in many countries around the world. Centers of entrepreneurial development see business incubators as vehicles for economic growth and meeting socioeconomic needs. Some of the developmental goals of business incubators may include: creating jobs, fostering a community’s entrepreneurial climate, inspiring the commercialization of technology, diversifying local economies, encouraging female or minority entrepreneurship, and identifying potential spin-in or spin-out business opportunities. Economic development planners are known to help revitalize economic development in military bases that are closing and in rural communities in distress.

There is no precise international data that speaks to the development of business incubators around the world; most academic studies focus on regional or national developments in this area. There are approximately 5,000 business incubators worldwide, of which about 1,000 are located in North America (100 in Canada; 900 in the US) and 850 are located in Western Europe. About 800 business incubators are estimated to exist in developing countries.

In many countries, business incubation programs are sponsored by regional or national government institutions as a part of their overall economic development strategies. In other countries, incubation programs are independent, community-based projects where national or local economic development offices finance the initial start-up phase.

Defining the operational model establishes the structure and parameters of the business incubator. The operational and structural model of the business incubator defines the structure of the incubator, the scope of the services offered, and the available financing options. Current academic research suggests that there are three basic models of operations for business incubators. The first is a virtual operational model where the incubator does not provide premises for the incubated firms. Instead, support and services are offered from a central office via telephone or the internet, allowing newly created firms in different geographic locations to access the business support service. While some virtual incubators offer an address and mailbox, others offer a wide array of services such as hands-on management assistance, access to financing, and orchestrated exposure to other businesses. Most virtual incubators also offer shared office services such as reception, answering services, and web page maintenance. Financing is sometimes available through this type of business support structure. The second model is the provision of “brick-and-mortar” physical facilities to tenant firms. The entire process of developing the business is concentrated into this building. Advantages of this model include the formation of partnerships between tenant businesses and the resolution of common problems by resident entrepreneurs. Support services are generally few and financial assistance is limited. The third model of business incubation offers a wide range of services, such as “know-how” assistance and financing.

The determinants of successful business incubation

Although many practitioners have attempted to pinpoint the determinants of a successful business incubator, no final consensus has been reached. In essence, three basic aspects of business incubator performance seem to ultimately translate into success for tenant firms: services, a network of contacts, and availability of financing. For the incubator to be successful, the services offered must be adequate to the geographic area of its activity and to the development stage of the entrepreneurial firms it aims to support. A key aspect of this success is the quality of the network of firms and the people connected with the incubator. For example, traditional brick-and-mortar incubators limit their network of contacts to tenant firms in the incubator, while networked incubators rely on their network for the firm’s survival and ultimate success. In addition to the services provided and the network of relationships, availability of financing at appropriate stages of the tenant firm’s development can also reduce business risk and shorten the incubation period.

Typology of business incubators

There is no one homogenous method of classifying business incubators. The classification has evolved over time to reflect financial and human resources, business culture and environment, and social agenda. Figure 6.3 presents a simplified landscape of the main types of business incubators. The key criteria selected for mapping the business incubation spectrum were profit orientation (for-profit, not-for-profit) and the operational model (virtual, brick-and-mortar, full service). The oval around each type of business incubator represents the breadth of the business services provided and the source of financing. Table 6.3 provides a brief summary of the key characteristics of business incubators. In the paragraphs that

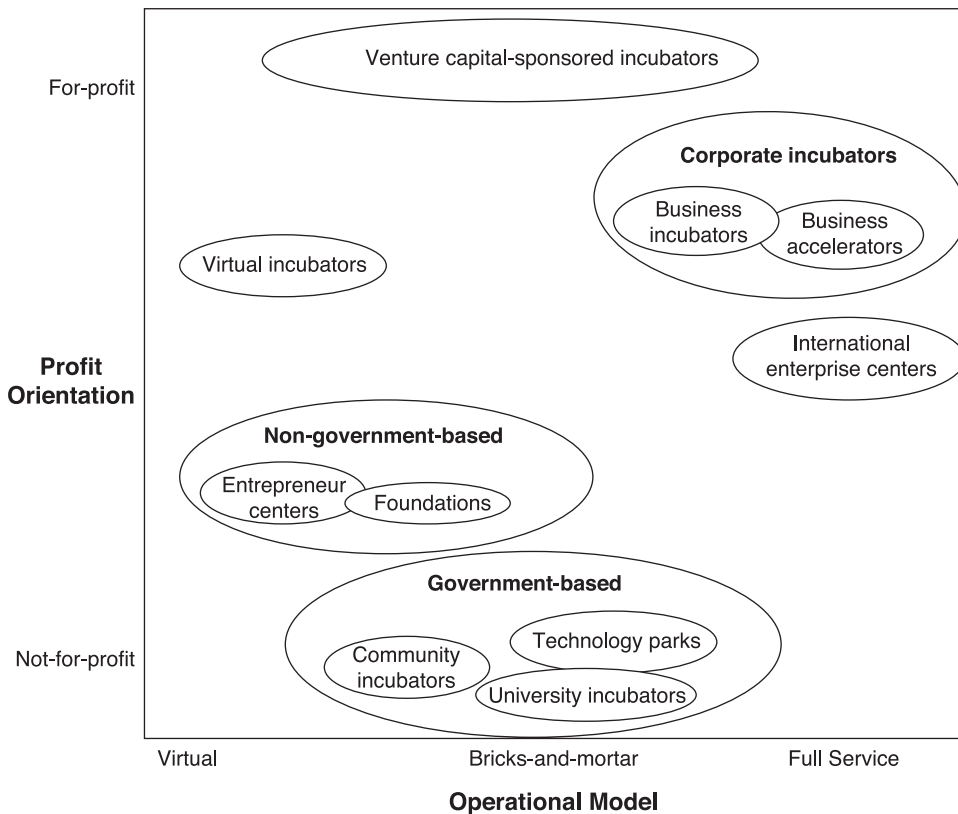


Figure 6.3 The landscape of the major types of business incubators

follow, we provide additional information about university incubators, corporate incubators, and international enterprise centers.

UNIVERSITY INCUBATORS

Academic entrepreneurship is a growing phenomenon. University-based incubators – typically housed in university campuses and generally connected with science faculties (i.e., medicine, engineering, biotechnology, computer science) – are focused on promoting the development of new research and enhancing universities’ research agendas. These incubators are operated as faculty divisions or as separate entities under the faculty’s jurisdiction. University incubators provide tenant entrepreneurial firms with well-equipped and well-staffed laboratories, extensive research libraries, powerful computer systems, and the support of faculty members; they also provide standard business support services including business plan preparation and planning, and managerial assistance. The key role of this type of incubator is to link research, technology, “know-how,” and capital. Tenant firms are typically founded by one or more scientists who participate in academic research. Out of a total of 5,000 business incubators located around the world, approximately 1,500 are university-related. Researchers argue that the socioeconomic impact of these incubators on the community is significant owing to their

Table 6.3 A typology of business incubators

<i>Type</i>	<i>Objective</i>	<i>Sectoral focus</i>	<i>Services provided</i>	<i>Profit orientation</i>	<i>Lead sponsor</i>
University incubators	Research	Sciences	Brick-and-mortar	Non-profit	Public
Corporate incubators	New product development	All	Full service	For-profit	Private
Community incubators	Job creation	All	Limited	Non-profit	Public
Technology parks	Product development	Sciences	Various	Non-profit	Public
Entrepreneur centers	“Know-how” assistance	All	Various	Non-profit	Public
Foundations	“Know-how” assistance	All	Limited	Non-profit	Public/private
Virtual incubators	“Know-how” assistance	All	Limited	Non-profit	Public
International enterprise centers	Business development	All	Full	For-profit/non-profit	Public/private
Venture capital-sponsored	Business development	Sciences	Full	For-profit	Private
Business accelerators	Business development	All	Limited	For-profit/non-profit	Public/private

symbiotic networking of entrepreneurs, students, university faculty members, and the business community.

CORPORATE INCUBATORS

The growth of corporate incubation has been a relatively recent phenomenon, as corporations have realized that their intellectual assets can become a source of increasing profits and growing shareholder value. Corporate incubation is based on a co-operative relationship between the parent corporation, the corporate incubator, and a technology venture where physical, knowledge-based, and intangible resources can be bridged. These incubators are generally established by larger corporations and are aimed at leveraging and disseminating intellectual capital within the corporation (consequently reducing the acquisitions of entrepreneurial firms at premium-priced valuations). These incubators either establish new entrepreneurial ventures on the basis of their own teams of professionals or admit independent tenants under their corporate umbrella. In the second case, the corporation makes gains through service fees or an equity stake in the new venture.

INTERNATIONAL ENTERPRISE CENTERS

These structures, often called “third generation incubators,” offer the most sophisticated range of services, including links between universities, research institutes, and international joint ventures. Such intense support programs are effectively paid for by sharing in the success of the tenant firm by taking an equity stake, royalty payment, or brokerage, or by underwriting fees on arranged capital. The majority of international enterprise centers

provide in-house debt or equity capital and have strong channels with external providers of finance. Many of these structures focus on export activities and are related to other industrial incubators.

Crowdfunding

“Crowdfunding” is an innovative, emerging, revolutionary, and rapidly growing mode of entrepreneurial finance that represents a collective or network-based effort undertaken by a large number of individuals (often including thousands of participants) to pool financial resources to support entrepreneurial activity, a one-off project, or an idea. Crowdfunding is the aggregation of small contributions; this is in contrast to sourcing larger amounts of capital from a smaller number of institutional investors. Crowdfunding normally occurs through the use of an online platform from which the entrepreneur makes a wide and open inquiry to generate the attention of interested individuals and secure access to finance in exchange for some type of value (which may come in different monetary or intangible forms as discussed below). Crowdfunding represents a form of dis-intermediated investment banking – it omits traditional financing channels in favor of the entrepreneur directly and instantly connecting with the end user/investor. Crowdfunding is effectively a social networking event aimed at generating capital. It is most successful for funding projects in the genres of arts (i.e., music, film, theatre, and book publishing), technology (i.e., software development, consumer electronics), and gaming (i.e., video games).

Crowdfunding offers numerous benefits to both entrepreneurs and capital providers. First, crowdfunding appears to fill an existing liquidity gap in the market for financing projects within a specific range of capital needs. Second, crowdfunding “democratizes” access to finance for projects or entrepreneurial firms that under other circumstances would not obtain funding. This “democratization” of financing also extends to the funders; participating individuals would perhaps not normally obtain exposure to these investment or funding opportunities, which might otherwise be reserved for institutional financiers, “accredited investors,” wealthy individuals, or the friends of the founding entrepreneurs. Third, crowdfunding allows young entrepreneurial firms to obtain the necessary market confirmation of their concept, test-drive the business idea, and generate their first paying customers. Fourth, even at a modest scale of business activity (crowdfunding has successfully funded about \$3 billion worth of projects per annum), crowdfunding is estimated to have a profound impact on accelerating entrepreneurship. It is also encouraging that crowdfunding resonates well with female entrepreneurs, whose proportion in this mode of entrepreneurial finance is significantly higher than for males; this remedies certain liquidity challenges for female entrepreneurs. Last, crowdfunding is multifunctional. The online platform is not only used to secure capital, but also presents a unique promotional opportunity to the entrepreneur. Entrepreneurs rely on videos, photos, images, and online presentations to convince individual investors to participate in the venture; this process allows the entrepreneur to increase the firm’s media presence.

In terms of the structure of the crowdfunding industry, there are about 550 online crowdfunding platforms worldwide, which jointly contribute about \$3 billion per annum (an estimate for 2013) to projects or entrepreneurial firms. The majority of platforms operate in the United States and Western Europe. The United States is the single most active market for crowdfunding. Donation- and lending-based platforms generate the largest amounts of capital, but the reward-based platforms are the largest category in terms of volume (lending-based systems operate the smallest amount of platforms). The equity-based platforms

traditionally raise the highest amounts of capital per deal, while donation-based platforms raise the smallest. The robust growth of crowdfunding can be explained by the existence of liquidity gaps in the marketplace (where solo entrepreneurs, freelancers, or creative individuals are not able to secure suitable financing for their projects, ideas, or endeavors), by cumbersome and expensive access to finance through other, more traditional means of entrepreneurial finance, and by the desire of individuals to be engaged via social media. Crowdfunding seems to resonate with people who are participants, social connectors, creators, activists, or “cheerleaders” for certain causes. The success of crowdfunding also demonstrates how social media platforms such as Facebook, Twitter, and LinkedIn can be applied to the field of entrepreneurial finance.

Crowdfunding represents an augmentation of an earlier concept called “crowdsourcing.” Crowdsourcing was broadly defined in the mid-2000s as a method of tapping into the general public (“the crowd”) for creative and novel ideas, innovations and inventions, concepts, solutions, themes, paradigms, and so on. Crowdsourcing has been used by innovative entrepreneurial firms and larger corporations as an effective management tool aimed at increasing firms’ competitive advantage in the marketplace. Crowdfunding also represents a further evolution of the open architecture business model (we discussed this concept in more detail in Chapter 3).

There are numerous prerequisites for running a successful crowdfunding campaign. First, the entrepreneur must identify the right “crowd” and develop a compelling, clear, concise, believable, engaging, and inspirational storyline for the desired crowd. The entrepreneur needs to convey passion, enthusiasm, and conviction for achieving his or her desired goals, and the business “pitch” has to be uniquely structured for potential investors, customers, backers, and other stakeholders. A solid start to the campaign, which then allows the project idea to go “viral,” is critical to the overall success of crowdfunding efforts. Second, the entrepreneur needs to achieve a good strategic fit between the online platform and the concept, idea, industry, project characteristics, marketing strategy, etc. Crowdfunding platforms differ with respect to their funding model (i.e., donations, lending, rewards, or equity), mode of operation (i.e., cut-off date or open call), number of viewers, reputation, and capital-release model (i.e., an “all-or-nothing” formula or “whatever is raised” approach). Last, the entrepreneur must be prepared to undertake the initiative. The crowdfunding platform is only an “enabler” or facilitator; the entrepreneur must do all the preparatory activities. Crowdfunding campaigns are resource demanding and intensive – the entrepreneur must be prepared to interact with potentially thousands of investors while working on marketing initiatives, product/service development, business development, and so on.

The individuals who support crowdfunding may be experienced financiers, novice investors, product/service enthusiasts, or philanthropists. In deciding to invest, crowdfunders rely on information provided on the online platform, which can range from a basic overview of the project to more professional presentations that include a business plan, a full set of financial projections or cash budgets, legal documents (i.e., incorporation acts), and so on. It is important to note that crowdfunders, especially those who are not experienced investors, rarely possess the ability, skill, and background to perform extensive research, conduct in-depth due diligence, assess risks, place a valuation on the business venture, or estimate potential returns. Instead, these investors are willing to take a “leap-of-faith” based on the abstract characteristics of the project. Crowdfunding is decision making on the basis of imperfect and incomplete information – an intuitive judgment call. Other investors (i.e., more sophisticated crowdfunders) seek opportunities in which they can exercise more definitive business judgment based on the entrepreneur, the board members participating in

the entrepreneurial venture, the financial forecasts, the quality of information available, the exit prospects, or the longevity of the venture.

Various crowdfunding models

In the crowdfunding mode of entrepreneurial finance, individual investors demonstrate various expectations for returns (financial and non-financial in nature). Crowdfunding activities generally fall into one of four categories: lending, equity investing, donations, and reward-based. Table 6.4 outlines these schemes.

In the lending-based model, the crowdfunders are expected to receive an interest payment and the principal. The crowdfunders are expected to execute a standardized loan agreement obtained from the online platform or the entrepreneurial firm itself; the loan document often represents an abbreviated bank loan (with a stated interest payment, maturity date, and so on). Some loans are only payable if the project achieves its desired milestones and is successful. The funds are collected by the platform and directed to the project or the entrepreneurial firm. Lending-based crowdfunding is similar in nature to activities undertaken by financial institutions, banks, or pay-day lending centers, which make funds available at premium prices to above-average risk clients (those with poor credit ratings, unstable or no income, and no collateral).

In equity-based financing, the crowdfunders receive an equity stake in the entrepreneurial firm or participate in a profit sharing scheme. In this instance, the crowdfunders obtain shareholders' decision-making powers: to vote, exercise rights, appoint management, decide upon distribution (or direction) of profits, and so on. This subcategory of crowdfunding

Table 6.4 Different methods of crowdfunding and associated rewards/returns

<i>Types of crowdfunding</i>	<i>Financial rewards</i>	<i>Non-financial rewards</i>	<i>Examples of crowdfunding platforms</i>
Lending	Interest payments and principal	Limited or none	Prosper Zopa LendingClub
Equity	Ownership stake in the business Profit sharing scheme Voting rights	Limited or none	Assob SellaBand Wefunder
Donations	None	Memberships, business updates, product improvements, free samples	Fundly JustGiving Spot.us
Reward	None	Intangible benefits such as input into product design, packaging, pricing, and so on Discounts on products and services First to receive products ahead of general public Memberships, business updates, product improvements, free samples	Kickstarter Indiegogo Kiva

(as well as the lending-based system) seems to be most appropriate for technology-related projects (i.e., software, video games) and media projects (i.e., films, music, literature, and books). The majority of projects in this category generate up to \$250,000 in financing and about 25 percent of projects fall between \$50,000 and \$100,000.

Under the donation-based scheme, crowdfunders donate money to projects or ventures because they believe it is a worthwhile undertaking. The crowdfunders identify with the idea, concept, or approach, believe in the project's social and welfare value, or are willing to support the idea on a purely philanthropic basis. Certain projects may also appeal to the funder's personal beliefs or passions (the environment, community, faith, religion, etc.). Donation-based crowdfunding reflects human nature – individuals like to support a dream, a worthwhile cause, or effect change. Crowdfunders are directly and personally vested in the cause represented by the project and they effectively take “ownership” in the project. Moreover, the entrepreneur-donor relationship is more altruistic. The contributions are generally very small (often less than \$25 per donation) and there is no expectation of financial benefits or returns; the donors simply wish to be a part of a successful product, service, or business launch, or participate in the delivery of products into the marketplace. Funders often receive “honorable” mentions once the project “goes live” or a small token reward or gift (i.e., t-shirts, thank you cards, product samples, CDs, books). The concept is similar to the financing model used by traditional charities (in the United States alone, the charitable giving market is worth about \$300 billion per annum). The majority of the projects in this category tend to generate less than \$5,000 in funding.

Crowdfunders can also participate in projects on the basis of other, more loosely defined rewards. Some participants may support a project in exchange for a “token” reward or special participatory privileges; this is called a reward-based model. For example, crowdfunders may directly participate in the design of products and services (i.e., product design, artwork, brand name, packaging, product or service features, and pricing); they effectively make a personal “stamp” on newly created products and services and are involved in the value creation process. The funders may also receive free samples and early product releases, obtain membership in the funded organization, obtain tickets to new plays or shows, decide upon a product's launch date and geographic distribution, interact freely with business owners, or belong to a dedicated community or special interest club. A common model of reward-based crowdfunding is the pre-order model. In this model, the entrepreneur effectively relies on a bootstrap financing technique where donors pre-order products or services, paying for them in advance. This technique is especially useful for start-up entrepreneurial firms as online pre-ordering may effectively serve as an estimate of potential future demand for products and services (it allows the entrepreneur to estimate the market size). The technique also allows entrepreneurs to test products in the marketplace, determine the range of a product's desired features, and decide upon a pricing strategy; it can also be used as a screening device to eliminate suboptimal products from the offer.

Crowdfunding platform operations and legal restrictions

The funding procedure is fairly similar across all crowdfunding platforms. While there are some differences with respect to the time from completion to launch in various crowdfunding initiatives, the process usually takes about nine weeks to complete (running a campaign on a lending-based platform normally takes about half this time). The process begins when the entrepreneur registers the project on the online platform and places a formal request for capital (an “open call” for capital). On the online platform, the fundraiser normally specifies

the amount of capital sought, outlines the preferred form of financing (equity, debt, donations, or other formats), and provides any material for review (i.e., written documents, video, presentations). The crowdfunders review these propositions and make decisions on whether or not to support the project. About a half of all crowdfunding platforms take deposits right away into dedicated trust or escrow arrangements; the remaining ones receive declarations or pledges and then receive funds later. The online platform normally acts as the intermediary in the transaction; it facilitates the collection of money and settles payments, provides standard investment agreements (i.e., contracts, loan agreements, and subscription agreements), and co-ordinates other technical aspects of the fundraising. The online platform may also offer cash management services to the entrepreneur. The project normally does not take off until a minimum amount of capital has been raised; in some cases, the project does not continue unless the full amount of capital sought has been generated. Crowdfunding platforms normally earn a commission on funds paid to the entrepreneur ranging from 2 to 25 percent (the average is about 7 percent). Crowdfunding can prove to be expensive not only in terms of commissions, but also the human resources given to “investor relations.” Commissions are calculated either on the total amount of raised funds or the desired amount of funds sought, and commission charges vary depending on whether the project reaches its fundraising goals (less percentage commission) or does not (more percentage commission). In addition, crowdfunding platforms can charge nominal amounts for license or maintenance fees; these range between \$15 and \$50 per month.

It is important to note that crowdfunding, being a novel form of entrepreneurial fundraising, is not uniformly regulated across all legal jurisdictions. In most legal jurisdictions, crowdfunding is not recognized; in some instances, public solicitation for equity may not be permitted and may violate local securities laws. In unregulated jurisdictions, the concerns stated by securities regulators relate to investor protections, disclosure of information, and fraud. In these jurisdictions, online crowdfunding platforms operate, but offer “equity-like” arrangements or revenue/profit sharing schemes rather than a straight equity sale. Other forms of crowdfunding (i.e., reward-based schemes, donor systems, and lending) are also available.

Questions to consider

1. Define the modes of entrepreneurial finance available to entrepreneurs.
2. Differentiate between the various sources of equity – namely, venture capitalists, business angels, and public markets. Describe the advantages and disadvantages of each equity source. Are these sources of equity financing complementary or competitive? Discuss their use in relation to the evolution of the entrepreneurial firm.
3. Discuss the most appropriate bootstrapping methods that could be used by a newly created janitorial business.
4. Why do some government-sponsored financial assistance programs struggle to deliver appropriate assistance to entrepreneurs? Is it a good idea for governments to use public funds to foster entrepreneurship?
5. Discuss the advantages and disadvantages of the various crowdfunding models.

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Part III

Value measurement

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7 Financial analysis of entrepreneurial firms

Chapter objectives

After reading this chapter, you should be able to:

- identify the key steps for financial analysis of entrepreneurial firms;
- understand the main tools of financial analysis;
- discuss the main components of financial statements;
- conduct a comprehensive analysis of an entrepreneurial firm;
- differentiate between traditional methods of financial analysis and cash-flow-based approaches;
- recognize the divergence between free cash flow and net profit;
- use comparative analysis for evaluating the financial performance of entrepreneurial firms.

Introduction

Most firms tend to focus on generic financial indicators to measure financial performance and value creation. This reliance on financial indicators is generally reflective of corporate concentration on the attainment of quarterly financial targets such as revenue, profits, earnings per share, and so on. While it is important to understand and to be able to apply these general financial indicators, it is also imperative to recognize that value creation may not always be captured by them. Value may also be generated through business activities, which can be more difficult to ascertain by financial measures. Value is normally generated by making the right bets on the right market, developing a strong management team, operating the right business model, securing a growing market share, and so on. In Chapter 3, we mentioned that financial indicators sometimes only reveal part of the entire value creation picture; this point is worth reiterating here, as well. Although financial indicators continue to be an elementary measure of financial performance, they are only representations of historical business activity; they quantify the aggregate effect of many factors (those that are immediately obvious and those that are more difficult to ascertain). As noted, the true extent of value creation activity may not be immediately visible within conventional financial analysis.

In this chapter, we offer a review of the most common methods of financial analysis. A four-step model of analysis is proposed, focusing on liquidity, cash generating activity, profitability, and growth dynamics. We close the chapter with a review of other business metrics (financial and non-financial) as well as a discussion of the entrepreneurial firm's business dashboard and the importance of a balanced scorecard.

An overview of financial statements

Financial statements play an important role in an entrepreneurial firm's financial success. To be successful, entrepreneurs need to analyze their firm's financial condition, monitor financial performance in comparison to the budget, make financial and business decisions, secure external funding, and understand the value creation process. Financial statements help entrepreneurs to achieve this.

There are four different kinds of financial statements: the income statement, the statement of retained earnings, the balance sheet, and the cash flow. In some cases, the income statement and the statement of retained earnings are combined into a single statement known as the statement of income and retained earnings. Financial statements for public firms are normally prepared in accordance with Generally Accepted Accounting Principles (GAAP) or International Accounting Standards (IAS); they are also audited by a professional accounting firm. An accounting standards board (a national professional accounting body or institute) establishes and develops financial reporting standards and guidance for how firms must account for their activities for public firms. However, there are no requirements for auditing the financial statements of private firms. Simply put, entrepreneurs may not immediately see value in a financial audit for a private firm. Preparing financial numbers in accordance to GAAP or IAS standards requires a full-time professional accountant to be on staff; when entrepreneurial firms begin their operations, they often use a non-complex financial program for tax reporting (which also prepares simplified financial statements) or the services of a freelance accountant. Second, entrepreneurs may see limited need for an audit of the financial statements, especially at the beginning of a new venture, because they feel at this point that they are intimately familiar with the finances of the firm (a philosophy that sometimes prevails even after the entrepreneurial firm becomes more sizeable). Another pragmatic reason for not completing an audit of the financial statements is that doing so can be an expensive proposition – the cost of the audit can begin at \$30,000 to \$40,000 per annum, depending on the complexity of the business.

Creating an income statement is comparable to recording a video. The statement captures the operating activities of the firm over a certain period of time (usually a month, quarter, or year), and shows revenues, expenses, and profit (or income). Revenues represent the gross income that the firm has generated during the reporting period (the revenue line does not distinguish between cash and credit sales). Expenses capture the overall cost of providing goods and services to customers. The major expense categories include the cost of goods sold (purchases of goods sold during the year), selling and administrative expenses (marketing, salaries, office support, rent, office supplies, overhead, and so on), depreciation expense (allocation of the costs of an asset over a longer period of time), financial expenses, and taxes. Expenses are matched with revenues. One of the most important parts of the income statement is the profit line; the earnings before interest taxes, depreciation, and amortization (EBITDA) and the earnings before interest and taxes (operating income; EBIT) are often the most important parts of the income statement.

The statement of retained earnings presents how shareholders divide the net profit of the firm (this is usually done on the advice of the management team). The entrepreneurial firm can either pay dividends or retain profits on its accounting books in the form of retained earnings. In most jurisdictions, restrictions are placed on the firm's ability to pay dividends. Dividends, of course, represent a cash payment, so the firm needs to have cash in the bank to actually pay them. The formula for calculating the balance of retained earnings is discussed

in Chapter 4 and is calculated according to the following formula: Retained Earnings_{n+1} = Retained Earnings_n + Net Profit_{n+1} – Dividends_{n+1}.

If the income statement is comparable to a video, the balance sheet is comparable to a still photograph. The balance sheet illustrates the entrepreneurial firm's assets, liabilities, and equity at a single moment in time. This is done in accordance with a well-known accounting equation: assets = liabilities + equity. Because of its "still" nature, the balance sheet does not tell us anything about the firm's financial position before or after the date on which the balance sheet was prepared – so from this point of view, the statement is static. Because of this, financial analysts often regard the balance sheet as potentially misleading and open to manipulation (items can be temporarily hidden before the preparation date). On the assets side, there are two main categories: current assets (listed in order of liquidity) and fixed assets. Current assets include cash, marketable securities (shares, bonds and other investments, which can be converted into cash in a timely manner), accounts receivable (value of credit extended to customers), inventory (raw materials, finished goods, work-in-progress), and pre-paid costs (expenses paid in advance, such as insurance, subscriptions, etc.). The liabilities and equity section of the balance sheet summarizes how the firm's assets are financed. The capital to finance assets normally comes from creditors (who maintain a claim against the firm) and owners (who have an equity, ownership, or economic claim in the business). While equity holders cannot "lend" their capital to the firm, they may maintain an implicit expectation for a potential return in the form of dividends or appreciation of share value. Liabilities are divided into two categories: short term (accounts payable, or money owed to creditors; accrued expenses, or payments "promised" but not fulfilled; taxes payable, or the legal obligations to be settled; notes payable – a short-term part of debt, payable within a year) and long term (bank lending, debt obligations, commercial paper, and so on). The shareholders' equity includes common and preferred equity, as well as retained earnings, which represent the cumulative amount of net profits achieved since the inception of the firm adjusted for any dividends that may have been paid out. A common misunderstanding is that equipment or other obligations can be paid for using retained earnings. This interpretation, of course, is incorrect, as retained earnings effectively represent a "paper entry" on the balance sheet rather than actual cash.

Last, there is the cash flow statement, which captures how actual cash flows into and out of the entrepreneurial firm over a specific period of time. The cash flow statement is constructed by adjusting the income statement to differentiate between profit and cash flow and by comparing the balance sheets at the beginning and the end of this period in order to arrive at cash inflows and outflows. The cash flow statement normally comprises three main sections of activity: operating, investing, and financing. The operating section is constructed by adding depreciation (which is not a cash outflow, but rather a legitimate expense deduction on the income statement) to net profit and making subsequent adjustments to specific items on the balance sheet (current assets and current liabilities). The investing section includes the gross amount spent on fixed assets, intangible assets, and long-term securities. The financing section presents financing activities related to issuing or retiring (i.e., buying back) securities such as common equity, preferred equity, notes, bonds, bank loans, and so on (it also includes a line recognizing payment for dividends). The cash flow statement is often regarded as the most "honest" financial statement, as it is difficult to manipulate or adjust.

The cash flow statement can be presented in one of two methods: direct or indirect. The two methods have a similar construct (in that they involve three types of activities: operating, investing, and financing), but differ in terms of operations. Under the direct method, cash flow from operations gives details about where the cash was generated from (i.e., collected

from customers) and where it was directed to (i.e., investment in inventories, covering operating expenses, paying taxes, and settling interest payments). The indirect method, as noted previously, takes the net profit line and adjusts it for cash/non-cash expenses (such as depreciation and amortization, which are added back to net profit) and changes in working capital. This method is most commonly used in the preparation of financial statements.

So, which financial statement is the most important? When entrepreneurs start new ventures, they often “process” the financial side of the business in the form of a simple cash budget. As discussed in Chapter 4, this approach of managing the financial and accounting affairs of the business focuses on cash receipts (cash inflows) and cash disbursements (cash outflows). Because the concept of cash inflows and cash outflows is intuitive to entrepreneurs, a simplified cash flow statement (or cash budget) is the most important and paramount function for the entrepreneurial firm. However, as an entrepreneurial firm gets larger, the focus on cash flow lessens, and entrepreneurs begin to concentrate more on the income statement and, consequently, profits. The income statement is the only financial statement produced on a regular basis; other financial statements (i.e., the balance sheet) are often only created at the end of the reporting period. If the balance sheet is not produced, then neither is the cash flow statement; hence, entrepreneurs begin to lose track of cash movements in their firms. The consequence of this re-orientation from cash flow to net profit is losing track of capital “tied up” by entrepreneurial firms in inventory and accounts receivable. The profit orientation is heavily reinforced by financial media, the financial community, and financial analysts who concentrate on reporting the earnings and profits of firms; the financial industry is often mesmerized by earnings, net profit, earnings per share, and P/E multiples. At least for some time while this occurs, the entrepreneurial firm continues to concentrate on purchases (fixed assets, intangible, and other expenditures, depending on what is most prudent and what the entrepreneurial firm can afford); this, in turn, leads to a question commonly posed by entrepreneurs: where has the cash gone?

Discussion in this chapter will focus on NatureCARE Pharmacies, an independent network of pharmacies in the province of Ontario, Canada. The business was established as an entrepreneurial venture in 2005 (when the first pharmacy was opened) and by 2010 revenue reached \$58 million. NatureCARE Pharmacies has a unique focus – it specializes in homeopathic medicine (accounting for about 65 percent of the company’s revenue), vitamins (10 percent of revenue), and dietary supplements (15 percent); the remaining 10 percent of revenue comes from a wide range of other products. The firm sources products from leading international suppliers such as Heel (Germany), Boiron (France), Genestra Brands (USA), and Swiss Herbal (Switzerland). The pharmaceutical sector for alternative medicine in Ontario is highly fragmented and is just beginning to consolidate. Only a few pharmacy chains have focused on this unique product offering, and NatureCARE Pharmacies is a clear market leader with 18 pharmacies in the province. The firm has grown organically to a significant size and is looking for acquisitions for a major expansion (the firm needs to secure \$10 million to effect acquisitions).

Management’s projections assume that NatureCARE Pharmacies is expected to make three acquisitions of independent small pharmacy chains in Ontario focusing on natural vitamins and supplements; this was to occur in 2011. The owners held detailed meetings with the three firms, terms were agreed upon, and letters of intent were signed. This effort was expected to further solidify the firm’s position in Ontario and serve as a springboard for further expansion into neighboring provinces (Manitoba and Quebec).

Tables 7.1 to 7.3 present the financial statements for NatureCARE Pharmacies. The statements present the historical financial numbers (2007 to 2010) and the projected financial forecasts (2011 to 2015).

Table 7.1 The income statement for NatureCARE Pharmacies, 2007–15

(In \$'000)	Historic				Projected					
	2007	2008	2009	2010	2011	2012	2013	2014	2015	
Revenue	3,489	7,210	23,734	57,994	84,891	115,872	134,783	152,289	169,348	
% revenue growth		106.6%	229.2%	144.3%	46.4%	36.5%	16.3%	13.0%	11.2%	
Cost of goods sold	2,871	5,876	18,726	45,757	66,809	90,264	104,861	118,938	133,277	
Gross profit	618	1,334	5,008	12,237	18,082	25,608	29,922	33,351	36,071	
Gross profit margin (%)	17.7%	18.5%	21.1%	21.1%	21.3%	22.1%	22.2%	21.9%	21.3%	
Selling cost	262	361	1,780	4,398	6,027	7,879	9,435	10,203	11,346	
General and administrative expenses	145	187	475	1,063	2,547	3,360	3,774	4,416	4,572	
Other expenses	56	167	171	158	1,698	2,202	2,426	2,817	3,099	
Earnings before interest, taxes, depreciation, and amortization (EBITDA)	155	619	2,582	6,618	7,810	12,167	14,287	15,915	17,054	
EBITDA margin (%)	4.4%	8.6%	10.9%	11.4%	9.2%	10.5%	10.6%	10.5%	10.1%	
Depreciation	180	180	250	837	1,837	1,837	1,837	1,837	1,837	
Operating profit (EBIT)	-25	439	2,332	5,781	5,973	10,330	12,450	14,078	15,217	
EBIT margin (%)	-0.7%	6.1%	9.8%	10.0%	7.0%	8.9%	9.2%	9.2%	9.0%	
Interest expense	90	180	180	940	1,449	949	699	699	699	
Earnings before taxes (EBT)	-115	259	2,152	4,841	4,524	9,381	11,751	13,379	14,518	
Taxes @ 36%	0	93	775	1,743	1,629	3,377	4,230	4,816	5,226	
Net profit (loss)	-115	166	1,377	3,098	2,895	6,004	7,521	8,563	9,292	
Net profit margin (%)	-3.3%	2.3%	5.8%	5.3%	3.4%	5.2%	5.6%	5.6%	5.5%	

[Please note that there was no tax loss carry-forward for NatureCARE Pharmacies in 2007]

Table 7.2 The cash flow statement for NatureCARE Pharmacies, 2011–15

(\$'000)	2011	2012	2013	2014	2015
Operating activities:					
Net profit	2,895	6,004	7,521	8,563	9,292
Depreciation	1,837	1,837	1,837	1,837	1,837
Decrease (increase) in accounts receivable	-1,441	-2,547	-1,554	-1,439	-1,402
Decrease (increase) in inventory	-2,668	-2,765	-1,126	-3,471	-3,536
Increase (decrease) in accounts payable	4,343	5,784	3,599	3,471	3,536
Cash provided by (used in) operating activities	4,966	8,313	10,277	8,961	9,727
Cash received from (used for) investments:					
New fixed assets purchases	-10,000	0	0	0	0
Cash used in investing activities	-10,000	0	0	0	0
Cash received from (used for) financing activities:					
Proceeds from (repayment of) long-term debt issue	-5,000	-5,000	0	0	0
Proceeds from new common share issue	10,000	0	0	0	0
Cash provided by (used in) financing activities	5,000	-5,000	0	0	0
Net increase (decrease) during the year	-34	3,313	10,277	8,961	9,727
Beginning cash balance	1,618	1,584	4,897	15,174	24,135
Net change in cash balances	-34	3,313	10,277	8,961	9,727
Ending cash balance	1,584	4,897	15,174	24,135	33,862

Horizontal and vertical analysis

In Chapter 4, we introduced the concepts of vertical and horizontal analysis, which can be useful for understanding the dynamics of financial statements. Horizontal and vertical analysis methods allow for a detailed analysis of historical financial statements and can prove helpful when preparing future financial forecasts. Vertical analysis (also known as structural or common-sized analysis) involves expressing variables in one financial statement as a percentage of a key variable. In short, we express a specific financial statement in percentage terms. This type of investigation can be used to analyze both the income statement and the balance sheet, but is rarely applied to the cash flow statement. For example, in the case of the income statement, using the revenue line as a key variable in calculations allows all cost components to be expressed as a percentage of revenue to show how much revenue each cost item “consumes.” In terms of the balance sheet, different items of the balance sheet are expressed as a percentage of total assets; the analysis exemplifies how much of the total assets can be claimed by shareholders and creditors (i.e., banks, suppliers).

Horizontal analysis (also known as trend analysis) focuses on determining percentage increases in certain items within the financial statement. This analysis can assist in determining whether the firm’s current financial situation is improving or deteriorating. This form of analysis also underlines the firm’s strengths and highlights its weaknesses; hence, it can help to assist with determining what corrective actions to take. Horizontal analysis can also be

Table 7.3 The balance sheet for NatureCARE Pharmacies, 2010–15

(\$'000)	2010	2011	2012	2013	2014	2015
Assets						
Current assets:						
Cash	1,618	1,584	4,897	15,174	24,135	33,862
Accounts receivable	5,536	6,977	9,524	11,078	12,517	13,919
Inventory	19,297	21,965	24,730	25,856	29,327	32,863
Total current assets	26,451	30,526	39,151	52,108	65,979	80,644
Fixed assets, gross	8,366	18,366	18,366	18,366	18,366	18,366
Less: Accumulated depreciation	1,447	3,284	5,121	6,958	8,795	10,632
Fixed assets, net	6,919	15,082	13,245	11,408	9,571	7,734
Total assets	33,370	45,608	52,396	63,516	75,550	88,378
Liabilities and shareholders' equity						
Current liabilities:						
Accounts payable	12,130	16,473	22,257	25,856	29,327	32,863
Total current liabilities	12,130	16,473	22,257	25,856	29,327	32,863
Long term debt	16,991	11,991	6,991	6,991	6,991	6,991
Total liabilities	29,121	28,464	29,248	32,847	36,318	39,854
Shareholders' equity:						
Common shares	500	10,500	10,500	10,500	10,500	10,500
Retained earnings	3,749	6,644	12,648	20,169	28,732	38,024
Total shareholders' equity	4,249	17,144	23,148	30,669	39,232	48,524
Total liabilities and shareholders' equity	33,370	45,608	52,396	63,516	75,550	88,378

used to ascertain the relationship between different items in a financial statement; in other words, it answers whether there are items in the financial statement that increase by the same amount (this information helps to understand key business drivers). Horizontal analysis is normally applied to the income statement and the balance sheet.

Comparative analysis

Experienced analysts know that there are no easy yardsticks to assess a firm's historical financial performance or its future financial fortunes. There are multiple reasons for this. First off, there are unique entrepreneurial firms with fundamentally different business models. For example, firms in certain sectors of the economy differ in terms of fixed assets, customer base, leverage, cash flow, and so on. Second, firms go through cycles where their financial performance deteriorates or improves with no immediate implications for the viability of the business. This implies that financial performance measures may be needed for both good times and bad times, and that longer term comparative data is quite useful.

One of the unique methods used to overcome such challenges is comparative analysis. This concept is introduced in Chapter 8, where we will discuss business valuation and the

EBITDA multiples method. The essence of comparative analysis is to compare the performance of one firm to other firms operating in the same industry (this approach is also known as cross-sectional analysis or benchmarking). The most important point to remember is that a firm's financial performance has a tendency to gravitate towards the industry average in the long term.

Finding comparable data sometimes requires a significant amount of research. A number of research firms make this investigation considerably easier, as they publish financial data on certain industries. For many publications, relevant industry ratios are calculated and some information comes as raw data (unfortunately, many of the cash flow ratios used in this chapter were not available). Industry data can be found in newspapers (i.e., *The Wall Street Journal*, *Financial Times*, *Barron's*, *USA Today*), magazines (i.e., *Forbes*, *Fortune*), business publications (i.e., *Standard and Poor's Statistical Surveys*, *Standard and Poor's Corporation Records*, *World Almanac*), annual reports, internet websites (i.e., Yahoo Finance, Google Finance), electronic databases (i.e., EDGAR, SEDAR, EBSOHOST), investment advisory publications (i.e., *Value Line Investment Survey*, *Bloomberg*, *Capital IQ*), and so on.

The stepwise financial analysis

The most common method of financial investigation is an evaluation of the historical financial statements going back three to five years. Such an analysis is important in understanding the historic performance of the entrepreneurial firm in the context of its external and internal environment, and provides insight with respect to future financial forecasts. However, the firm's past is fixed; it is irrecoverable, unchangeable, and irrelevant to future decision making. It is the path that the entrepreneurial firm has traveled and the financial trail it has left behind. In this chapter, we will focus on a financial analysis of NatureCARE Pharmacies in the context of the firm's financial projections.

Traditional analysis of financial statements involves calculating and assessing financial ratios (a ratio is a number that expresses the value of one number in relation to another). Traditional financial analysis involves a standard set of ratios (i.e., liquidity ratios, profitability ratios, asset activity ratios, debt ratios, leverage ratios, market valuation ratios, etc.), which often relate to one financial statement. Most academic literature provides no insight into the relative importance of these measures and does not give readers any sense of a particular sequence in which these ratios should be investigated.

In this chapter, we offer both a traditional ratio analysis and a focus on cash flow ratios, which are equivalent to traditional financial approaches. The equivalent cash flow ratios are shown in comparison to the traditional ones – this is consistent with our approach that the cash flow statement and cash management are the most important components of analysis for entrepreneurial ventures. This aspect of analysis is especially important for young entrepreneurial firms, who are more vulnerable to failure than more mature firms. As a consequence of this (at least in the first stage of development for the entrepreneurial venture), entrepreneurs should manage for cash rather than for profits and earnings.

The proposed ratio analysis provides the framework for an analysis consistent with the needs and characteristics of the entrepreneurial firm. Practical evidence and academic literature suggest that entrepreneurial firms experience many challenges with respect to cash flow. Entrepreneurs learn about the importance of managing cash flow “the hard way” if they are effectively running out of cash and need to arrange for emergency financing. Concerns over cash flow are most often regarded as an aspect of new venture creation that keeps entrepreneurs awake at night, and evidence suggests that entrepreneurial firms have problems

managing working capital. For one, entrepreneurial firms struggle with cash collection, often because of their lack of credit policies, inconsistent application of these policies, inadequate screening of customers (limited credit checks), or worries over losing customers. Second, as noted in Chapter 4, entrepreneurial firms experience challenges when forecasting revenue. Cash problems are even more pronounced when the entrepreneurial firm operates in a cyclical industry or if there are unexpected fluctuations in market demand – no firm is able to adjust its operating costs “on a dime” to reflect downturns in trading activity. Third, an inability to correctly predict revenue has immediate implications for entrepreneurial firms in terms of inventory management: entrepreneurial firms either carry too much inventory (which ties up capital), or too little (the firm foregoes actual sales).

Our analytical framework in this chapter is based on a hierarchical and sequential progression rather than on a complete and exhaustive application of the ratios. The proposed analytical framework rests on a four-step sequence of analysis which includes liquidity, cash generating activity, profitability, and growth dynamics. The first two ratios (namely liquidity and cash generating ability) are interconnected because they relate to business survival – running out of cash can be a common problem for entrepreneurial firms. If the entrepreneurial firm is not able to pay its bills on time or manage its cash flow effectively, its days of existence may be numbered. An entrepreneurial firm needs to have a profound understanding of where cash comes from, where it is going, how much is needed for basic operations (i.e., a cash burn rate), how much new capital is needed and when, and so on. Maintaining strong cash flow not only assures survival, but also translates into value creation – free cash flow is a critical component of the most fundamental valuation methodology, the discounted cash flow method (DCF). The two subsequent ratios (namely profitability and growth dynamics) are critical to operating the business effectively and for successful expansion (business growth translates into improved market share, especially when the firm grows its revenue line faster than the competition; also, long-term sustainability of market share converts into profitability). The hierarchical and sequential approach to the financial analysis of entrepreneurial ventures is presented in Figure 7.1.

The first part of the investigation focuses on liquidity, which is the most fundamental health check for any entrepreneurial firm. Liquidity assures business survival. The next step in the analysis is to analyze the cash flow and its components (i.e., operations, investments, and finances). The objective of any entrepreneurial firm is to develop repeatable and growing cash flows – these are the hallmark of any successful entrepreneurial firm. Next, profitability is analyzed (profitability refers to profit margins, or profits divided by revenue, rather than a dollar value). For this analysis, we look only at the most critical

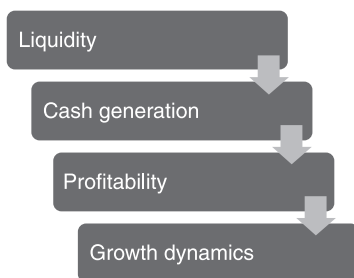


Figure 7.1 A step-by-step process of analyzing the financial performance of entrepreneurial firms

measures of profitability for entrepreneurial firms (i.e., EBITDA and EBIT) while mostly ignoring others (i.e., gross profit, net profit). Net profit, which may be important in deciding the level of dividends, should not be the central focus point of profitability analysis – other lines of the income statement, like EBITDA, are more important. The last step in the proposed framework of analysis involves understanding growth dynamics in revenue as well as other components of the financial statement (i.e., revenue, EBITDA, and free cash flow). Strong growth in revenue is an important component of competitive analysis.

Let's now turn to analyzing each of these components in the context of NatureCARE Pharmacies.

Staying alive: liquidity

The most important objective of an entrepreneurial venture is to stay alive (this is especially critical in the early phases of development, when most business failures occur). Survival becomes significantly easier when the entrepreneurial firm begins to generate strong sales, control costs, and efficiently manage working capital. Liquidity, the proper management of current assets and liabilities, is key. Liquidity ratios describe the cushion provided by current assets to settle outstanding liabilities, and illustrate the firm's ability to cover its short-term obligations. The most common measures of liquidity are current ratio, quick ratio, and times interest earned (see equations 7.1a–7.3a).

Given the importance of cash for entrepreneurial ventures, there are additional ways of assessing liquidity based on cash flow. Cash flow liquidity ratios emphasize the importance of the cash flow to the survival and early development of entrepreneurial firms. Cash flow measures of liquidity include the following metrics: operating cash flow ratio, cash flow coverage ratio, and cash interest coverage ratio (see equations 7.1b–7.3b). Even though practitioners, auditors, managers, investors, analysts, and academics (cash flow ratios are rarely seen in accounting, auditing, finance, or entrepreneurial finance textbooks) have been slow to adopt these cash flow ratios, they can prove to be more reliable measures of liquidity than the traditional ratios based on the balance sheet. Cash flow liquidity ratios also appear to have more ability to predict business failure, and can help to ascertain a firm's ability to withstand any internal shocks (i.e., robust revenue growth and significant need to invest in capital expenditure) and external challenges (i.e., competitive pressures, rapid and unforeseen declines in product demand, economic cycles, inflation, and so on).

Traditional liquidity ratios	Cash flow liquidity ratios
$CR = \frac{\text{Current Assets}}{\text{Current Liabilities}} > 2 \quad (7.1a)$	$OCF = \frac{\text{Cash flow from operations}}{\text{Current Liabilities}} > 1 \quad (7.1b)$
$QR = \frac{\text{Current Assets} - \text{Inventory}}{\text{Current Liabilities}} > 1 \quad (7.2a)$	$CFC = \frac{\text{Net profit} + \text{depreciation} \text{ \& amortization}}{\text{Current Liabilities}} > 1 \quad (7.2b)$
$TIE = \frac{\text{Operating Profit (EBIT)}}{\text{Interest Paid}} > 3 \quad (7.3a)$	$CIC = \frac{\text{Cash flow from operations}}{\text{Interest Paid}} \quad (7.3b)$
CR = Current ratio	OCF = Operating cash flow
QR = Quick ratio	CFC = Cash flow coverage
TIE = Times interest earned	CIC = Cash interest coverage

The current ratio (CR) expresses the relationship between all current assets and current liabilities (equation 7.1a). CR also describes how many dollars of current assets cover one dollar of current liabilities. The rule-of-thumb for this ratio is equal to at least two times (two dollars of current assets to one dollar of current liabilities). A more pronounced and stringent measure of liquidity is the quick ratio (QR), otherwise known as the “acid test” (equation 7.2a). The quick ratio is a better measure of the firm’s liquidity because it removes inventory from current assets. The reason for the exclusion of inventory is that it can be difficult to liquidate and value, especially in cases where the entrepreneurial firm requires unique raw materials in its production, when there are limited raw material “intermediaries” that can liquidate the inventory, and when the inventory has an expiry date of less than two years. Inventory write-downs can be as high as 50 percent, especially if potential buyers sense the firm is in dire straits financially. The rule-of-thumb for this ratio is at least one time. The last traditional liquidity ratio, times interest earned (TIE), assesses the firm’s ability to service its interest payments. TIE expresses a relationship between operating profit (EBIT) to the value of interest payments. Paying interest on time is important to entrepreneurial firms, because not meeting these obligations can force the bank to “pull-the-plug” on their financing (i.e., freezing the firm’s bank account or, in more extreme cases, forcing liquidation or bankruptcy). Different banks have various policies of working with delinquent loans, but the “tolerance safety fuse” of most banks is quite short. In the case of this ratio, coverage of at least three times is preferred.

Cash flow liquidity ratios, on the other hand, have some advantages over traditional ratios. Since they are based on actual cash flow, cash flow ratios can illustrate how much cash was generated over a certain period of time (traditional liquidity ratios are more static because they assess liquidity at a single point in time as captured by the balance sheet). For example, an improvement in the current ratio may come from increasing inventory and accounts receivable. While current and quick ratios can improve as a result of growing inventory and accounts receivable, the impact of these “improvements” is actually negative from the cash flow point of view – the firm ties up more cash in extending credit to suppliers and in inventory (this is where the discrepancy between the static and flow measures is most pronounced). Moreover, as noted previously, cash flow ratios have more “predictive” power in terms of business survival or failure. One of the disadvantages of using cash flow ratios is the lack of comparable data; as previously noted, data is not readily reported by businesses, research firms, and analysts (limited industry averages also exist).

In terms of specific liquidity ratios, the operating cash flow (OCF) ratio describes the amount of operating cash in relation to current liabilities (see equation 7.1b). OCF measures in what manner the entrepreneurial firm accrues cash to settle its short-term liabilities. The cash flow coverage (CFC) ratio is similar to the OCF measure, but uses internally generated cash flow (net profit plus depreciation and amortization) in the numerator of the formula (see equation 7.2b). CFC is a less robust measure of liquidity than the OCF ratio because it does not take into account the impact of changes in working capital items on the operating cash flow; it is also regarded as a more neutral measure of operating cash flow (assuming working capital is more or less constant). The desired average expected for the OCF and CFC ratios is equal to one. A measure of less than 0.5 indicates a significant risk of not being able to settle short-term liabilities. The last measure of liquidity based on cash flow is the cash interest coverage (CIC) ratio, which expresses the cash flow from operations in relation to the interest paid (see equation 7.3b). This ratio is regarded as a more realistic measure of the firm’s potential to settle required interest payments than the traditional measure (TIE).

Table 7.4 Liquidity ratios (traditional and cash flow equivalents) for NatureCARE Pharmacies for the period between 2010 and 2015

	2010	2011	2012	2013	2014	2015
Traditional liquidity ratios						
Current ratio	2.18	1.85	1.76	2.02	2.25	2.45
Quick ratio	0.59	0.52	0.65	1.02	1.25	1.45
Times interest earned	6.2	4.1	10.9	17.8	20.1	21.8
Cash flow liquidity ratios						
Operating cash flow ratio	0.32	0.30	0.37	0.40	0.31	0.30
Cash flow coverage ratio	0.33	0.29	0.35	0.36	0.35	0.34
Cash interest coverage ratio	2.63	3.43	8.76	14.70	12.82	13.92

Table 7.4 presents the liquidity ratios for NatureCARE Pharmacies for the period between 2010 (historical financial performance) and 2015 (projected financial performance). The table illustrates both traditional ratios and cash flow ratios to demonstrate the incremental value that cash flow ratios can bring to an evaluation of an entrepreneurial firm's liquidity. The quick ratio shows that the entrepreneurial firm struggles with liquidity. While the current ratio was equal to 2.18 in 2010, it declined in 2011 and 2012 (in both years, the current ratio was below two). The reasons for the decline include growing accounts payable (to secure products for new acquisitions) and limited availability of cash (equal to about 2 or 3 percent of revenue). The ratio is below generally accepted standards and below the pharmacy industry standard equal to 2.4. The current ratio is expected to recover above two for the years 2013 to 2015, as the firm is expected to build significant cash reserves. The evolution of the quick ratio follows a similar pattern of development; it continues to decline and trends below the desired level of one (the industry standard for the quick ratio is equal to 1.3), but begins to steadily improve in 2013. The times interest earned measure appears safely above the desired level of three for all years (2010 to 2015), but is well below the industry average of 23.

The two cash flow liquidity ratios (operating cash flow and cash flow coverage ratios) fail to register any meaningful improvement in liquidity for NatureCARE Pharmacies. While the current and quick ratios have predicted a stable improvement post-2012, the operating cash flow and cash flow coverage ratios oscillate between 0.3 and 0.4, showing no significant improvement. No visible improvement in cash flow liquidity ratios illustrates a potential for severe liquidity problems for NatureCARE Pharmacies in the future (note that the cash flow ratios outline liquidity problems in spite of the net profits generated every year). The cash interest coverage ratio predicts some improvement, even though it is less robust than the times interest earned ratio.

The overall assessment of liquidity for NatureCARE Pharmacies should be of concern to owners and managers. It is again important to emphasize that based on traditional ratio analysis, the firm is stronger than it is on the basis of cash flow liquidity measures. However, the traditional approach to liquidity evaluation provides false-positives. Cash flow ratios are consistently weaker than the traditional measures. An ambitious acquisition program, the repayment of long-term debt (which reduces the amount of cash), and increases in accounts payable are expected to put significant pressure on the firm's ability to meet its short-term obligations. The firm's liquidity will worsen if a downturn in the economy occurs, if the expected acquisitions do not produce the desired revenue growth and costs savings, or if new

Table 7.5 A comparative analysis of working capital for NatureCARE Pharmacies with industry statistics

(In %)	Industry statistics						NatureCARE Pharmacies (2010)
	2006	2007	2008	2009	2010	Average	
Account receivable/revenue	5.95	5.92	5.76	5.86	6.01	5.90	9.55
Inventory/revenue	9.12	10.17	9.33	8.75	8.33	9.14	33.27
Accounts payable/revenue	7.28	7.86	6.09	5.99	5.82	6.61	20.92
Working capital/revenue	7.61	7.77	6.70	7.14	6.82	7.21	24.69

entrants begin to compete in the marketplace. In fact, any of these components would likely force the entrepreneurial firm to look for additional cash.

Another way to measure the expected liquidity for NatureCARE Pharmacies is to compare its expected performance with industry statistics (in most industry statistics, working capital items are often expressed as percentages of revenue). Industry analysis is presented in Table 7.5. The analysis illustrates that average statistics for the pharmacy services industry are significantly different from the averages projected for NatureCARE Pharmacies across all measurement categories. It appears that in the case of NatureCARE Pharmacies, working capital items “consume” a significant portion of revenue (the statistics for NatureCARE Pharmacies are well above industry averages). This indicates that working capital management in our example is not optimal – the balance of accounts receivable is too high (which may indicate excessive sales on credit) and the level of inventory appears excessive (which may denote problems related to inventory management). The situation is not expected to significantly improve for NatureCARE Pharmacies between 2011 and 2015.

Cash is king: cash generation potential of entrepreneurial ventures

In Chapter 4, we focused our analysis on the graphical depiction of the evolution of the entrepreneurial firm’s revenue and profit lines in the context of the firm’s development life cycle. Here, we return to this analysis, but for the purpose of demonstrating the disparity between net profit and free cash flow (note that we define free cash flow as the sum of net profit, depreciation, and changes in working capital less any investment into fixed assets). Understanding this divergence is especially critical for young entrepreneurial firms, particularly at the early stage of development when net losses begin to minimize or even convert into profits, but the firm continues to consume significant amounts of cash (see Figure 7.2 for a graphical representation of this phenomenon).

In the first part of the graph, the net profit of the entrepreneurial firm increases; revenues are low and start-up and operating costs are significant. Cash-wise, the entrepreneurial firm needs to cover its operating costs, but also invest additional financial resources into working capital (i.e., the entrepreneurial firm extends credits to customers and builds necessary inventory) and capital expenditure (i.e., machinery, equipment, land, intangible assets, and so on). A disparity between net profit and free cash flow is normally expected by entrepreneurs in the early stages of venture development, and this expectation forces them to prepare for this disparity. The next critical point of the graph is the position of convergence between net

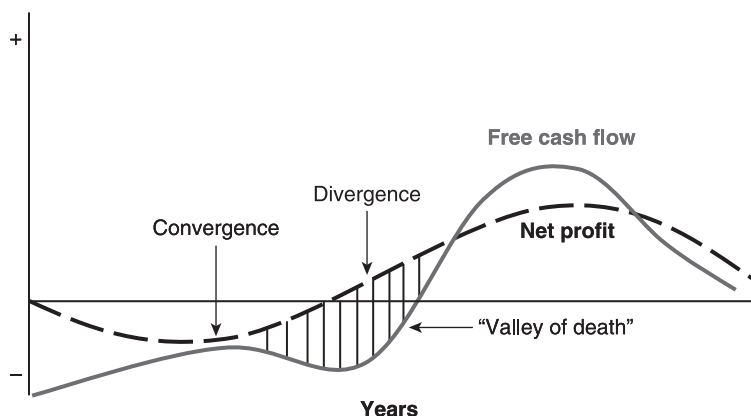


Figure 7.2 The evolution of net profit and free cash flow in an entrepreneurial venture

profit and free cash flow. This convergence often tricks entrepreneurs into believing that their cash concerns are behind them, but this is not the case. Subsequent expansion necessitates the need for more investment into capital expenditure and working capital. Consequently, a cash death trap, or the “valley of death,” arrives to the total surprise of the entrepreneur, who does not recognize the growing disparity between net profit and free cash flow. The cash shortfall continues even if net profits begin to show a positive trajectory. This is interesting from the point of view of business valuation. Since the entrepreneurial firm is beginning to build its net profit line (from negative to positive and expanding further), entrepreneurs implicitly assume that the value of their firms must be growing. Other financiers, like venture capitalists (who are more cash-flow-oriented), see the reality of the business differently – they still see the cash flow risks. Since there is a lag behind growing net profits and free cash flows, external financiers see the progression in the build up of business value as less apparent; this creates a significant disparity in valuation expectations between entrepreneurs and external financiers, which are often difficult to bridge. At some point in the future, the cash flow trend and the net profit-free cash flow disparity reverses – cash flow begins to exceed net profit as minimal capital expenditure is needed to support working capital (the firm does not need to compete in the marketplace by offering favorable payment terms to customers and its revenue size allows it to exert pressure on suppliers, which now credit the firm). The firm is also able to find its “sweet spot” for managing inventory levels. Consequently, free cash flow becomes a strongly positive number. This trend once again reverses towards the end of the firm’s life cycle.

Cash is the lifeline of any business, even more so for an entrepreneurial firm. Cash flow can most simply be defined as the flow of capital into and out of a firm over a specific period of time. Cash flow also captures whether the entrepreneurial firm is adding cash to its reserves or eroding it. Adequate cash assures survival; poor cash flow management leads to imminent failure. The most critical objective for entrepreneurial firms is to keep the right balance between consuming and generating cash – a fine balance must be achieved between revenues, costs, working capital items, and capital expenditures. An entrepreneurial firm generating repeatable cash flow is well protected from business failure and any negative external shocks. Cash flow also represents the most comprehensive measure of the management team’s capability.

Let's review the cash flow statement for NatureCARE Pharmacies and interpret its most important components. The reduction of accounts receivable in the amount of \$1,441,000 forecasted for 2011 means that the firm is expected to collect less than what it plans to sell. This trend is expected to continue between 2011 and 2015 (note that all the values of the changes in accounts receivable are negative and represent a cash outflow; hence, a negative number). A similar trend of negative cash flow (or outflow) is anticipated for inventories. In 2011, the firm is expected to buy more inventory (\$2,668,000) than it is planning to sell (please note that inventory relates to costs of goods sold); hence, a negative change in cash flow in inventory balances between 2011 and 2010. Changes in liabilities go in the opposite direction compared with changes in assets. In our example, NatureCARE Pharmacies is expected to use the suppliers' credit to finance its operations. In effect, the firm incurred more costs than it paid for; hence, the positive inflow in cash flow equal to \$4,344,000 expected in 2011 (this is a major component of positive cash flow for the firm between 2011 and 2015). If suppliers were unwilling to extend this credit to NatureCARE Pharmacies, the firm would not be able to effect its expansion program without further financing or changes to other components of its working capital. As noted in Chapter 4, changes to accounts receivable policies and the management of inventory (by limiting its size) are likely to negatively affect the firm's revenue line.

The overall cash flow for NatureCARE Pharmacies appears to be reasonably strong over future years. Each year, the firm is expected to generate strong cash flow from its operations; this is primarily due to anticipated increases in net profit and good management of working capital. What accounts for a positive change in cash flow from operations is the credit, which is extended to the firm by its suppliers. If we separate working capital from operating cash flow, changes in working capital items are positive between 2011 and 2013. However, working capital begins to consume cash in 2014 and 2015. For example, in 2011 a change in working capital is equal to \$235,000 ($[-\$1,441,000] + [-\$2,668,000] + \$4,344,000 = \$235,000$). In 2011, the firm secured \$10 million from venture capitalists as a result of acquisitions and the partial repayment of an outstanding loan (\$5 million in 2011 and \$5 million in 2012). The firm is also expected to carry some debt on its books in the amount of \$7 million. The net change in cash flow is expected to be negative in 2011, but will grow steadily in future years, increasing the cash balance from \$1.6 million in 2011 to \$33.9 million by 2015. In reality, this anticipated cash balance is unlikely to sit on the balance sheet, but may be used for further expansion of the business beyond what is envisaged in the current business plan.

The cash conversion cycle

As noted, the objective of any entrepreneurial firm is to manage cash well. This is accomplished by quickly collecting accounts receivable, increasing the rotation of inventory and limiting investment into it, and stretching the disbursement of cash to suppliers. The analysis that captures the dynamics between the three components of working capital is known as the cash conversion cycle, or liquidity gap.

The cash conversion cycle represents the sum of days of outstanding revenue (i.e., the average collection period of accounts receivable in days) and the days of inventory less days of payables outstanding. Days of revenue outstanding outlines the amount of days of the firm's accounts receivable. In other words, days accounts receivable indicates the amount of days the firm's clients take to pay. Days inventory indicates the average number of days that inventory stays at the firm's warehouse before it is sold. The two components added together

(days accounts receivable and days inventory) demonstrate the length of time it takes for the firm to collect its cash from customers from the moment when the firm buys inventory for re-sale or production. The shorter this period of time, the less cash is effectively tied up in inventory and accounts receivable. Days payable, on the other hand, indicates how long suppliers are willing to wait to be paid for the sale of raw materials or products. In summary, the cash conversion cycle is captured by the following formula: days accounts receivable + days inventory – days accounts payable. The net effect is the length of time the firm has to finance working capital, and the desired number is low or negative (in this case, the number of days accounts payable is higher than the sum of days accounts receivable and days inventory).

We previously learned about the formulas for calculating days accounts receivable, inventory, and payable in Chapter 4. A reminder of these formulas follows (see equations 7.4–7.6).

$$\text{Days Accounts Receivable} = \frac{\text{Accounts Receivable}}{\text{Revenue}} \times 365 \quad (7.4)$$

$$\text{Days Inventory} = \frac{\text{Inventory}}{\text{Cost of goods sold}} \times 365 \quad (7.5)$$

$$\text{Days Accounts Payable} = \frac{\text{Accounts Payable}}{\text{Cost of goods sold}} \times 365 \quad (7.6)$$

In the case of NatureCARE Pharmacies, days accounts receivable for 2011 is expected to be equal to 30 days ($\$6,977,000 / \$84,891,000 \times 365 = 30$), days inventory is expected to be equal to 120 days ($\$21,965,000 / \$66,809,000 \times 365 = 120$), and days accounts payable is expected to be equal to 90 days ($\$16,474,000 / \$66,809,000 \times 365 = 90$). This indicates that the cash conversion cycle for the firm is expected to be equal to 60 days ($30 + 120 - 90 = 60$). So, what does this mean? First, a positive number indicates that NatureCARE Pharmacies needs to make an investment into working capital. If we add the amounts of accounts receivable and inventory and deduct the amount of accounts payable, NatureCARE Pharmacies ties up (or invests) about \$12.5 million in working capital ($\$6,977,000 + \$21,985,000 - \$16,474,000 = \$12,469,000$). A positive number also indicates that if the firm is expected to maintain the current status of days accounts receivable, inventory, and accounts payable, any increases in revenue would automatically translate into an incremental investment in working capital. For example, if days inventory for 2012 were expected to stay at 120 days (in our case, they are expected to be reduced to 90 days) and other components of working capital were to stay the same, the total investment into working capital would need to be equal to \$16.9 million.

While the conversion cycle analysis may not be immediately intuitive – especially when the amounts of days in certain components of working capital change from one period to another, in addition the bases for these calculations (i.e., revenue and costs of goods sold) – the approach illustrates that a strongly positive conversion cycle requires additional capital to be “tied up” in working capital items. The objective for entrepreneurial firms should always be to minimize the cash conversion cycle. Table 7.6 presents a summary of the most common techniques to manage the three components of working capital (receivables, inventory, and payables).

Table 7.6 The most common techniques for managing working capital

<i>Working capital component</i>	<i>Managing techniques or approaches</i>
Accounts receivable	Establish and execute clear collection policies and procedures Conduct thorough investigation before extending credit to new clients Consider raising standards for granting credit Establish credit limits for all customers (and follow them) Monitor and “overreact” to overdue receivables (analyze ageing receivables) Invoice immediately upon sale Be active in collection (letters, phone calls, collection agencies, make deals – settle for a reduced amount, sell accounts receivable to factors) Maintain good relations with customers (large and small) Provide incentives to pay early (discounts) and consider charging interest on overdue accounts
Inventory	Monitor suitability of ordering raw materials (time and value) Regularly calculate stock turnover (in turns or days) Maintain a limit of investment in working capital (calculate value of stock) Implement inventory management systems (“just-in-time” or ABC system); calculate “economic order quantity” and “reorder point” Dispose of slow moving and outdated products (offer discounts) Rely on outsourcing production where possible Avoid repeatable stock outs (occasional stock outs may be acceptable to customers)
Accounts payable	Develop clear authorization procedures for all expenditures (value limits) Take advantage of discounts only if cash flow allows Buy amounts consistent with your forecast Investigate alternative sources of supply

Cash flow sensitivity analysis

Sensitivity analysis may be defined as the process of determining the responsiveness of certain parameters to other variables. Specifically, the objective is to understand how changes in one or a group of independent variables are likely to influence dependent variables under different scenarios. Sensitivity analysis is a “what-if” form of scenario analysis; it allows one to anticipate what is likely to happen if an expected course of action does not materialize.

Sensitivity analysis is normally used in financial analysis to understand the impact of certain variables upon other measures in the context of financial forecasts (it is irrelevant to run “what-if” scenarios related to the historical financial performance of a firm, even though quantifying some risks and “stress-testing” certain assumptions from the past can be useful). Since the objective of our financial analysis is to provide an analysis of the financial forecasts for NatureCARE Pharmacies (rather than examine the firm’s historical financial performance), performing a sensitivity analysis may provide useful considerations.

It is important to note that analysts, managers, and bankers normally run the financial sensitivity analysis with respect to the income statement. Throughout this chapter we have constantly underlined the importance of the cash flow statement as the core financial report, and so we will run our sensitivity analysis on the basis of cash flow (our “stress test” will specifically address the issues related to working capital). Let’s see how specific assumptions

Table 7.7 Sensitivity analysis for NatureCARE Pharmacies for operating cash flow (impact on 2011)

<i>Working capital component</i>	<i>Scenario A (negative)</i>	<i>Scenario B (more negative)</i>	<i>Scenario C (positive)</i>
Days accounts receivable	45 days / \$1.5 million	60 days / –\$2.0 million	15 days / \$8.5 million
Days inventory	150 days / –\$0.5 million	180 days / –\$6.1 million	60 days / \$15.9 million
Days accounts payable	60 days / –\$0.5 million	30 days / –\$6.1 million	75 days / \$2.2 million

regarding working capital are likely to affect cash flow from operations (see Table 7.7). Our analysis will center on changes in days accounts receivable, inventory, and accounts payable. The sensitivity analysis may involve changing these values in one year or over time (i.e., using different values in different years). It is important to note that in the anticipated case for the firm in 2011, net cash flow from changes in working capital is equal to \$5.0 million (see Table 7.2) – this is our base measure.

The sensitivity analysis presented in Table 7.7 outlines three scenarios (two negative and one positive); these scenarios test the impact of changes upon operating cash flow. In the first simulation (scenario A), we increase the days accounts receivable (from 30 days to 45 days), worsen inventory management (120 days to 150 days), and force accounts payable to be settled earlier (90 days to 60 days). The most profound impact is seen from the change in days inventory and accounts payable. Under both scenarios, the firm's operating cash flow becomes negative (–0.5 million) – a large enough shift to place NatureCARE Pharmacies into financial difficulties in spite of an anticipated injection of new capital equal to \$10 million (under these assumptions, the firm would need an additional \$4.0 million just to maintain a positive cash balance in 2011). The next analysis (scenario B) provides an even worse scenario – the firm requires an additional \$10 million to break-even. The sensitivity analysis also tests a positive scenario where the firm does better than expected in managing working capital. In this scenario, the firm is able to generate between \$2.2 million and \$15.9 million worth of additional capital.

Profitability and margins

Profitability ratios describe the relationship between costs and revenue expressed as a percentage of revenue (the profitability ratio is not expressed as a dollar amount, but rather a percentage value or margin). Specifically, profitability ratios measure how much of the firm's revenue is consumed by expenses. There are different measures of profitability seen in financial literature, including gross profit margin, operating profit margin, and net profit margin. The most widely quoted and often-cited profitability measure is the net profit margin; it is also one of the most poorly understood measures of profitability, as it is often equated to cash. Nothing can be paid for from net profit; all expenses are paid for by cash.

The most under appreciated – and useful – line of the income statement is EBITDA, which rarely appears in the income statement as a separate line, but is arrived at by adding amortization and depreciation to net operating profit and then dividing the sum by revenue. EBITDA profit can also be expressed as a percentage of revenue, or as an EBITDA margin (see equation 7.7). The EBIT (or operating profit) line is second only in importance to EBITDA (see equation 7.8). You may be asking yourself why EBITDA is considered to be

so useful. EBITDA can be used for comparative purposes. Because the EBITDA line reports the level of profitability before any financing decisions (i.e., the level of debt and associated interest payments), investment decisions (i.e., the level of capital expenditure and associated depreciation expense), and business organization decisions (i.e., different firms are organized differently in terms of distribution structure, access to clients, use of marketing, and so on) have been made, it forms an appropriate basis for a comparative analysis. EBITDA also reports the level of profitability before taxation; as different geographic destinations have different taxation levels and offer unique taxation schemes (i.e., investment tax credits, tax deferral, and tax-free zones), the EBITDA line removes the taxation component from the analysis (the net profit line is not useful for comparative purposes). EBITDA can also be used for valuation purposes.

A cash-flow-based measure of profitability can also be offered. The OCF margin describes the relationship between cash flow from operations and revenue (see equation 7.9). The cash flow from the operations margin is a more inclusive and informative profitability line than EBITDA or EBIT because it captures not only the overall profitability of the entrepreneurial firm, but also the cash investment needed for inventory and accounts receivable to generate revenue; as a result, this indicator allows for a careful evaluation of the “total” cash outlay of revenue generation. OCF also illustrates how effectively the firm generates cash (as opposed to profits) from revenue.

Traditional profitability ratios		Cash flow profitability ratios	
$\text{EBITDA}\% = \frac{\text{EBITDA}}{\text{Revenue}}$	(7.7)	$\text{OCF}\% = \frac{\text{Cash flow from operations}}{\text{Revenue}}$	(7.9)
$\text{EBIT}\% = \frac{\text{EBIT}}{\text{Revenue}}$	(7.8)		
EBITDA	= Earnings before interest, taxes, depreciation, and amortization	OCF	= Operating cash flow
EBIT	= Earnings before interest and taxes		

Table 7.8 presents different profitability measures (EBITDA%, EBIT%, and OCF%) for NatureCARE Pharmacies in comparison with the industry averages. The EBITDA margin grew steadily between 2007 and 2010 and is expected to stabilize at the 9–10 percent level in the future. This level of EBITDA margin appears to be achievable, as the firm has been able to generate this level of profitability in the past. On a comparative basis, NatureCARE Pharmacies appears to outperform the industry in terms of the EBITDA profit margin (about 9 percent for NatureCARE Pharmacies versus 6.1 percent for the industry). What may be worrying for NatureCARE Pharmacies in the long term is that the financial performances of firms in the sector tend to gravitate towards industry averages in the long run; in the future, the profitability of NatureCARE Pharmacies may decline. It is important to note that the OCF margin captures more fluctuations in profitability, especially between 2011 and 2015. As a result, the OCF margin appears to be a more cautious and conservative measure of profitability.

Table 7.8 Profitability ratios (traditional and cash flow equivalents) for NatureCARE Pharmacies for the period between 2007 and 2015

	2007	2008	2009	2010	2011	2012	2013	2014	2015	Industry averages
EBITDA %	4.4	8.6	10.9	11.4	9.2	10.5	10.6	10.5	10.1	6.1
EBIT %	−0.7	6.1	9.8	10.0	7.0	8.9	9.2	9.2	9.0	1.7
OCF %	1.2	3.4	3.7	5.2	5.9	7.2	7.6	5.9	5.7	n/a

EBITDA: earnings before interest, taxes, depreciation, and amortization; OCF: operating cash flow

Growth dynamics

An analysis of growth dynamics in the firm's key financial numbers represents a special consideration of the horizontal analysis, where a percentage growth in specific items of the financial statements is captured. Growth within the financial performance of a firm is crucial to its continued success. We consider growth dynamics in two lines of the income statement (revenue and EBITDA) and in one line of the cash flow (free cash flow). Growth in the revenue line reflects the firm's overall success in the marketplace. If the entrepreneurial firm is able to grow its revenue line beyond the rate of growth in the market, the firm is said to have captured an increased share of the market. Growth in market share confirms that the firm's commercial proposition is well balanced (between price and quality), that its products have generated a customer following, that its distribution channels have been properly chosen, and that existing market players are less competitive.

Further confirmation of the entrepreneurial firm's success in the marketplace can be deduced from an increase to the EBITDA line. Any entrepreneurial firm desires to increase revenue and, at the same time, increase its EBITDA margin and EBITDA value. Growth in EBITDA is important because it confirms that the entrepreneurial firm is generating (and not destroying) value; the increased EBITDA confirms that the entrepreneurial firm is capable of converting revenue growth into profit enhancement.

Free cash flow is also an important component of measuring the growth dynamics of an entrepreneurial business. Growing free cash flow provides a cushion of safety and protection against business failure and unexpected events in the marketplace. Free cash flows are also the cornerstones of the discounted cash flow method; this is the most comprehensive measure of overall effectiveness of operations because it captures how effective the firm is in growing its free cash flow from growing revenues.

Table 7.9 presents the growth dynamics for NatureCARE Pharmacies across three financial measures. The table confirms a steady growth in revenue and EBITDA. The growth of free cash flows is generally more cyclical, more unstable, and less predictable. In the case of NatureCARE Pharmacies, free cash flow undergoes periods of decline and deterioration in years 2008 and 2014.

Business metrics for entrepreneurial firms

Entrepreneurs often use a simplified method of analysis to quickly assess the performance of their entrepreneurial firms. Commonly, business metrics are used to analyze key data sets. These indicators are often different compared with those found in traditional financial analysis. We discuss these business metrics in the context of the entrepreneurial venture's dashboard. Of course, business is not the only space where analytical metrics are used.

Table 7.9 Growth dynamics in revenue, EBITDA, and free cash flow for NatureCARE Pharmacies between 2007 and 2015 (percent)

	2007	2008	2009	2010	2011	2012	2013	2014	2015
Revenue	234.8	106.6	229.2	144.3	46.4	36.5	16.3	13.0	11.2
EBITDA	117.4	299.9	317.9	156.3	18.0	55.8	17.4	11.4	7.2
FCF	12.9	-28.0	16.9	11.6	24.8	n/a	23.6	-12.8	8.5

EBITDA: earnings before interest, taxes, depreciation, and amortization; FCF: free cash flow

Unique metrics and indicators are widely used in statistics, computer science, engineering, medicine, and sports.

Business metrics gauge and monitor the performance, efficiency, and progress of the entrepreneurial firm, or can be used to objectively quantify an explicit business process. They are the leading business indicators that direct strategic decision making. Without these metrics, strategic decision making becomes a series of best-effort business guesses. Business metrics are the key bits of information that define the nature of the business. In comparison with key performance indicators (or KPIs – a measure frequently used in business to monitor a specific part of the business or business process), business metrics are often designed to capture all aspects of business activity. Business metrics are often designed to be enterprise-specific and address the key concerns of major stakeholders in the entrepreneurial firm (i.e., management, founders, shareholders, and so on). Each entrepreneurial firm must decide which business metrics it needs to monitor. This process may take some time; the decision process to include or exclude certain business metrics often requires strong business judgment, careful observation, and even direct experience with specific business metrics. Furthermore, business metrics can be qualitative and quantitative. Some business metrics are regularly generated by the entrepreneurial firm in its daily activities while others require thoughtful examination, external investigation (i.e., gathering information from industry and research reports), implementation of surveys, and so on. The best business metrics should be easy to create, understand, measure, manage, act upon, and explain. They should also be sufficiently “granular” and detailed enough to be able to decompose specific business activities and allow for proper diagnosis. Business metrics should also be exhaustive in their description of entrepreneurial business activity and relevant to the specific business.

Business metrics can be used on a stand-alone basis or on a comparative basis. In a comparative setting, they can be compared with industry benchmarks or standards (though these can be difficult to determine at times). A comparative analysis provides a useful reference point and places a specific business indicator in the right context. Business metrics are not static; what matters to the entrepreneurial venture changes as it moves through its life cycle. Business metrics can also be performance-oriented (measuring a key business activity) or diagnostic-based (indicating why something is not working well).

While most business metrics generally rely upon historical information, they can be viewed as lagging metrics or leading metrics. The lagging business metrics are backward looking markers that reflect past business activity; they do not forecast future performance. Most financial indicators are regarded as lagging indicators because they are measured after the fact and may not be indicative of the future performance of the business. Leading business metrics, on the other hand, are forward looking and focus on the business activities which are purported to drive the future performance of the entrepreneurial venture. Leading metrics have a prognostic and predictive quality in that they are known to correlate with future

performance. These metrics are likely to operate on a cause-and-effect principle. For example, customer satisfaction may be directly related to repeat orders and increased revenue. Employee satisfaction may convert into less turnover, more productivity, and higher creativity (leading to more revenue and higher profits). However, the leading business metrics are not easily identifiable and often require statistical analysis.

There are many advantages to using business metrics. Properly selected business metrics are often simple to understand and can be easily communicated to others. They act to unite efforts across various functional departments in the business. Business metrics can also reduce a wide range of possible business values, key success factors, and key performance factors into a small group of the most important indicators. Entrepreneurs often intuitively recognize that if they select the right business metrics, they will be in a position to achieve their personal ambitions and business objectives. Metrics also allow the entrepreneur to make decisions on a timely basis. As noted, some business metrics actually have the ability to forecast future business performance in revenue, profit, cash flow, and value – this is immensely useful for decision-making purposes. Finally, business metrics allow the entrepreneur to be more proactive (rather than reactive) in managing the entrepreneurial venture.

The entrepreneurial venture's dashboard

Automotive vehicles are equipped with a range of gauges (or an instrument cluster) which convey the most important information to the driver. These indicators allow the driver to proceed safely and efficiently. Most importantly, they serve as important action triggers for the driver should the indicators fall behind a desired level.

The concept of the entrepreneurial venture's dashboard is a metaphor aimed to represent the most critical business metrics (this term was originally coined by General Electric). The dashboard basically offers an "at-a-glance" review of the most important business metrics for the firm; it is critical business intelligence captured in the form of a paper report (often called a "flash" report) that the manager receives on a daily, weekly, or monthly basis. A business dashboard works best when the entrepreneur is familiar with industry averages and benchmarks, understands the historical trends in key business metrics for his/her area of business, and relies from time to time on a more comprehensive review of the entire business. While business dashboards (and the business metrics presented in them) have multiple advantages, they also have some disadvantages. The most pronounced disadvantage of using a business dashboard is that it provides the value of specific business metrics right in the moment of performance. The indicators on the entrepreneurial firm's instrument panel rarely present summaries, trends over time, comparisons, exceptions, and so on. If the entrepreneur is not aware of the proper historical or comparative context, the dashboard may be of limited value.

As observed previously, it can be difficult for the entrepreneur to decide which business metrics to monitor. In the case of the dashboard, this task becomes even more challenging because the entrepreneur has to decide which indicators (from a pre-selected group) should be included on the dashboard. Academics and business practitioners normally recommend that entrepreneurs work with five to seven business metrics. While there is no precise one-fits-all formula for how to select the right metrics, there are a handful of questions the entrepreneur can ask to decide upon the right composition of business metrics for the dashboard: What do managers need to know to run their business effectively? What types of behaviors do shareholders and managers want to promote? What

keeps managers up at night? What information and data are most relevant to managerial decision making?

The balanced scorecard for entrepreneurial firms

While using a business dashboard with selected business metrics is an important component of managing an entrepreneurial venture, the entrepreneur may sometimes need to rely upon a more comprehensive and systematic assessment. A more thorough business review may be achieved through the use of a balanced scorecard. This measurement instrument is defined as a structured report used by management to monitor business activities. The balanced scorecard is a broader representation of the entrepreneurial vehicle's dashboard, where actual and targeted results are compared across key measures. Balanced scorecards are normally made up of four key areas: employees, customers, financial management, and operations (they may also include innovation, learnings, future prospects, and so on). It is important to note that an even more advanced monitoring and diagnostic tool can be used in management; this is called the strategic audit. The strategic audit is a more comprehensive analytical tool aimed at monitoring activities and pinpointing performance problems.

A balanced scorecard determines the most important goals for the entrepreneurial firm and segregates them into a set of contributing factors. Since the main theme of this book is value creation, we will focus on the main contributors and determinants of value creation. There are six main components relating to value creation: management, mode of operations, margins, money management, market, and market share. These components will therefore comprise the entrepreneurial value creation balanced scorecard (see Table 7.10 for a review of the main metrics for the six components). In the section below, we discuss the specific indicators that may be included in the entrepreneurial venture's value creation balanced scorecard. Since we have already discussed financial indicators in this chapter, our focus in the remaining section of the chapter is on metrics related to non-financial indicators of entrepreneurial value creation, namely market, market share, management, and business model.

Market is one of the most important determinants of entrepreneurial success and value creation. Market can also be the largest enemy for an entrepreneurial firm. If the entrepreneur identifies a suitable investment opportunity in a market which is growing and to which he or she can deliver a product or service that is superior (or at least comparable) to other market players, strong consumer demand can elevate the entrepreneurial firm to strong growth, profitability, value creation, and, ultimately, exit. As we noted in Chapter 3, it is of course possible to be successful in a market which is flat, growing slowly, or filled with multiple competitors. However, success in these markets is much more difficult to achieve. The main focus in market analysis should be on the entrepreneurial firm's target market: a unique cluster of customers towards which products and services are directed. The other area of concentration for the entrepreneurial firm is market coverage, defined as the number of retail outlets distributing a specific product or service. The key indicators in market analysis estimate two components: the size of the market and its growth rate. Many industries and markets are closely followed by analysts. Although many reports are available to the public for free, the most in-depth and comprehensive publications are often sold and can be expensive to obtain. Such reports may cost between \$5,000 and \$25,000 – quite a high expense if the entrepreneurial firm plans to purchase the reports annually. These reports normally highlight past and future overall market demand, the competitive structure of the industry (including a profile of each key market player), merger and acquisition activities in

Table 7.10 The balanced scorecard for entrepreneurial firms based on the six determinants of value creation

<i>Main building block</i>	<i>Broad thematic areas</i>	<i>Key concepts</i>	<i>Specific metrics</i>
Market	Market attractiveness	Target market Market coverage	Volume and value
Market share	Revenue generation	Lead generation Lead conversion	Cold calls per employee New leads per employee Revenue per customer Customer acquisition cost Revenue per employee Revenue/wages
	Customer experience	Customer retention Customer satisfaction	Survey index Survey index
	New product development	New product introductions	Patents
Management	Talent pool management	Recruitment effectiveness Management training Management satisfaction Management retention	Survey index Survey index Survey index Survey index
Mode of operations	Business model effectiveness	Production efficiency Product quality	Gross profit margin Production downtime Defects Production waste
	Capital employment efficiency	Financial returns	Return on invested capital Return on assets
Margins	Company-wide measures	Profitability	EBITDA margin EBIT margin
	Project-specific measures	Project profitability	EBIT or EBITDA per project Profit break-even Project return on investment
Money management	Cash management	Cash flow	Days accounts receivable Days accounts payable
	Liquidity measures		Quick ratio Current ratio Liquidity gap

EBITDA: earnings before interest, taxes, depreciation, and amortization. EBIT: earnings before interest and taxes

the market (including financial considerations paid for acquisition targets), the most attractive and fastest growing segments of the market, consumer requirements, future trends, and so on. Of course, it is possible for an entrepreneurial firm to gather its own market intelligence data, but this requires consistent analysis; the entrepreneurial firm may not have sufficient human resources to dedicate towards in-depth market surveillance. A thorough understanding of market dynamics becomes much more difficult to achieve if the entrepreneur has

developed a totally new product or service. In this circumstance, the entrepreneur has to “discover” the market rather than merely “ascertain” it. Consequently, the robustness of market estimates will largely depend on the quality of assumptions in modeling market demand and market dynamics.

Inherently connected with market dynamics is the competitive structure of the market. Here, the entrepreneurial firm can focus on areas which contribute towards improving the firm’s sustainable competitive advantage in the marketplace. Two important measures are new product or service introductions and the overall customer experience with the portfolio of offered products or services. Overall competitive success is expressed in the trajectory of revenue growth, which captures the effects of lead generation (the number of new clients approached) and lead conversion (the percentage of leads converted into paying customers). The best measure of entrepreneurial success in the marketplace is the market share data, which can be expressed in absolute terms (as a percentage of the market effectively “owned” by the entrepreneurial firm) or comparative terms (how much larger the entrepreneur’s market share is compared with its competitors; for example, the entrepreneurial firm’s market share is 1.4 times larger than a specific competitor). Entrepreneurial success and value creation come as a result of the entrepreneurial firm’s ability to solve unique and persistent customer problems (rather than mere annoyances). New product or service offerings are often reflective of the innovative nature of the entrepreneurial firm. Innovation can be captured by determining the amount of capital dedicated to research and development, the number of product or service improvements, the number of patent applications, and so on. Customer experience with products and services has a significant impact on the entrepreneurial firm’s ability to develop a sustainable business (where it adds new clients without losing its existing client base). The key component of a positive customer experience is customer satisfaction, which further converts into customer loyalty and retention.

There are a wide range of business metrics related to market share (these may be industry and firm-specific). The most common metrics are revenue per customer, sales per square foot of retail space, and customer acquisition cost. There are also different metrics expressed on a per employee basis (i.e., revenue per employee, the number of cold calls per employee, new business leads per employee, etc.). Business metrics in the value creation category are mainly quantitative; these indicators can be calculated from an existing data set generated internally by the entrepreneurial venture. Some data may come from direct or indirect interactions with customers.

Next to the market in importance to the entrepreneurial firm is the management team. It is generally understood that frustration or disappointment on the part of the management team hurts the business and destroys the internal culture of the firm, teamwork, creativity, employee dedication, and so on. It is therefore important to measure employee satisfaction. In addition to employee satisfaction, the entrepreneurial firm needs to measure other components such as management retention, recruitment effectiveness, and management training. Management retention is important because any disruptions to the management team are likely to result in interference towards building an effective and stable team, engaging into the entrepreneurial learning process, making appropriate strategic decisions, and, most importantly, growing the entrepreneurial firm (management disruptions can amend the revenue growth trajectory). The entrepreneurial firm also needs to track the extent to which it is effective in filling spots on the management team’s roster. It is well known that partial management teams make more business mistakes, struggle with securing external finance, generate less innovation, make less robust strategic choices, and are more negatively affected by business cycles. Consequently, a partial team performs more poorly than a

complete team. Members of the management team also need opportunities to develop, refine, and polish their skills; this can be done through informal training, mentorship programs, job rotation (where a member of the management team is asked to assume a different management post within the entrepreneurial venture), formal training and education, attending conferences, and so on. The best practice in entrepreneurial firms is for management team members to be afforded an annual budget for training purposes (usually between \$2,000 and \$10,000).

Unfortunately, there are few formal metrics to measure how an entrepreneurial firm deals with its talent pool. Most entrepreneurial firms that regard their management teams as a critical component of their growth and value creation develop their own internal methods to measure these four components (i.e., recruitment effectiveness, training, satisfaction, and retention). These methods can be basic or more sophisticated. The most important thing is for the entrepreneurial firm to pay close attention to these four areas of management assessment. While more mature corporate firms can theoretically be more lenient towards these four management components, inability to hire the right people for the management team, problems with management turnover, a decline in job satisfaction, and failure to improve management skills can be damaging to most firms. Moreover, problems in any of these four areas may result in immediate negative effects on the firm.

Last, there are business metrics that relate to the actual business model. In broad terms, the business model needs to be economic, optimal, and effective. It also needs to ensure that resources (i.e., human, capital, tangible, intangible, and so on) are well utilized to generate quality products or services at a price expected by end users. Business metrics in this category are normally industry or market-specific. While some entrepreneurial firms successfully innovate their business model (or components of it), the vast majority of firms maintain a strong competitive position by incrementally improving upon their existing business construct and architecture. Metrics relating to the business model can be financial (i.e., gross profit margin, return on invested capital, return on assets, and so on) or non-financial (i.e., capacity utilization, production downtime, defects, production waste, and so on).

Questions to consider

1. Differentiate between traditional and cash flow measures. Why are cash-flow-based metrics more useful for analyzing the historical and forecasted financial performance of entrepreneurial firms?
2. Discuss the hierarchical or sequential approach to financial analysis offered in this chapter.
3. What is the relevance of industry comparison?
4. Discuss the divergence of free cash flow and net profit in an entrepreneurial setting.
5. Why is the EBITDA line so important?

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8 Valuation of entrepreneurial firms

Chapter objectives

After reading this chapter, you should be able to:

- outline the reasons for performing business valuation;
- discuss the major valuation methods;
- identify the main approaches used to determine a discount rate;
- describe the steps of the discounted cash flow method;
- understand the principles of the multiples method;
- be able to construct a valuation approach for any entrepreneurial venture.

Introduction

Business valuation can be simply defined as the systematic manner by which an asset is valued. In this chapter, we will discuss business valuation in the context of the entrepreneurial venture. The key premise of any business valuation is that the entrepreneurial firm is expected to continue its operations well into the future; this is commonly known as valuation made on a “going concern basis.”

Business valuation is performed for a number of reasons. Common reasons for valuation include business transactions (i.e., disposal of shares, mergers, or acquisitions, bank loans, business sale, initial public offering, private placement, buyout, bankruptcy, reorganization, and restructuring), personal circumstances (i.e., divorce, estate planning, and succession planning), and legal disputes (i.e., tax challenges, shareholder disputes, and contract disputes). Most commonly, however, business valuation is performed ahead of an acquisition or disposal.

The purpose of business valuation is to develop a valuation range that best captures the value of the firm. Business valuation aims to narrow the wide spectrum of possible values which can be assigned to the entrepreneurial venture. In other words, business valuation is about crystallizing the range in which a business transaction is likely to occur. While it is important to establish the valuation range, the ultimate value of the entrepreneurial firm is determined by the market forces present when the firm is sold or when any type of “liquidity event” involving the firm occurs. Examples include when a part of the business is sold to new partners, when existing shareholders dispose of shares to one another, when the firm is liquidated, or when shares are offered to the general public. In all of these examples, a business valuation is explicitly or implicitly made.

Business valuation is a combination of “art” and “science.” Financial engineering and business judgment are used in equal measure. The “science” is predominantly based on

“mechanical” functions and external research. The mechanical preparation of the valuation requires error-free financial forecasts for the entrepreneurial firm and an application of the most appropriate valuation techniques. The external investigation involves conducting research related to a specific industry and understanding the internal factors present inside the firm. The “art” comes from developing a set of robust assumptions related to the business (this is often done on the basis of incomplete information and imperfect data). Developing sound assumptions relates to the construction of the financial forecasts, determining specific inputs for the valuation model (i.e., multiples, discount rates, growth rates, and so on), and ascertaining the appropriate valuation range. The “art” of business valuation also involves establishing the final value of the entrepreneurial firm, which is typically done at the negotiating table when the parties specific to the transaction ultimately decide upon the value of the firm.

Owners of entrepreneurial firms rarely know the value of their ventures. Research and business practice suggest that less than one out of every three business owners actually knows their firm’s value; this is especially true for entrepreneurial ventures which had limited external financing (no bank loans or venture capital financing), the same business partners since inception, and an overall lack of liquidity events. Moreover, entrepreneurs rarely engage in the business valuation process, and those who do, often quote the “rules-of-thumb,” which may not be relevant to the type of business they run or the industry they operate in.

An overview of business valuation methods

The valuation range of a business is normally established on the basis of different valuation techniques which reflect the actual purpose and premise of the business valuation. The techniques outline the value of the entrepreneurial venture from various points of view and are important to consider when establishing the valuation range. Some valuations are more market-driven and appropriate for public firms (P/E, or price-to-earnings ratio; PEG ratio, or P/E divided by earnings growth; various dividend models), while other valuation methods are better suited to private firms (EV/EBITDA (earnings before interest, taxes, depreciation, and amortization), or enterprise value [EV] divided by EBITDA earnings; EV divided by revenue). Some valuation techniques (such as discounted cash flow models) are successfully applied in both settings. Valuation techniques can be constructed around the income statement or rooted in the balance sheet. Some techniques rely heavily on reflecting the underlying risks of the business, while others appear to be risk-neutral.

Table 8.1 summarizes the main valuation methods used in the entrepreneurial setting. The valuation methods are divided into three main groups: multiples methods, capitalization methods, and accounting-based methods. For multiples, industry comparative data (relevant to a specific firm) is applied to determine the firm’s value. This method is based on the understanding that a single firm’s financial characteristics (usually defined as EBITDA, EBIT, or net profit) can capture business value. The advantages of multiples are that they are simple, intuitive, quick, and easy to apply. As multiples methods often relate to a specific part of the income statement, the multiples approach is more relevant to the main stakeholders of the firm (e.g., common equity holders and bondholders). Some of the disadvantages to this approach are that multiples tend to oversimplify the business valuation process, that relevant multiples can vary widely from one time period to another, that businesses are often structured differently in the industry (i.e., different revenue compositions, business models, client bases, products, and so on, which makes comparisons quite challenging), and that

Table 8.1 A comparison of the main methods of business valuation

Characteristics		Multiples methods		Capitalization methods		Accounting-based methods	
Concept		Industry-wide comparative valuation		Reflecting risk by discounting value		Balance sheet use	
Category		Earnings multiple	EBITDA multiple	EBIT multiple	Revenue multiple	Capitalization of proceeds	Liquidation value
Formula		$\frac{P}{E}$	$\frac{EV}{EBITDA}$	$\frac{EV}{EBIT}$	$\frac{EV}{Revenue}$	EBITDA $\frac{EBITDA}{k}$ Earnings $\frac{Earnings}{k}$ $\frac{D}{k}$	Assets – Liabilities (re-adjusted) Assets – Liabilities Replacement value n/a
					$\sum \frac{FCF_n}{(1+k)^n} + \frac{TV}{(1+k)^n} + \text{adj}$		
Components		Price, earnings	EV, profit	EV, profit	EV, revenue	Free cash flow, discount rate, terminal value, adjustments	Discount rate & various proceeds (EBITDA, earnings, dividends)
Valuation domain		Public	Public/private	Public/private	Public/private	Public/private	Public/private
Common range		10–20x	5–8x	8–12x	0.2–2.0x	n/a	n/a
Advantages		• Simple and quick • Comparative data freely available • All stakeholders' interests are captured, especially for EV-based methods • “Rules-of-thumb” multiples may commonly be known		• Comprehensive (especially DCF) • Reflects underlying operating risks • Highly intuitive framework (higher risk, lower price) • Complex procedure (especially DCF) • Requires financial forecasts • Requires significant experience and business judgment on inputs		• Simple (replacement value may be more complex) • Useful to define extreme valuation parameters (either valuation floor or ceiling)	
Disadvantages		• May not reflect future earnings or profit potential • Too simplistic (may not account for other business factors)		• Accounting-based • Disregards operating parameters (cash flow, profitability) • Centers around the balance sheet (may not provide the best metrics for financial performance analysis)			

DCF: discounted cash flow; EBIT: earnings before interest, and taxes; EBITDA: earnings before interest, taxation, depreciation, and amortization; D: dividends; E: earnings; EV: enterprise value; FCF: free cash flow; k: discount rate; P: price; TV: terminal value; adj: adjustments reflect adding values for current assets and deducting values for all liabilities

some important business and financial components are ignored (i.e., cash flow). Multiples methods can be divided into two subcategories: earnings-based and enterprise value-based. The first subcategory is based on an earnings multiple commonly known as price-to-earnings (P/E). The P/E multiples method, often used in valuing public firms (this technique may be less relevant to entrepreneurial firms, as it only relates to common equity holders), captures how much investors are willing to pay for one dollar of the firm's earnings. In this method, industry average P/E multiples are used to value the underlying firm. For example, if the relevant industry P/E multiple is equal to eight times and the firm's earnings are equal to \$5 million, the firm's value is equal to \$40 million (please note that no adjustments are made for debt).

The remaining valuation techniques in the multiples method are derived on the basis of "enterprise value" (EV), which is presumed to capture the entire economic value of the firm while considering all financing sources the firm has at its disposal. EV is often regarded as the theoretical "takeover price" that an outside investor would pay for the firm, free and clear of all obligations (i.e., debt, preferred shares, other liabilities, and so on). In other words, EV recognizes that the willing buyer needs to settle all the debts and liabilities that the firm has on its balance sheet while benefiting from available cash and cash equivalents. The advantages of the EV framework are that other relevant parts of the financial structure of the firm are represented (such as common shares, preferred shares, and creditors), that the measure allows for a comparison of firms with different capital structures (for example, leveraged and unleveraged firms), and that it can be used for firms of different asset intensities (though in some cases, especially for firms that are asset-intensive, the level of capital expenditure is deducted from EBITDA or EBIT). EV is considered to be a structure-neutral measure of a firm's value. The disadvantages of the EV approach are that EV can be difficult to establish, that it unnecessarily simplifies the valuation process, and that valuation multiples based on EV from one firm may not be applicable to another. EV is commonly used to develop three separate measures corresponding to the income statement: EBITDA multiples, EBIT multiples (used for less capital-intensive firms), and revenue multiples (often used when neither EBITDA nor EBIT are applicable).

The second category of valuation techniques relates to capitalization methods. Capitalization methods require the specific financial achievements of the firm (i.e., cash flows, earnings, profits) to be divided or capitalized by a discount rate or capitalization rate. Capitalization methods attempt to reconcile the two most fundamental concepts in finance: risk and reward. There are two approaches to capitalization. In a simple capitalization calculation, specific parts of the income statement (i.e., EBITDA, EBIT, and net profit) or the cash flow statement (i.e., free cash flow, dividends) are discounted by a relevant risk factor (as reflected in the discount rate, required rate of return, or weighted average cost of capital). The discounting agents in this approach include required rates of return (k), discount rates (r), average costs of capital rates (WACC), and risk adjusted rates ($k-g$; the required rates minus the growth rates in dividends). In a more complex capitalization calculation, the firm's financial forecasts (specifically, its free cash flows) are discounted; this approach is known as the discounted cash flow method (DCF). In the DCF method, the firm's free cash flows are discounted by the appropriate discount rate to the present point in time (the moment at which we perform the valuation exercise). In addition, the terminal value (this concept is discussed in more detail later in the chapter) is calculated and subsequently discounted to the present. Final adjustments are then made to these calculations to arrive at the net market value of common equity. The DCF method is based on the common valuation principle of maximizing cash flow and minimizing risk. It is important to note that the financial

projections used to perform business valuation have to be “normalized,” which means removing from consideration any one-off, non-recurring, or non-core items of the business (both on the revenue and cost side) and recasting the financial forecasts to reflect the repeatable financial characteristics of the venture.

The third category of valuation methods relates to the firm’s accounting and, specifically, the balance sheet. Accounting methods include net book value, liquidation value, and replacement value. All of these methods have limitations when compared with the other methods; they do not consider the firm’s profits, earnings, or cash flows, nor do they take into account the firm’s future potential. Accounting methods may be useful, though, as a way to establish the upper and lower boundaries of the firm’s value. The most common accounting-based method is “net book value” or “net worth,” which captures the differences between the historical values of assets and liabilities. The most pronounced limitation of this method is that assets and liabilities are recorded in the accounting books at historical values. Accounting methods are seldom used to estimate the value of a firm for transactions.

“Liquidation valuation,” on the other hand, is similar in approach to the net book value concept. In this case, assets are recorded at liquidation values (i.e., market values), or what one may be willing to pay for fixed assets (i.e., machinery, equipment, land), inventory, and any intangibles. These values are often much less than those recorded in the firm’s accounting books, especially if the liquidated firm employs highly specialized machinery and equipment, relies on rare raw materials, or uses unique infrastructure (such items may not be freely marketable and may be sold at significant discounts). In such cases, discounts on the disposal of assets based on historical records may be quite severe (e.g., 50 percent or more, especially if the potential buyers are aware that a limited number of buyers are likely to bid for sold items). There is, of course, the possibility that the assets recorded on the firm’s books are undervalued; for example, a firm with a significant inventory of a unique commodity product like oil, gas, or gold may see the price of these commodities increase over time. Liquidation valuation must also account for any costs directly related to liquidation (i.e., legal and otherwise). Similar to the problems experienced with valuing assets, the liabilities recorded in the firm’s accounting may not reflect market values; in other words, the key consideration is how much money is required to pay off liabilities (the settlement values may be less than the values of liabilities recorded in the books, as vendors may be willing to swallow a “hair-cut” with a cash settlement). Ultimately, the liquidation value is the amount the firm’s shareholders would receive if all of the firm’s assets are liquidated and all of its liabilities were settled. The liquidation value is often perceived as the floor price for the firm, as no shareholder would be willing to receive value for the business less than the amount of cash received from it upon liquidation. From this point of view, the liquidation method is sometimes referred to as “break-up” valuation.

The “replacement” valuation method is based on the idea that no investor would be willing to pay more for the firm than what it is expected to cost to replicate the business in the open market (such costs would include building production facilities, developing distribution structures, securing clients, testing products, purchasing required software and hardware, buying raw materials, and hiring staff). From this point of view, the replacement method often sets the ceiling price for the firm. While it may be a relatively straightforward process to establish the market price of certain assets used by the business, it can be much more difficult to put a price on “softer” parts of the firm such as business relationships, client loyalty, or product reputation.

It is often argued that entrepreneurial firms in the “modern economy” (especially internet ventures) require new valuation approaches, techniques, or measures. Such arguments were

most pronounced during the internet bubble of the late 1990s and early 2000s, when start-ups and young entrepreneurial firms were valued at extremely high multiples of revenues or profits (if they even existed). This book does not recommend any “special treatment” for such entrepreneurial ventures. “New era” firms have to pass the same common sense tests that any other venture must, and an evaluation of the business must be based on securing customers and generating revenue, controlling costs and generating profit (i.e., EBITDA, EBIT, net profit), effectively managing working capital, making appropriate capital budgeting decisions, and so on.

The discounted cash flow method

The discounted cash flow model considers three main interlocking components of value: cash flow size, cash flow timing, and cash flow risk. According to the DCF approach, the underlying value of the firm is equal to the present value of the free cash flows the firm generates. In principle, the DCF model involves projecting the firm’s cash flows for a reasonable period of time, then discounting the cash flows to the present point in time. It is normally possible to estimate financial forecasts with a degree of accuracy for a period of three to five years; beyond this point, too many unknown factors must be dealt with, and developing a detailed projection can become counterproductive (hence, the time horizon for a start-up is around 18 months). It is also important to recognize that at the end of the forecasting period, the firm is presumed to continue its operations into the foreseeable future – a fact captured in the form of “terminal value” (TV). At the end of the process, special adjustments are made to finalize the calculations and arrive at the net market value of common equity. The final adjustment to the calculations depends on whether the objective of the valuation is to calculate the market value of common equity or the value of the entire business. For example, to arrive at the market value of common equity (which is the purpose of most valuation exercises), current assets are added to the present value of cash flows, while liabilities (both short term and long term) and the value of preferred share equity (if available) are deducted. In the case of estimating the value of a complete business, current assets are added to the present value of free cash flows (the present value of terminal value is included in this calculation). The objective from this point on is to calculate the net market value of common equity.

Capitalization rates

Before we turn to applying the DCF method to the case of NatureCARE Pharmacies, it is imperative to discuss one of the most critical components of the method – the discount rate.

The capital asset pricing model

One of the most common methods of calculating the discount rate (also known as the capitalization rate or the required rate of return) is to rely on the capital asset pricing model (CAPM). This approach estimates the required rate of return that investors would need to secure in order to invest into a specific firm. The required rate of return is calculated in the context of the firm’s risk profile as measured by beta (β), which measures the firm’s degree of risk relative to overall market risk.

There are three components of the CAPM model: the risk-free asset (k_{rf}), the return on the stock market (k_{m}), and the appropriate beta (related to the industry in which the firm

operates). Two of these components ($k_m - k_{rf}$) represent the market risk premium, which encapsulates the additional risk that investors demand for an “average” investment (see equation 8.1). In other words, the market risk premium represents an incremental return that investors will be compensated with in exchange for investing into the market. The risk-free rate (k_{rf}) is the rate of return that investors expect from an investment that contains no risk. The risk-free rate is normally denoted by the rate of return from a 60- or 90-day Treasury bill – the minimum rate of return investors typically demand. The equation can also include a special component not normally found in the CAPM equation – the “illiquidity premium” (IP). IP accounts for the fact that entrepreneurial firms are often privately held and their shares are illiquid (shares cannot be freely bought and sold in the public market). The value of IP is generally believed to be between 5 and 15 percent.

$$k_r = k_{rf} + \beta \times (k_m - k_{rf}) + IP \quad (8.1)$$

k_r = The required rate of return for the firm’s common equity

k_{rf} = The risk-free rate of return

β = The beta of the firm’s common shares

k_m = The rate of return on the stock market

IP = Illiquidity premium

The concept of “beta” warrants additional discussion as it is the most complex component of the CAPM model. Generally, betas are found by running a regression analysis where simultaneous historical observations on the returns of a particular firm’s stock and the market are made and then charted on a graph (with the horizontal x-axis showing the return on the stock market and the vertical y-axis presenting the return on the stock). The graph depicts the specific points that chart the historical relationship between returns from a specific firm and overall returns of the market. If a sufficient amount of observations can be made (whether on a daily, weekly, or monthly basis) and then plotted on the graph as dots, a scatter graph is obtained which can then be used to regress the individual firm’s stock return on the return on the market. The obtained characteristic line portrays the relationship between the firm’s returns and overall market returns. The beta is effectively the slope of the regression line (i.e., rise over run). Beta can be greater than one (representing a risk profile of the firm’s returns which is higher than the market), less than one (risk less than the market), or equal to one (risk equal to the market). The relevance of the beta calculation relates to its “predictive” capabilities. For example, if a specific firm’s beta is estimated at 1.2, and if the market return is expected to be equal to 10 percent, then the return of the firm’s stock will be equal to 12 percent

$$(\text{return}_{\text{firm}} / \text{return}_{\text{market}} = 1.2; \text{hence, } \text{return}_{\text{firm}} = \text{return}_{\text{market}} \text{ times } 1.2; 10\% \times 1.2 = 12\%)$$

Beta represents the non-diversifiable risk (otherwise known as market or systematic risk) of a firm as it relates to factors that are presumed to affect all firms in the marketplace (i.e., interest rates, inflation, exchanges rates, cataclysmic events, acts of God, and so on). The other risk – diversifiable risk (also known as unsystematic risk if it relates to events that can affect one firm or an asset) – is deemed irrelevant if it can be moderated through diversification.

Although understanding the statistical underpinnings of a beta calculation is important, our objective is not to derive beta from scratch. Beta for specific firms and industries can be derived from various sources including research firms (i.e., Value Line, Bloomberg, and Capital IQ) and financial websites (i.e., Yahoo Finance, Google Finance). Appropriate data can also be found on numerous academic websites.

Table 8.2 presents historical betas for a wide selection of sectors (between 2000 and 2010). The selected sectors can be classified into three basic groups: defensive, cyclical, and counter-cyclical. Defensive sectors are less immune to economic swings and include such sectors as utilities, security, apparel, healthcare, non-alcoholic beverages, and pharmaceuticals. As seen in Table 8.2, defensive sectors have stable average betas normally below market risk (less than one or around one). Betas for these sectors do not vary over time (standard deviation is relatively small and equal to 0.10 to 0.15). Examples include electric utility (average return, $\bar{x} = 0.77$; standard deviation, $\sigma = 0.13$), medical services ($\bar{x} = 0.92$; $\sigma = 0.10$), and pharmacy services ($\bar{x} = 0.90$; $\sigma = 0.09$). Cyclical sectors offer strong growth opportunities during periods of overall economic growth and include sectors such as manufacturing, construction, wholesale and retail, professional services, transportation and distribution, and automotives. Betas for cyclical sectors are normally above one (denoting higher risk than the market) and can vary abruptly from year to year; hence, there is a higher standard deviation (automotives: $\bar{x} = 1.26$, $\sigma = 0.20$; internet: $\bar{x} = 2.14$, $\sigma = 0.65$; railroad: $\bar{x} = 0.96$, $\sigma = 0.24$). Counter-cyclical sectors are those sectors that are successful when the economy is in downturn: discount retailers, alcoholic beverages, temporary employment agencies, education services, etc. Betas for these sectors show average risk and less variance than those in cyclical sectors (educational services: $\bar{x} = 0.99$, $\sigma = 0.17$; tobacco: $\bar{x} = 0.68$, $\sigma = 0.07$).

We can determine the appropriate discount rate (or the required rate of return) for NatureCARE Pharmacies in the context of the adjusted CAPM (including the illiquidity component, IP). The average historical beta for the pharmaceutical services industry is equal to 0.90. If we further assume that the stock market returns 15 percent, that the 60-day Treasury bill returns 5 percent, and that the minimum adjustment for an illiquidity premium is equal to 5 percent, we can proceed to calculate the required discount rate in accordance with the adjusted CAPM model ($5\% + 0.90 \times [15\% - 5\%] + 5\% = 19\%$). The result of this calculation – 19 percent – is the effective rate that should be applied to the DCF model.

The weighted average cost of capital

The concept of the weighted average cost of capital was initially derived for the purpose of capital budgeting decisions – instances where financial managers consider various investment projects to determine which project is likely to add value to the firm. It is important to note that capital budgeting does not only refer to the purchasing of new equipment or machinery; hiring production staff or senior managers, purchasing new raw materials, streamlining the production process, engaging in marketing and promotional activities, performing research, and implementing innovation are all activities that can potentially increase the value of the firm. Furthermore, cash inflows and outflows for the firm may change as a result of undertaking such projects. The key components of capital budgeting are developing incremental cash flows (inflows and outflows) for the project, deciding on their timing, and assessing risk. One of the most critical aspects of project evaluation is the cost of capital, commonly viewed in capital budgeting decisions as a weighted average cost of capital (WACC). The basic rule when using WACC in capital budgeting is that if a project returns more than the cost of capital, it should be accepted; if it returns less than the WACC rate, the project should be rejected.

The concept of the weighted average cost of capital considers various sources of capital that the firm uses to finance its investment projects; this represents the compensation capital suppliers demand for the use of their funds. Because the entrepreneurial firm needs to

Table 8.2 Average betas for specific industries for the period between 2000 and 2010

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	Average	Standard deviation
Apparel ¹	0.82	0.86	0.91	0.88	0.76	0.90	0.93	0.87	1.14	1.30	1.35	0.97	0.20
Automotive ²	0.89	0.95	1.06	0.99	1.08	1.23	1.29	1.57	1.51	1.72	1.53	1.26	0.29
Building materials ²	0.85	0.83	0.84	0.80	0.74	0.96	0.98	1.07	1.39	1.45	1.32	1.02	0.25
Drug ¹	0.90	1.04	1.14	1.15	1.30	1.59	1.59	1.79	1.17	1.11	1.11	1.26	0.28
Educational services ³	0.84	0.90	1.16	1.03	1.10	1.09	1.09	1.30	0.84	0.75	0.81	0.99	0.17
Electric services ¹	0.53	0.54	0.73	0.80	0.76	0.81	0.94	0.93	0.82	0.79	0.78	0.77	0.13
Information services ²	1.10	1.13	1.10	1.04	0.94	0.86	1.01	1.06	1.24	1.28	1.10	1.08	0.12
Internet ²	2.57	2.50	2.47	2.72	2.63	2.78	2.30	1.97	1.41	1.04	1.11	2.14	0.65
Medical services ¹	0.85	0.84	0.87	0.82	0.82	0.96	0.94	1.10	1.10	0.97	0.88	0.92	0.10
Pharmacy services¹	0.81	0.92	0.90	0.89	0.78	0.81	0.93	1.12	0.94	0.88	0.95	0.90	0.09
Precious metals ²	0.42	0.40	0.38	0.41	0.41	0.67	0.90	1.11	1.41	1.18	1.18	0.77	0.39
Railroad ²	0.77	0.76	0.82	0.83	0.67	0.73	0.96	1.23	1.26	1.29	1.20	0.96	0.24
Retail ²	1.03	0.92	0.96	0.91	0.97	0.99	0.94	1.12	1.01	1.35	1.36	1.05	0.16
Telecom services ¹	1.45	1.59	1.62	1.35	1.32	1.69	1.43	1.34	1.43	1.10	1.01	1.39	0.21
Thrift stores ³	0.78	0.72	0.67	0.57	0.48	0.49	0.56	0.59	0.66	0.73	0.70	0.63	0.10
Tobacco ³	0.59	0.60	0.71	0.67	0.59	0.66	0.79	0.70	0.71	0.78	0.73	0.68	0.07
Trucking ²	0.86	0.89	0.86	0.83	0.78	0.88	0.98	1.04	1.17	1.30	1.20	0.98	0.17

Source: Based on information available on the website <http://pages.stern.nyu.edu/~adamodar/> (information retrieved on June 22, 2012)

Notes:

1 Defensive industries

2 Cyclical industries

3 Counter-cyclical industries

properly evaluate these budgeting projects, it needs to know the costs associated with securing capital (i.e., the price for capital); this is captured in the form of a single rate (i.e., the rate of return the project needs to satisfy the demands of capital providers).

An entrepreneurial firm can secure financing for its capital projects from a variety of sources, including existing shareholders (both common and preferred), bankers, financial institutions, new partners, strategic investors, and other creditors. In order to determine the entrepreneurial firm's overall cost of capital, we need to determine the cost of capital related to each capital supplier. Most academic literature focuses on estimating the WACC by implicitly assuming that the firm that undertakes the capital budgeting project is public and that the market price of common equity or preferred share equity is freely available (as determined by the market). Such an approach suggests that the cost of preferred shares is calculated by dividing the amount of preferred share dividends by the market price of dividends ($k_p = D_p / P_p$). Conversely, the returns expected for common shareholders are generally calculated by adjusting the so-called dividend growth model to effectively arrive at the cost of common share equity (i.e., the return expected by common equity holders). If we assume that the price of common shares can be derived from a formula ($P_0 = D (1 + g) / [k_c - g]$), then we can determine the rate of return common shareholders would expect to receive in accordance with this formula: $k_c = [D (1 + g) / P_0] + g$ (where k_c is the required annual rate of return for common shareholders on the anticipated project; D represents the amount of common share dividends; g is the expected constant growth rate of the firm's common share dividends; and P_0 is the current price of the common share). Further adjustments to the formulas used to determine the cost of capital for preferred shareholders and common shareholders would need to be made if a capital increase were to occur, or if there were to be an injection of new capital into the firm. Extra costs associated with this would include the cost of flotation or private placement, hiring external consultants (i.e., lawyers, accountants, and underwriters), printing (i.e., prospectus and associated materials), and so on.

It is easy to see that the approach commonly used to determine the WACC discount rate for public firms may not work effectively in an entrepreneurial setting (where most firms are private). The construct of determining the cost of capital by using the approach commensurate with public firms would effectively create a "circular error" – we are attempting to find a discount rate to apply to the discounted cash flow model in order to determine the price of common equity. The approach would ultimately need to be modified.

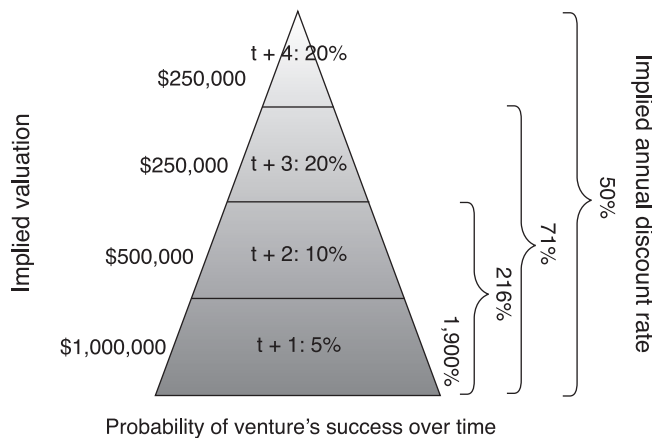
Consider debt and preferred shareholders equity. In terms of debt, when the entrepreneurial firm borrows capital, the cost is stated in the form of an interest rate the firm effectively pays on what it has borrowed (if the firm issues bonds, the interest rate is determined by the lender; similar circumstances occur when the firm issues a promissory note, commercial paper, or another debt instrument). The interest rate is effectively the cost of debt for the firm. However, since the interest rate on the debt is tax deductible, the firm's effective cost is much lower and is calculated according to the formula $k_d = k_{int} (1 - T)$, where k_d captures the cost of debt, k_{int} represents the interest rate on borrowing, and T is the tax rate. If our example subject, NatureCARE Pharmacies, borrows funds at 10 percent and its tax rate is equal to 36 percent, then the effective after-tax cost of debt would be equal to 6.4 percent ($10\% \times [1 - 36\%] = 6.4\%$). In terms of preferred shares, the preferred shareholders "charge" a preferred share dividend expressed as a percent of the value of preferred shares equal to 5, 7, or 10 percent or more; this represents the cost of capital for preferred shareholders (note that preferred share dividends are not tax deductible). In some entrepreneurial firms, preferred shares do not pay any dividends; preferred shareholders only hold priority in the event of liquidation, bankruptcy, or a winding up of the venture.

Determining the cost of common shares for entrepreneurial ventures requires some consideration. If we were to ask the entrepreneur at the start of the venture what his or her applicable discount rate or required rate of return would be, there would be two possible reactions. First, the entrepreneur may not have thought about this rate at any great length and therefore would not be able to verbalize a single number. Determining the discount rate is hardly a priority for an entrepreneur at this point in the firm's life cycle. At the outset of the venture, entrepreneurs are more focused on perfecting their market proposition, building their sales and distribution structures, conserving or "stretching cash," and other day-to-day activities focused on reducing or eliminating the initial teething problems of the venture. The major objective at this stage is business survival, not deliberating over applicable discount rates. Second, the entrepreneur may not be willing to disclose an actual number, especially if high returns are expected (as in the example provided next). Certain expectations may be unjustly amplified at this point in the process.

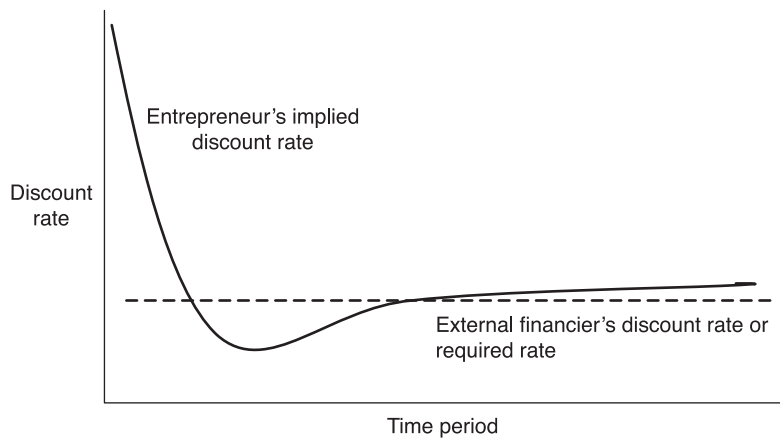
While it is not our objective to provide a theoretical framework that can be used to derive a precise discount rate in the entrepreneurial setting, a few key points are worth noting. Let's develop a simple example focusing on four different components: the probability of the entrepreneurial venture's success; the time required to achieve noticeable business success; the business valuations; and the discount rates. Let's assume that our entrepreneur has \$50,000 in savings and wishes to develop a start-up firm. The entrepreneur's annual salary is equal to \$50,000. At the time of the venture's inception, the probability of the venture being successful is quite small (let's assume it to be equal to 5 percent). At this point, the value of the venture is more or less equal to the cash value contributed by the entrepreneur. If the entrepreneur does not want to draw less than an annual salary of \$50,000, then he/she may implicitly consider the implied valuation of the venture one year hence to be equal to \$1,000,000 ($\$50,000 / 5\%$; at this point, the entrepreneur would not be making less than his or her current salary). The probability of the venture's success, combined with the entrepreneur's desire to not be worse off than before while still taking some minor business risks, implies that the discount rate (or the reflection of risk in the venture) may be infinitely high. Let's assume that the venture has a time horizon of four years to get to some measurable level of business success. Using basic present value calculations, we can calculate that the implicit annual discount rate at the end of year one is equal to at least 1,900 percent ($PV = -\$50,000$; $FV = 1,000,000$; $PMT = 0$; $n = 1$; $I/Y = []$). By the end of year two, the entrepreneur may be able to remove some of the operational risks associated with the venture (i.e., test the product in the marketplace and improve its features, develop customer relationships, generate actual sales, hire talented staff, and so on). Therefore, in the second year of operations, we can reasonably assume that the chances of business success will increase (let's say to 10 percent). Again, the increased probability of success has implications for the implied value of the entrepreneurial firm. At the end of the second year, the firm's value would be equal to \$500,000 ($\$50,000 / 10\%$) and the implicit annual discount rate would be equal to 216 percent ($PV = -\$50,000$; $FV = 500,000$; $PMT = 0$; $n = 2$; $i/Y = []$). At the end of years two and three, the implied business value would be equal to \$250,000 and the discount rate would be equal to about 50 percent (assuming that the entrepreneur continues to deal effectively with operational risks and challenges). Anecdotally, one of the most well-known American venture capitalists once said that he is always willing to assign a valuation of \$250,000 to any entrepreneurial venture that "appears to have some business sense." This is perhaps the point in the entrepreneurial venture's life cycle when sufficient start-up risks have been removed and less astronomic and more reasonable required rates of return can be applied to the valuation of the business. Calculations for the remaining two periods

(years three and four) and the implied valuations and discount rates can be determined using the detailed calculations in Figure 8.1a.

Figure 8.1b continues our consideration of the implied discount rate for the entrepreneurial venture in graphical form. The figure illustrates that the entrepreneur's discount rate starts out infinitely high (reflecting the low probability of success in entrepreneurial ventures, especially those in competitive markets), but moderates to more reasonable levels when certain operational risks have been addressed (this normally occurs between years three and five). At some point in the life of the entrepreneurial venture, the perception of risk diminishes significantly in the eyes of the entrepreneur as a track record of success builds and confidence is gained. This is the point in the graph that the entrepreneur's discount rate drops below that of the rate of return expected by external financiers (e.g., venture capitalists, displayed in the graph as a flat line). The external financier's perception of risk may be exaggerated,



(a) Probability of entrepreneurial success, value creation, and implied discount rates



(b) The entrepreneur's discount rates (or the required rates of return)

Figure 8.1 A consideration of the entrepreneur's discount rates

as the financier operates on the basis of imperfect information pertaining to the operational risks of the venture. In the long term, the discount rates (or required rates) expected by the entrepreneur, the external financier, and the public market are likely to gravitate toward the same expectations for the prevailing market discount rate.

Equation 8.2 provides the formula for calculating the average weighted cost of capital. Even though the capital structure of a firm can be quite complex, the structure of an entrepreneurial firm is generally much simpler than those of more mature firms. Typically, the capital structure includes debt, common equity, and maybe preferred equity (this part of the capital structure is less common in entrepreneurial firms); hence, the more simply composed formula in equation 8.2. It is important to note that the entrepreneurial firm may hold different types of debt with varying interest rates. The firm may also possess different classes of shares (e.g., new and old shares), as different shares may be enshrined with various economic and non-economic rights, entitling investors to different returns. All these components would need to be reflected in the WACC formula, which is easy enough to amend if additional components of the capital structure exist (the principles of calculating the percentage weights are the same). Additionally, new investors (as in the case of NatureCARE Pharmacies in 2016) may have different return expectations than existing shareholders.

We will use the example of NatureCARE Pharmacies for calculation purposes. The first step in the calculation is to assess the entrepreneurial firm's capital structure (the mixture of capital used to finance the firm's assets) and calculate the percentage of each type of capital source. Assuming the data as presented in their balance sheet is accurate, NatureCARE Pharmacies is expected to have \$11.9 million of debt (at 10 percent per annum) and \$0.5 million of common equity from its existing shareholders in 2011, as well as \$10 million from investors. The firm has no preferred shares, so the weighted average cost of capital formula is simplified to $k_{wacc} = (w_d \times AT k_d) + (w_c \times k_c)$. Therefore, the proportion of debt is equal to 53.1 percent ($11.9 / [11.9 + 0.5 + 10] = 53.1\%$), the existing common equity is equal to 2.2 percent ($0.5 / [11.9 + 0.5 + 10] = 2.2\%$), and the new common equity is equal to about 44.7 percent ($10 / [11.9 + 0.5 + 10] = 44.7\%$). If we assume that the current cost of debt is equal to 6.4 percent, an "old" common equity holder can expect a return of 15 percent (higher than the bank financing, but lower than venture capital financing) and a "new" equity financier can expect a return equal to 25 percent. Now we can calculate the weighted average cost of capital for NatureCARE Pharmacies. The discount rate using the WACC approach for our firm is equal to 14.9 percent ($53.1\% \times 6.4\% + 2.2\% \times 15\% + 44.7\% \times 25\% = 14.9\%$) – this is the rate NatureCARE Pharmacies can use in the discounted cash flow model. Please note that without the new infusion of capital into the firm's capital structure at the end of 2010, and given the previous assumptions related to the cost of capital for common equity holders and creditors, the WACC would be equal to 6.5 percent ($97.1\% \times 6.4\% + 2.9\% \times 15\% = 6.5\%$).

$$k_{wacc} = (w_d \times AT k_d) + (w_p \times k_p) + (w_c \times k_c) \quad (8.2)$$

k_{wacc} = The weighted average cost of capital

w_d = The weight (proportion of debt) being used to finance the project

$AT k_d$ = The after-tax cost of debt

w_p = The weight (proportion of preferred shares) being used to finance the project

k_p = The cost of preferred shares

w_c = The weight (proportion of common shares) being used to finance the project

k_c = The cost of common share equity

Other methods of estimating capitalization rates

Business practitioners may also use more intuitive methods of estimating the required rate of return or discount rate for specific investment opportunities. While practitioners may not be familiar with certain technical terms and methods such as CAPM, WACC, or IRR (the internal rates of return – a measure commonly used by venture capitalists), they can intuitively “size up” business risk and assign the required rates of return to various projects.

A few approaches can be used to determine the discount rate. Some investors may think of the required rate of return in terms of two basic components: the risk-free rate and the premium (commonly known as the “equity risk premium,” or ERP, in academic literature). Using this approach, investors attempt to judge the risk of the project or investment opportunity in reference to the risk-free rate (the rate obtained from holding a Treasury bill). Various studies suggest that these equity risk premiums vary from 3 to 10 percent per annum. Similar approaches to using the risk-free return and estimating the ERP are used in academic arbitrage pricing models (where general market factors are assessed and assigned a composite risk measure) and multifactor models (where specific risk-driving factors are assessed). Business practitioners, using this approach, can consider the incremental rate of return above the risk-free rate. Second, investors can choose the most appropriate required rate of return by analyzing their personal investment opportunities and deciding what level of risk to assign to them. These investors tend to assign some level of premium returns above their personal risk tolerance level – an approach that is highly subjective. Third, some special types of investors – such as venture capitalists – raise capital from limited partners (i.e., actual investors in the venture capital fund) and then “pitch” to deliver returns in a specific range representing the multiple on the cash invested into the fund. These multiples may be equal to three or four times cash-on-cash, meaning that the venture capitalists “promise” to return \$3 or \$4 for every dollar invested into the fund, net of fees, costs, and carried interest. The cash-on-cash multiple has an implicit required rate of return built into the “promise” to limited partners. For example, if venture capitalists promise to return at least three times cash-on-cash to limited partners, and the average holding period of their investment into the entrepreneurial firm is equal to five years, then the expected return needs to exceed 25 percent per annum ($\$1 \times [1 + 25\%]^5 = \$3.1$). Finally, some investors look at the historical track record of their investment performance and use the “historic” returns as a benchmark for an appropriate “hurdle rate” for new investment propositions. This approach is often used by multinational firms looking to engage with various capital budgeting or investment projects. The firms accept or reject capital budgeting projects and make investment decisions based on whether or not the anticipated return from the project will exceed the historic hurdle rate.

Discounted cash flow method: the case of NatureCARE Pharmacies

The first step in applying the appropriate discount rate to the discounted cash flow method of valuation (Step 1) involves the calculation of free cash flows (FCF) for each year of the financial forecast for the years 2011–15. The FCF represents the sum of the cash flow from operating activities (namely net income, depreciation, and changes in working capital) and investing activities (i.e., capital expenditure). The calculation of the FCF excludes financing activities, largely because any cost of capital is normally reflected in the discount rate applied in the model. For NatureCARE Pharmacies (see details from the cash

flow statement in Chapter 7), the free cash flows are as follows: $FCF_{2011} = -\$5.0$ million ($\$4,966,000 + [-\$10,000,000] = \$5,034,000$); $FCF_{2012} = \$8.3$ million ($\$8,313,000 + \$0 = \$8,313,000$); $FCF_{2013} = \$10.3$ million ($\$10,277,000 + \$0 = \$10,277,000$); $FCF_{2014} = \$9.0$ million ($\$8,961,000 + \$0 = \$8,961,000$); and $FCF_{2015} = \$9.7$ million ($\$9,727,000 + \$0 = \$9,727,000$).

Step 2 involves discounting the FCFs to the present point in time (t_0) by the appropriate discount rate (equal to 19 percent). If we perform the valuation in early January 2011, then we discount the FCF_{2011} by the full amount of the discount rate; otherwise a partial discount would need to be arranged if we value the firm in a time other than the beginning of that year. The discounting of the FCFs is based on dividing the appropriate FCF for the forecast year by the discount rate and taking into consideration the amount of time since t_0 (i.e., one period, two periods, and so on) in accordance with equation 8.3.

The next step (Step 3) involves adding up the discounted present values of the FCFs to arrive at the present value of cash flows from operations (see Figure 8.3 for details). This value is equal to \$18.6 million.

$$PV \text{ of } FCF = \frac{FCF}{(1 + k)^n} \quad (8.3)$$

PV = Present value
 FCF = Free cash flow
 k = The discount rate
 n = The number of periods

The next step (Step 4) requires us to deal with the fact that NatureCARE Pharmacies plans to continue operations beyond the end of the financial forecast (i.e., year five). As we noted earlier, the window of time in which forecasts are considered to be precise is between three and five years (for young ventures, this period may be much shorter – closer to 18 months). Since it is assumed that NatureCARE Pharmacies will successfully continue its operations into the foreseeable future, it is important to ascertain the value of the firm beyond the firm's financial forecast. In this case, the concept that allows us to determine the value of the venture beyond year five is terminal value (TV). The calculation of the terminal value is based on the FCF for the last year of the precise financial forecast (i.e., FCF_{2015}). This cash flow is subsequently increased by the anticipated growth rate (g) in the value of the terminal cash flow extending into infinity. The adjusted terminal cash flow (FCF_{2015}) is subsequently discounted by the appropriate discount rate (k), which is then reduced by the growth rate in the cash flow (the growth rate in the cash flow is assumed to moderate the risk of the business; hence, the discount rate is reduced by the firm's ability to grow its cash flow; hence, the denominator becomes equal to " $k-g$ "). The formula for calculating the terminal value is presented in equation 8.4. For NatureCARE Pharmacies, the terminal value is equal to \$51.2 million. It is important to discount the terminal value – here calculated for the end of the year 2015 – to the present point in time (t_0). This is accomplished by using equation 8.3. The present value of TV is equal to \$21.5 million (see Figure 8.2 for detailed calculations and a description of the cash flow and terminal value discounting) – this figure represents the operational value of NatureCARE Pharmacies.

$$TV = \frac{FCF_t(1+g)}{k-g} \quad (8.4)$$

TV = Terminal value

FCF_t = Free cash flow at the end of the forecasting period

g = Growth in the free cash flow

k = The discount rate

It is important to make two points about the DCF method at this stage in the process. First, the growth rate in the terminal cash flow (g) is generally assumed to be minimal (between 0 and 5 percent). It is imperative to limit the growth of the terminal free cash flow, which extends the FCF calculation into the infinite (as implied by the formula). In our case, it is assumed that the growth rate in the terminal cash flows (i.e., FCF₂₀₁₅) is equal to zero; hence, the cash flow is not presumed to continue growing (even a negligible increase in the growth rate has a significant compounding effect on the terminal value). Limiting growth in the terminal cash flow is considered a conservative approach to business valuation. In limiting the growth rate to a minimum, we moderate the growth in FCF₂₀₁₅, which may have an unduly large influence on the present value of cash flows from operations (the higher the growth rate, the more terminal value is effectively “worth” in present value terms). Second, practitioners sometimes take steps to adjust the contribution of the present value of terminal value to the overall calculations of present value for all cash flows. For example, practitioners may not allow the present value of TV to exceed one-third or one-fourth of the sum of all present values from operations (i.e., the present value of cash flows plus the present value of TV). Assigning a significant amount of value to the operations of the firm that come from components of the DCF model can be problematic because we are not able to forecast these with much precision. Instead, this practice may be accomplished by adjusting the discount rates for the calculation of the terminal value to a higher level (by 10 or 15 percentage points from the 19 percent level used for other time periods). In some cases, different discount rates are applied in subsequent time periods to reflect the various levels of risk inherent to different phases of the entrepreneurial firm’s development. This approach effectively divides the firm’s growth into risk profiles and appropriates specific risk to each developmental phase of the firm.

In the final step (Step 5), we arrive at the firm’s net value of common equity by reflecting other components of the balance sheet in our calculations (namely current assets and liabilities). In this step, current assets are added back to the operational value of the firm (i.e., present value calculations) and deducted from current liabilities and long-term debt. In the case of NatureCARE Pharmacies, the market value of common shareholders’ equity is equal to \$35.1 million (see Table 8.3 for detailed calculations).

The multiples method

The multiples method is based on the concept of EV. It is often argued that EV is a more comprehensive metric for determining the value of a firm because it captures the theoretical takeover price of the venture. In other words, EV provides an answer as to how much a willing buyer would need to pay in order to acquire the business without any financial obligations. Enterprise value is often regarded as a more accurate measure of a firm’s value than a measure such as capitalization, which is calculated by multiplying the amount of shares by their value, because it considers other sources of the financial structure of the firm

In \$'000	2010	2011	2012	2013	2014	2015
	$\frac{-\$5,033}{(1 + 19\%)^1}$					$\frac{\$9,726 \times (1 + 0\%)^{19-0}}{19\% - 0\%}$
-\$4,229		$\frac{\$8,312}{(1 + 19\%)^2}$				
\$5,869			$\frac{\$10,276}{(1 + 19\%)^3}$			
\$6,098				$\frac{\$8,960}{(1 + 19\%)^4}$		
\$4,468					$\frac{\$9,726}{(1 + 19\%)^5}$	
\$4,076						$\frac{\$51,188}{(1 + 19\%)^5}$
\$21,450						
\$37,732						

Figure 8.2 Present value calculations for free cash flows and terminal value

Table 8.3 Net common value of shareholders' equity for NatureCARE Pharmacies

Valuation components	Value (\$ million)
Operational value of NatureCARE Pharmacies	\$37.7
Plus: current assets	\$26.5
Less: current liabilities	\$12.1
Less: long-term liabilities	\$17.0
Market value of common equity for NatureCARE Pharmacies	\$35.1

(preferred shareholders, debt, cash, cash equivalents, and so on). As noted, the concept also recognizes that the buyer must settle liabilities including pension obligations, unpaid bonuses to management, overdue taxes, stock option programs, off-balance sheet liabilities, and so on. The buyer also benefits from the cash placed on the firm's accounting books.

As presented in equation 8.5, the enterprise value is calculated as a sum of common equity (E_c), preferred equity (E_p), minority interest (MI), and debt (D) minus cash and cash equivalents (C). As the enterprise value captures the theoretical takeover value of the firm, the value of preferred shares is added to the net value of common equity since preferred shares represent the firm's obligation to its preferred shareholders (this liability usually comes in the form of dividends or in the form of redemption arrangements where the preferred shares need to be "retired" at some point in time). Minority interest represents the ownership interest the firm has in a subsidiary firm that the firm does not fully own (other investors also hold interest in the subsidiary venture). The firm being valued, which has a subsidiary interest in another firm where other shareholders maintain an ownership stake, must recognize this "outside interest" as a liability (the firm would need to purchase this interest if it wishes to have full control of the subsidiary venture). Debt and other obligations

are added to the equation for the same purpose – the buyer would need to settle these obligations as they come due. The theoretical buyer has the benefit of acquiring the cash and cash equivalents.

$$EV = E_c + E_p + MI + D - C \quad (8.5)$$

EV = Enterprise value

E_c = Common equity

E_p = Preferred equity

MI = Minority interest other owners hold in the subsidiary firm

D = Debt (all short- and long-term liabilities)

C = Cash and cash equivalents

If we consider EV in the context of the entrepreneurial setting, we can reduce equation 8.5 further. Most entrepreneurial ventures would not have any minority interests or preferred shareholders; hence, the EV value formula can be reduced to $EV = E_c + D - C$. Since the cash and cash equivalents act to reduce the level of debt and liabilities, the formula can be reduced to two components, namely $EV = E_c + nD$ (net debt and liabilities of cash). If the objective is to find out the net value of common equity, then the formula $EV = E_c + nD$ needs to be rearranged to determine the common equity: $E_c = EV - nD$.

As previously noted, the objective of the multiples method is to establish the value of the firm in relation to other firms in the industry with a similar business model, operating characteristics, customer profile, product and service structure, customer profile, and geographic coverage. On a comparative basis, one of the most intuitive ways to think of the value of the firm is to consider it as a multiple of the firm's earnings. The most commonly acknowledged line of the income statement used to represent earnings is the EBITDA line. The value of the firm, therefore, can be expressed as a multiple of EBITDA. The multiple comes from dividing the enterprise value by EBITDA; hence, the EV/EBITDA multiple.

In order to calculate the net market value of common equity (E_c), we need to calculate EV for the firm and then deduct net debt from this value. To do this, we can rely on EV/EBITDA multiples that are commonly calculated for firms, market sectors, and industries. If we know the EV/EBITDA multiple that is applicable to NatureCARE Pharmacies, we can multiply this EV/EBITDA multiple by the EBITDA that NatureCARE Pharmacies generates to find its implied enterprise value.

EV/EBITDA multiples can generally come from three sources: professional research firms that gather, adjust, calculate, and disseminate the relevant industry statistics for investors; research reports (often a very expensive option); and academic websites (free information). Data including EV/EBITDA, EV/EBIT, EV/revenue, and, occasionally, EV/earnings (a sort of approximation of P/E multiples) is often presented over time and lends itself to comparison with other sectors of the economy. Table 8.4 presents EV/EBITDA multiples for selected industries (including pharmacy services) and their evolution over time (between 2000 and 2010). In terms of the EV/EBITDA multiple relevant to NatureCARE Pharmacies (i.e., the pharmacy services sector), the average EV/EBITDA multiple is equal to 13.8 and displays a high degree of change over time ($\sigma = 8.4$). If we remove one of the outliers (e.g., in 2007 when the EV/EBITDA was 37.2) and “normalize” the average (by excluding the year 2007), the adjusted EV/EBITDA multiple would be equal to 11.3 ($\sigma = 2.0$). This adjusted figure would probably better represent what the market perceives to be a fair multiple for participants in the pharmacy services sector.

Table 8.4 EV/EBITDA multiples for a sample group of industries between 2000 and 2010

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	Average	Standard deviation
Apparel	6.99	9.03	8.41	11.66	7.18	8.84	10.90	8.97	4.41	8.08	9.89	8.58	1.98
Automotive	6.10	4.73	5.50	7.29	5.95	7.91	10.05	6.56	3.82	10.75	11.20	7.26	2.47
Building materials	6.15	4.66	4.96	7.40	7.50	8.16	7.62	7.70	6.02	8.33	11.79	7.30	1.94
Drug	34.30	18.15	12.50	17.25	12.58	13.29	13.60	11.80	8.65	9.32	9.06	14.59	7.22
Educational services	34.33	16.77	12.07	22.06	15.40	14.44	9.41	16.58	15.32	11.98	6.53	15.90	7.36
Electric utility	7.25	5.80	5.70	8.46	6.55	10.21	9.77	9.62	7.54	8.34	8.34	7.96	1.55
Information services	–	11.26	10.00	14.64	10.84	15.09	14.73	13.62	7.80	10.39	11.35	11.97	2.43
Internet	–	–	32.38	167.83	39.83	48.02	29.36	30.67	11.51	20.22	19.87	44.41	47.56
Medical services	9.79	6.73	5.16	7.66	7.67	11.35	9.16	8.94	4.62	6.20	6.82	7.65	2.03
Pharmacy services	–	11.85	10.43	12.88	11.11	14.73	12.81	37.15	8.75	9.87	8.81	13.84	8.41
Precious metals	–	–	8.68	21.17	13.14	23.31	24.48	17.23	13.90	18.71	18.28	15.89	7.36
Railroad	7.22	5.91	5.88	8.51	7.39	11.27	9.56	8.49	6.37	8.01	11.00	8.15	1.87
Retail	14.21	10.64	9.11	11.59	8.61	11.24	11.41	9.90	7.71	8.69	8.19	10.12	1.92
Telecom services	11.69	5.34	3.86	6.06	6.02	7.06	8.69	9.07	4.24	5.00	5.25	6.57	2.37
Thrift	6.12	–	–	5.27	–	–	6.32	4.30	3.93	4.62	5.26	5.12	0.90
Tobacco	7.02	5.28	4.58	5.91	8.02	8.70	9.81	9.36	8.00	8.32	9.28	7.66	1.75
Trucking	3.32	5.51	3.24	6.61	5.12	6.70	5.90	5.06	5.64	7.69	9.89	5.88	1.88

Source: Based on information available on the website <http://pages.stern.nyu.edu/~adamodar/> (information retrieved on October 6, 2012)

EV: enterprise value; EBITDA: earnings before interest, taxes, depreciation, and amortization

The industry statistics are helpful because they reflect the aggregate dynamics of the industry in a wide comparative spectrum. However, industry statistics may not represent the best way to value a firm. The objective of the multiples valuation method is to match the relevant EV/EBITDA multiple to the firm being valued (sometimes, the industry statistic may not be the best proxy). If the firm being valued has special or unique characteristics (i.e., a niche market focus, unique customer base, innovative business model, and so on), it may be more advantageous to construct the relevant EV/EBITDA multiple set by investigating other firms that operate in the industry and better match the profile of the firm being valued (this would involve discovering relevant multiples and then applying them to the firm). It is recommended to have at least five comparable firms for this exercise. In the case of NatureCARE Pharmacies, the firm is a specialty pharmacy that serves a unique market segment, so certain firms from the sector may better serve as a comparative reference. Table 8.5 presents comparable operational/valuation data for a select group of retailers operating in the pharmacy services sector (examples include Shoppers Drug Mart, Omnicare, Walgreen). The average EV/EBITDA multiple for this selection of firms is equal to 7.3. Table 8.5 also presents some of the operational statistics for these firms, including gross profit margin, EBITDA margin, and EBIT margin (these statistics are often used for benchmarking purposes).

The third category of comparables comes from actual merger and acquisition (M&A) transactions in the sector. Table 8.6 presents the M&A data. The problem with obtaining actual transaction data is that most transactions are private. Access to M&A data can be difficult if not impossible to obtain, and disclosure of pertinent information may be limited. The transaction reference points are valuable because they represent current market trends in the sector and serve as the best indicators of investors' appetite to execute transactions at specific valuations. Table 8.6 shows that in recent transactions, the common share equity of the acquired firms was valued at 15.2 times their EBITDA (subject to adjustment for net debt).

Table 8.5 Comparative valuation measures for valuing NatureCARE Pharmacies

<i>Comparative data</i>	<i>Risk profile</i>	<i>Operating performance</i>			<i>Enterprise value measures</i>	
	<i>Beta</i>	<i>Gross profit (%)</i>	<i>EBITDA margin (%)</i>	<i>EBIT margin (%)</i>	<i>EV/EBITDA</i>	<i>EV/Revenue</i>
Shoppers Drug Mart	0.35	11.0%	11.4%	8.6%	8.3	0.3
Omnicare	0.84	22.1%	9.8%	7.7%	8.0	0.8
Pharmerica	0.5	13.3%	4.3%	2.8%	8.1	0.2
SunLink Health Systems	1.43	31.0%	6.0%	2.5%	3.8	0.2
Rite Aid	2.23	26.4%	3.0%	1.1%	9.3	0.3
Walgreen	0.97	28.4%	7.1%	5.7%	5.6	0.4
CVS Caremark	0.79	19.7%	7.4%	5.9%	7.6	0.6
Sapporo Holdings	0.96	23.4%	3.3%	2.1%	7.5	0.2
Averages	1.01	21.9%	6.5%	4.6%	7.3	0.38

Source: Specialty Pharmacies: Sector Report, Bourne Capital Partners LLC. November 2011. Company data came from various other sources.

EBITDA: earnings before interest, taxes, depreciation, and amortization; EV: enterprise value

Table 8.6 Merger and acquisition transactions relevant to NatureCARE Pharmacies

Target	Buyer	Year	EV/Revenue	EV/EBITDA
Pharmerica	Omnicare	2011	0.3	8.7
Allon Healthcare	HIG Capital	2009	0.6	7.4
Carmichael Cashway Pharmacy	SunLink Health Systems	2008	0.5	6.4
Coram	Apria	2007	0.7	37.3
Option Care	Walgreen	2007	1.1	16.4
Averages			0.6	15.2

Source: Specialty Pharmacies: Sector Report, Bourne Capital Partners LLC. November 2011.

EV: enterprise value; EBITDA: earnings before interest, taxes, depreciation, and amortization

There are also three other factors that need to be considered (in sequence) in order to arrive at the valuation of the net common equity for NatureCARE Pharmacies: what EV/EBITDA multiple to apply; whether to apply any discounts or “haircuts” to the chosen multiple; and whether to use the historical or perspective EBITDA. Let’s assume that we have three sets of EV/EBITDA multiples representing long-term industry averages, firms similar to the operating profile of NatureCARE Pharmacies, and M&A transactions. Which set do we choose? Most practitioners would decide by selecting the EV/EBITDA multiple that is “closest” or most relevant to the firm being valued. Since NatureCARE Pharmacies is a specialty pharmacy, the operators chosen in Table 8.5 may be the most relevant group for valuation purposes. The average EV/EBITDA multiple for these comparable firms is equal to 7.3, so this specific multiple would be the starting point for our valuation. Please note that the chosen multiple is well below the “normalized” industry averages, equal to 11.3.

The next issue to consider is whether to further adjust the multiple. Practitioners often discount (or reduce) the multiple being applied in the EBITDA multiples valuation method for two reasons. First, since the comparable EV/EBITDA multiples normally come from publicly listed firms, some practitioners argue that the earnings (including the EBITDA and EBIT lines) could be less stable and of “lower quality” for private firms compared with public firms. Public firms normally undergo more scrutiny in terms of their disclosure of information, monitoring, and reporting compared with private firms. As an example, the financial statements of public firms, but not privately held firms, undergo regular accounting audits. Second, practitioners recognize that shares in a private firm are illiquid. Illiquidity tends to increase the investor’s overall risk because the shares cannot be easily monetized in a timely manner. Practitioners suggest that an appropriate discount to the relevant EV/EBITDA multiple is up to 25 percent (some apply hair cuts of as much as 50 percent).

The last consideration is whether to focus on historical EBITDA for the calculation of the enterprise value. Using historical EBITDA is a more conservative approach, as this financial performance line is often based on audited financial statements and represents the actual financial achievement of the firm. Using a historical EBITDA would be a disadvantage for valuation purposes if the firm’s EBITDA has shown a strong growth trajectory, as in this case, as the use of historical data would underestimate the enterprise value of the firm.

Let’s apply the considerations we have discussed above to the example of NatureCARE Pharmacies. The relevant EV/EBITDA multiple of 7.3 can be discounted by 10 percent to arrive at an adjusted EV/EBITDA multiple of 6.6 ($7.3 \times [1 - 10\%]$). The enterprise value of

NatureCARE Pharmacies is equal to \$43.6 million based on the historic $EBITDA_{2010}$ ($\$6.6 \text{ million} \times 6.6 = \$43.6 \text{ million}$) and equal to \$51.5 million based on the perspective $EBITDA_{2011}$ ($\$7.8 \text{ million} \times 6.6 = \$51.5 \text{ million}$). The net value of common equity for NatureCARE Pharmacies is estimated to be \$28.2 million based on historical data ($E_c = EV - nD$; $\$43.6 \text{ million} - [\$17.0 \text{ million} - \$1.6 \text{ million}] = \$28.2 \text{ million}$) and \$40.9 million based on perspective data.

Establishing a valuation range

As discussed at the beginning of this chapter, the valuation process comes down to not just a single number, but rather a range of possible valuations where the ultimate price of the asset is “discovered.” Where possible, all firms should be valued by using the discounted cash flow method, which should be considered a fundamental part of the valuation exercise because it is rooted in the financial future of the entrepreneurial firm. The EV/EBITDA multiples are also important (these should emphasize the historical financial performance as the basis for the methodological approach). Other valuation methods should be treated as further support when developing a valuation range. Valuations can help to either mark the floor valuation (i.e., liquidation valuation, which indicates the lowest value) or the ceiling price (i.e., the replacement valuation).

Figure 8.3 summarizes the usage of various valuation techniques for the case of NatureCARE Pharmacies. The average valuation (including all valuation techniques) is equal to \$24.8 million (this average also includes the two accounting methods that provide lower values). The valuation range for NatureCARE Pharmacies is likely in the vicinity of \$35 million. Factoring in a potential difference of \$3 million on either side of the valuation, the valuation range of the company would be between \$32 million and \$38 million.

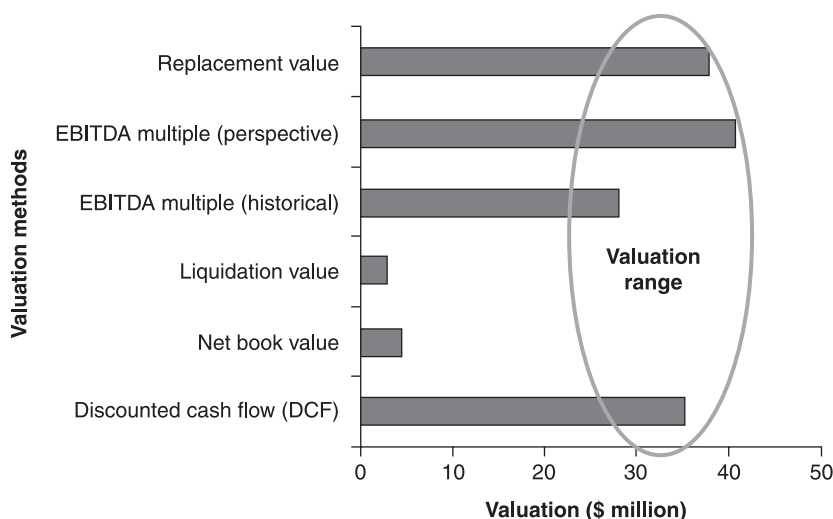


Figure 8.3 The valuation range for NatureCARE Pharmacies

EBITDA: earnings before interest, taxes, depreciation, and amortization

Cash-flow-based economic value added measure

One financial measure that continues to be widespread and popular in finance is the economic value added measure (EVA). Developed by consulting firm Stern Stewart and Company (see www.sternstewart.com), EVA is defined as a measure of the amount of annual profit remaining in the firm after accounting for the return expected by the firm's investors (i.e., equity holders and debt holders). The EVA measure specifically refers to the net operating profit after tax (NOPAT), which includes the earnings before interest expense and taxes (EBIT) adjusted by the applicable effective tax rate for the firm (see equation 8.6 for details). EVA is perceived as the estimate of real and true economic benefit generated by the firm after considering the minimum required rate of return expected by the firm's investors. The essence of the EVA measure is that the firm creates value for its shareholders. It is important to note that this measure does not represent the total value of the firm's equity, but rather serves as a confirmation that the firm is earning an economic profit by exceeding its investors' return expectations – it is an incremental or residual measure of value creation, not the actual value of the firm's equity. EVA highlights the minimum value of profit (in dollar terms) expected to be generated by the firm to satisfy its investors' return expectations. This minimum amount is often called a capital charge. The concept of capital charge is captured by multiplying the invested capital (IC) by the weighted average cost of capital (k_{wacc}).

The EVA measure is much more than simple arithmetic to calculate the difference between economic profit and the dollar amount of expected investor returns – it is also regarded as a method of measuring value creation or destruction in the firm each fiscal year (note that in academic studies, EVA highly correlates with the stock price movements of public firms, thereby serving as a proxy for value creation). A positive value indicates value creation and also means that the firm produces returns that exceed the weighted average cost of capital. A negative result indicates value destruction; in such a case, the firm does not produce returns equal to or exceeding the WACC rate. While a sporadic negative EVA may be acceptable for the firm and its shareholders, a continued trend of negative EVA values indicates that the firm requires reorganization, restructuring, or even outright closure. As such, EVA is a measure that highlights the importance of protecting and enhancing shareholders' value (and guarding capital from other investors such as debt holders).

Using the EVA measure can be helpful in multiple respects. First, the EVA approach highlights the importance of achieving returns that exceed the cost of capital. Second, it captures how much wealth was actually created in monetary terms. Third, it is an inclusive measure of wealth creation that captures information from the income statement and the balance sheet. There are also some disadvantages inherent to the EVA measure. EVA is relatively static as it only captures value creation in a specific period in the past. EVA is also better applied for firms that are relatively stable in terms of profit generation (entrepreneurial firms, due to their often erratic growth patterns, may experience negative EVA calculations; entrepreneurial firms may also generate losses at the EBIT level for some time). A negative EVA value for entrepreneurial firms may be unjustly misleading given the attractive future opportunities that many firms present. The most important criticism of the measure is that it is not future-oriented or forward looking; EVA is backward looking. By comparison, the discounted cash flow model and the net present value approach rely exclusively on future cash flows.

In Chapter 7, we noted the importance of cash flows for entrepreneurial firms, and how the cash flow (and cash flow ratios) can perhaps be more relevant to the financial analysis of entrepreneurial firms than profits. Cash flow is critical to the survival and early development

of entrepreneurial firms. Since the cash flow focus is our predominant orientation in this book, we offer to adjust the standard economic value added approach to one that focuses on cash flow rather than profit. We focus on cash because, as noted throughout this book, entrepreneurial firms cannot settle liabilities from profit. Moreover, the value of the firm (whether expressed in absolute or residual format) is inherently tied to cash flow. Therefore, in addition to presenting the most common EVA formula, we offer another variant of the EVA measure – this is called the cash-flow-based economic value added (CFEVA) measure, which captures the cash value equivalent of economic profit. In our case, the firm's investors obtain confirmation that the firm is actually in a position to pay out a minimum amount of cash return to them (whether they ultimately choose to receive cash in the interim period or not). In this case, we use free cash flows instead of the adjusted EBIT line.

The formula for the cash-flow-based economic value added measure is presented in equation 8.7. The formula is based on three components: free cash flow (FCF), the amount of invested capital (IC), and the investors' required rate of return on their investment (represented by the weighted average cost of capital, k_{wacc}). The amount of IC is the total amount of capital invested in the firm by the firm's investors; it is the market value of the firm's equity, preferred shares, and debt capital (debt capital is defined here as external debt capital, such as loans on which a specific interest rate is charged; note that debt capital does not include other liabilities which can be extemporaneously generated by the firm).

<i>Economic value added (EVA)</i>	<i>Cash-flow-based economic value added (CFEVA)</i>
$EVA = EBIT \times (1 - t) - (IC \times k_{wacc}) \quad (8.6)$	$CFEVA = FCF - (IC \times k_{wacc}) \quad (8.7)$
EBIT = Earnings before interest and taxes	FCF = Free cash flow
t = Effective income tax rate	IC = Invested capital
IC = Invested capital	k_{wacc} = Weighted average cost of capital
k_{wacc} = Weighted average cost of capital	

To illustrate how CFEVA is calculated, we use the numbers from NatureCARE Pharmacies. We assume here that the market value of the firm's equity is equal to about \$35 million (as noted previously in our calculations). The book value of debt on the firm's balance sheet is presumed to be the same as the market value; therefore, the book value of debt is equal to \$11.9 million. Note that NatureCARE Pharmacies does not carry any preferred shares on its balance sheet. The average cost of capital for NatureCARE Pharmacies is assumed to equal 14.9 percent (with a new round of equity). The total market value of capital provided to NatureCARE Pharmacies by its investors is equal to \$46.9 million (\$35 million plus \$11.9 million).

We can now solve the CFEVA equation for NatureCARE Pharmacies for 2011:

$$\begin{aligned}
 CFEVA_{2011} &= FCF_{2011} - (IC_{2011} \times k_{wacc}) \\
 CFEVA_{2011} &= -\$5.0 \text{ million} - \$46.9 \text{ million} \times 14.9\% \\
 CFEVA_{2011} &= -\$5.0 \text{ million} - \$7.0 \text{ million} \\
 CFEVA_{2011} &= -\$12.0 \text{ million}
 \end{aligned}$$

The value of CFEVA for NatureCARE Pharmacies in 2011 is negative, implying that the firm was not able to generate sufficient free cash flow to provide the cash return expected by investors (in 2011, NatureCARE Pharmacies invested significant capital into expansion). CFEVA indicates value destruction in the firm in 2011. Please note that this situation changes rapidly in the future for NatureCARE Pharmacies. Beginning in 2012, the firm is able to generate sufficient free cash flow to offset the nominal value of the capital required by its investors.

Questions to consider

1. You have been given the following estimates of free cash flow from your company and have no reason to doubt them. The cash flows will not grow at this pace indefinitely and you are likely to be conservative in your estimates of future cash flows. A 2 percent growth is achievable. Current assets are equal to \$10 million, current liabilities are equal to \$15 million, long-term debt is equal to \$6 million, and preferred shares are equal to \$2 million.

Cash flows for years 0 to 5						
Years	0	1	2	3	4	5
Cash flow (in millions)	3.4	4.6	5.7	8.3	9.1	10.2

The T-bill offers a 3 percent rate of return and the S&P 60 returned 25 percent to investors last year. Your boss tells you that the investors in the fund expect an additional premium of 7 percent. You estimate that the company has average risk compared with others in the market.

2. Compare and contrast between various valuation methods. Which valuation methods are most appropriate for manufacturing firms and which are the most appropriate for internet-based ventures?
3. Explain the difficulty in determining the discount rate using the weighted average cost of capital (WACC) for entrepreneurial firms. What key components of WACC are used to evaluate the discount rate?
4. What is the significance of industry comparables in valuation?
5. How does one decide upon a valuation range? Why is the valuation range important?

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9 Valuation of intellectual property

Chapter objectives

After reading this chapter, you should be able to:

- define the concept of intellectual property;
- explain the importance of intellectual property for entrepreneurial firms;
- describe the most important legal forms of intellectual property protection;
- illustrate the three major methods of valuing intellectual property;
- discuss the complexities of intellectual property valuation.

Introduction

In the last few decades, businesses have begun to focus less on traditional physical assets (such as land, buildings, machinery, and equipment) and more on the development of intangible assets. One of these intangible assets is intellectual property. Intellectual property is critical to both larger corporations and smaller entrepreneurial firms. For large corporate entities, intellectual property often represents the most valuable asset on their balance sheet. More than 70 percent of the market value of public firms is represented by intangible assets. For these firms, intellectual property has not only become a key strategic asset, but also the foundation for value creation. Intellectual property is even more paramount to entrepreneurial firms, which often begin their operations in basements, garages, abandoned warehouses, business incubators, and other suboptimal venues. For these firms, intellectual property may be their only source of strong financial returns and value creation. These financial returns may not be crystallized immediately; they are often captured over a longer period of time. Moreover, intellectual property may not automatically generate value on its own. It only becomes a valuable “competitive weapon” in the hands of a superb management team which can commercialize, produce, promote, and manage it. Without the right management team, the value of certain intellectual properties may not be fully exploited (or realized at all).

In this chapter, we focus on understanding intellectual property and the methods of its valuation. These topics are especially important for entrepreneurial firms which, while appreciating the need to continuously invent, innovate, and improve their products or services, generally demonstrate a limited understanding of the legal and financial concepts surrounding intellectual property. The limited awareness of most firms specifically encompasses legal protections, costs of protection, and – most importantly – valuation. Moreover, a majority of entrepreneurial firms do not know how to present intellectual property to the outside world (this disclosure is done in a much more effective manner by public firms).

Inadequate awareness also causes entrepreneurial firms to run a disproportionately high risk of unintentional infringement of intellectual property owned by others. It is perhaps understandable that the legal and financial issues related to intellectual property are placed on the “back burner” by most entrepreneurial firms given their preoccupation with business survival (especially at the early stages of new venture formation and development), day-to-day operations, strategic considerations, and the search for capital. Of course, overlooking the legal and financial issues related to intellectual property represents a major strategic oversight on the part of these firms as these intangible assets are important contributors to value creation.

We regard this discussion around intellectual property valuation as a natural extension of the previous chapter – the valuation of intellectual property may be regarded as a special case applied to a more difficult appraisal environment. At the same time, the general valuation principles outlined in the previous chapter still hold true in this chapter; we specifically refer to those valuation standards which relate to the importance of cash flows. Of course, intellectual property projects, assets, or properties should aim to generate cash flows which can be ascertained by the management team. On the other hand, intellectual property, which cannot reasonably be expected to generate cash flows upon its transformation into products or services, may have limited value to the entrepreneurial firm. This does not mean that it is worthless. Intellectual property developed by the entrepreneurial firm may not convert into cash flows for the firm itself, but it may be quite valuable to another firm which may be better able to exploit its true market potential. Intellectual property is often more valuable to a larger firm or multinational corporation. Acquirers of intellectual property often have all the necessary business functions in place to transform intellectual property into strong cash flows in a short period of time (i.e., loyal clients, production facilities, skilled labor, access to capital, a strong marketing and promotional presence, good distribution infrastructure, complete management teams, and so on). Simply put, the economics of intellectual property can vary in different hands.

An overview of intellectual property

Intellectual property is inherently connected with human evolution and can be broadly defined as a creation of the human mind using its original thought. Intellectual property is an expression of creativity, imagination, resourcefulness, and the ingenuity of the human mind, and it may take the form of knowledge, ideas, expressions, or thoughts which are deemed to have commercial value in the marketplace. Most intellectual property is immaterial, intangible, and non-physical. Intellectual property is everywhere around us; it can take the form of a formula, discovery, invention, brand name, design, software, or an imaginative work (i.e., literary, musical, artistic). Intellectual property can be developed by the inventor, sold, or licensed. Selling or licensing is common in situations where the inventor does not have the financial resources necessary to commercialize the invention (this is often the case for artistic works).

While intellectual property can provide firms with a competitive advantage, the ultimate success of a firm relying on intellectual property depends on many factors. First, the entrepreneurial firm needs to embrace the right technological change while ignoring other technical transformations. Most importantly, the entrepreneurial firm needs to properly assess the time at which technological transition is expected to occur within its industry; namely, when the industry will shift from one technological platform to another (the shift from film to digital in film/photography serves as an example of a recent technological transition). If the

industry is changing slowly, the entrepreneurial firm is likely to have difficulties competing with the more well-established and entrenched firms that already have multiple capabilities in hand related to research and development, production, and distribution. Incumbents are often satisfied with making small incremental improvements because even though they are heavily invested in “old” technology, even slow incremental improvements allow them to travel up the technological development curve. By making slow changes these firms also try to avoid cannibalizing the old technology too soon, before it is absolutely necessary to do so. Financial returns from technological innovations and intellectual property before their wide adoption are relatively unattractive and established firms have limited economic incentive to switch from old technologies to new platforms. While the existence of low returns is a poor motivator for established firms, it provides a unique window of opportunity for entrepreneurial firms in that they can undermine the competitive advantage of established firms in the medium and long term. A delayed reaction on the part of more established firms may afford sufficient time for an entrepreneurial firm to develop new products and services, test them in the marketplace, solicit client feedback, make necessary improvements, and build a strong customer following. If the entrepreneurial firm is successful in detecting an upcoming moment of a major technological transition, it will have a strong market potential.

Second, timing is everything when introducing technological change, invention, or innovation. When major shifts occur in an industry, proper timing of entry and the timely introduction of innovations into the marketplace can have a considerable impact on an entrepreneurial firm’s success. Introducing an innovative product or service too early often results in low revenues, high costs, and high “cash burn” – an unfortunate combination of economic circumstances that may ultimately result in business failure. If the entrepreneurial firm enters too late, it is likely to suffer from strong competition from established market players that have superior resources, economies of scale, customer loyalty, and so on.

Third, technology often develops in an evolutionary manner where small incremental changes are made over long periods of time, ultimately leading to a major breakthrough. The evolution of technology is often represented in the form of an “S-curve” in which product or service adoption is slow or even chaotic and random. Customers are often skeptical about new commercial propositions and reluctant to try them. At the beginning of the “S-curve,” the financial returns from innovation are likely to be minimal or negligent. In the next phase of the curve, products or services become more widely accepted as they gain market momentum (they may even “go viral”). In the third distinctive phase of the curvature, sales plateau or even decline as the inventions wear off and new innovations are introduced into the marketplace.

Fourth, it is important to recognize whether or not there is a “dominant design” in the firm’s industry. A dominant design is defined as a common platform or method that serves as a foundational building block for all products or services offered in the industry. For example, automobiles may vary in shapes, forms, characteristics, and uses, but they all operate on the basis of a combustion engine. A similar reality applies to the computer industry, where more or less the same computer chips are available to virtually all manufacturers. If the industry has not yet adopted a dominant design, market conditions are likely to be favorable to new entrepreneurial firms: barriers to enter the industry may be relatively low, the market is likely to be fragmented (no dominant players may be established), incumbent firms do not have strong and sustainable competitive advantages, business risks are generally low, and market participants can effectively compete on the basis of product differentiation. Firms can also gain a competitive advantage by locking in the prevailing design embraced by consumers. In such a case, it is important for the entrepreneurial firm to seek strong intellectual property

protections. If a dominant design already exists within the firm's industry, entry barriers are likely to be high, it can be more complicated to differentiate products or services, and established firms have a greater competitive advantage (mainly due to a cost advantage). In these circumstances, competitors generally offer similar products or services and the key to success is efficient production or customer delivery. Protection of intellectual property in industries where all competitors work from the same design palette may not be an optimal use of financial and human resources for entrepreneurial firms.

The intellectual property audit

It is important to highlight that a natural step before conducting a formal valuation of intellectual property is to take account of any intellectual property the entrepreneurial firm currently possesses. This is normally done in the form of an intellectual property audit. The purpose of such an audit is to conduct a comprehensive department-by-department analysis of all intellectual property in the hands of the entrepreneurial firm.

The audit determines whether or not the inventory of intellectual property is properly secured and protected. This analysis has to be done in the context of an environmental scan. Entrepreneurial firms often improve their initial designs, methods, and processes and these incremental improvements are rarely reflected in patents and other legal forms of intellectual property protection. Incremental changes require new patent applications to be filed and other intellectual property to be properly registered. A subsequent step is to understand work-in-progress intellectual property; these are projects that the entrepreneurial firm is actively pursuing and dedicating human and financial resources towards. New intellectual property projects need to be properly analyzed, structured, and documented. The final step is the valuation of intellectual property, which we discuss in detail in the latter part of this chapter.

It is important to note that most entrepreneurial firms do not conduct a proper analysis of their intellectual property. Intellectual property audits are seldom done. This *laissez-faire* orientation toward intellectual property often changes when the entrepreneurial firm begins to look for external financing. Venture capitalists are among the most determined promoters of intellectual property. In fact, the mere presence of venture capitalists in the entrepreneurial firm often ensures proper treatment of intellectual property and increased patent activity.

Legal protection of intellectual property

Intellectual property is also used as a legal term to denote the legal protections granted to holders, inventors, creators, or developers against undue imitation, infringement, piracy, or outright theft. This legal protection provides the inventor with an exclusive right of long-term use of the invention, but more importantly, it precludes others from using it without the expressed permission of the inventor. These legal means of protection are important because imitating or copying intellectual property is a widespread phenomenon across many industries. The legal tradition of protecting intellectual property dates back to the late 1880s.

Through the process of granting legal protections for intellectual property, governments aim to promote creativity, discovery, innovation, efficiency, and the spread of knowledge in the economy. In doing so, they provide individual inventors with an opportunity to recoup their developmental costs and allow them to generate a profit from their discoveries. On a microeconomic level, intellectual property is critical for firms because it can lead to a sustainable competitive advantage in the marketplace which, in turn, is likely to convert into

strong profits and cash flow. The end result of this process is value creation. Properly managed intellectual property allows firms to capture financial returns and generate value to a much greater degree than would otherwise be possible. Development of intellectual property provides opportunities for entrepreneurial firms to develop new products and services and to replace outdated offerings. Innovative entrepreneurial firms also gain access to government grants and other financial support which can be an important source of financing, especially in the early stages of development. Moreover, intellectual property allows firms to gain access to new markets. It also provides entrepreneurial firms with an opportunity to share their inventions (whether through partnership agreements or cross-licensing) with other firms in the marketplace which may own rights to complementary inventions. At the same time, innovation, invention, and research and development are not without their risks. In fact, there are multiple risks inherent to intellectual property: technical risks (Will a new product, service, process, or method actually work? Will key operational problems be effectively dealt with? Will unexpected problems be solved in a timely manner?), market risks (Will consumers adopt products and services to the level anticipated by the entrepreneurial firm? Will the market grow fast enough? Will consumers become loyal?), financial risks (Will the entrepreneurial firm secure the necessary capital to fully develop the intellectual property? What will this capital cost? Will a lack of capital place undue pressure on the firm? Will equity dilution be severe in the case of equity investors?), and competitive risks (How will competitors respond when new products or services are introduced into the marketplace? Will they retaliate? Will competitors imitate products or services in due course? Will the entrepreneurial firm go down the learning curve or the “S-curve” quickly enough to deter competitors?). These risks need to be properly addressed and managed by the entrepreneurial firm. On a macroeconomic scale, legislators view intellectual property as a way of attracting investment opportunities, creating jobs, promoting entrepreneurship, and fostering general economic development. In short, intellectual property allows firms to balance their aspirations with general social and economic benefits.

It is important to note that intellectual property is not normally reflected in the firm’s financial statements. Unlike tangible assets, intellectual property is not captured on the entrepreneurial firm’s balance sheet, nor is it reflected in any financial ratios. Patents, trademarks, copyrights, technology, processes, methods, or brands – which may be the key reasons for entrepreneurial success – are rarely acknowledged. For public firms, the value of intellectual property is normally captured by the difference between the firm’s net book value and its market capitalization (this is called “goodwill”); however, this methodology is unlikely to work for non-public entrepreneurial firms, for obvious reasons.

There are four general forms of intellectual property that can be defined in legal terms: patents, trademarks, copyrights, and trade secrets.

Patents

A patent is defined as a legal protection that applies to products, services, processes, methods, procedures, actions, techniques, inventions, and innovations. This form of legal protection grants the inventor a limited time “legal monopoly” in the marketplace to exploit the invention and bestows the inventor with the right to exclude others from producing and selling products or services based on the invention. A patent is typically used to protect new products or services as they enter an existing marketplace. Patents can protect newly created products or services, as well as those diffused from existing knowledge but produced in new forms. Patents can also be applied to products or services that represent significant

improvements to previous designs or architectures. Such products or services may include enhancements in technical specifications, components and materials, software, user orientation, and other functional characteristics. Product or service inventions are often referred to as “utility patents.” Utility patents refer to the ways in which inventions work and are utilized; normally, these are granted for a period of up to 20 years, after which patents become “public” (i.e., other firms can benefit from the invention and freely use it without any legal limitations).

Patents can also relate to changes in an entrepreneurial firm’s behavior, business practices, external relationships, and internal processes – legal protections related to these changes are often referred to as “business method patents.” For example, process innovation may involve the implementation of new or significantly improved production methods achieved on the basis of employee education and training, quality improvements, management practices, and so on. Significant changes to traditional management practices, equipment, machinery, and software are also covered. The next most common category of patents is “design patents,” which encompass new, original designs of products. These patent categories broadly focus on the manner in which the invention appears to consumers and are typically granted for a period of 10 to 15 years.

Most patents apply to innovations which could represent radical changes or incremental improvements. Radical innovations represent unprecedented breakthroughs and involve the commercialization of new products or services that have been developed on the basis of totally new technologies and are capable of providing high value to customers. Radical innovations are predominantly based on experimentation and are often regarded as disruptive – they improve a product or service in ways that are unexpected by the marketplace. Such innovations often come to dominate the market either by filling a specific niche that other products or technologies cannot saturate, or by improving product quality enough to effectively displace existing market incumbents. Incremental innovations, on the other hand, represent a systematic evolution of products or services into new offerings aimed at existing or new customers. Distinct steps may include identifying opportunities, clarifying objectives and benefits, researching initiatives, generating creative ideas, designing, developing, and testing prototypes, developing policies and strategies, confirming concepts through market research and marketing, and implementing new products or services. The process of generating systematic innovation may be chaotic, random, and unstructured. In such circumstances, innovation may become a “numbers game” – the more innovative ideas the entrepreneurial firm generates, the better its chances to develop a true breakthrough.

The patenting process requires that products, services, methods, processes, inventions, designs, or other works meet specific requirements. First, patent protection only extends to items which are unique and novel in that no other individuals have similar knowledge, ideas, or concepts. Second, the invention has to be non-obvious, in that it is not apparent to experts in the field. Last, the innovation has to be useful and beneficial. The patent process also requires the inventor to file a formal application accompanied by detailed descriptions, technical drawings, and other supporting documents (i.e., an “invention logbook,” a notebook that describes the day-to-day progress in developing the innovation). The level of detail has to be such that the invention can be replicated by reading the patent application. Please note that some information pertaining to patent applications requires public disclosure (we discuss this aspect of patenting later in this section).

The patent process normally includes five steps (preparing invention documentation → retaining a patent lawyer → patent search → filing a patent application → obtaining a decision from a patent and trademark office) and takes about 18 months to complete. The

inventor obtains a temporary protection at the moment of filing the application, but is not allowed to litigate against any imitators before the patent is actually granted. The best patent applications are relatively broad in scope and cover multiple uses and applications (although this may be difficult to achieve as new inventions often rely on previous patents). It is also important to note that maintaining confidentiality before filing a patent application is critical to the entire process. Public disclosure of any information related to the invention (be it through a short newspaper article or participation in an academic conference) may result in the invention losing its unique or novel status. Careless or even minimal disclosure can ruin the patenting process.

There are about two million patent applications filed worldwide every year. Most countries operate on the basis of a “first-to-file” system, granting patent protection to those individuals or organizations that have applied for patent protection first. The most notable exception to this rule is the United States, which grants patent registration priority to those that were “first-to-invent” rather than “first-to-file.”

Patent registration can be obtained through various legal routes. The most obvious avenue is to seek patent protections in a single country (usually that in which the inventor lives). This approach is relatively quick and inexpensive, but has multiple limitations (some of which are discussed next). The second possible avenue is to pursue regional patent protection. There are a number of international patenting organizations that allow patents for specific geographic regions. In such circumstances, a single application can secure patents in selected countries or across all member countries. Examples of such organizations are the European Patent Office (EPO; 38 members), Organisation Africaine de la Propriété Intellectuelle (OAPI; 18 members), and the Eurasian Patent Office (EAPO; eight members). There are also international patent registrations. The World Intellectual Property Organization (WIPO; 145 members) is perhaps the largest international patent-oriented institution. The international patenting system is based on a two-phase approach. In the first stage, an international patent search and analysis is conducted. This phase is followed by in-country patent registrations.

Since patents are the most predominant form of intellectual property for firms, let's briefly discuss their disadvantages. First, patent applications are expensive. On average, it costs between \$10,000 and \$15,000 to file a single patent application for an invention in a single country (there are also annual patent maintenance fees). Since a single-country patent application may not be enough to achieve sufficient protection, the investor often needs to strategically select a number of countries for which patents should be pursued. Many patent experts and practitioners believe that while registering intellectual property with regional or international patenting agencies is advisable (this allows for patent filing across a wider geographic region), actual legal protection occurs at the country level, where local patent or civil laws apply. This is why filing an application in a specific country is a more forceful form of protecting intellectual property. If a decision is made to file applications country-by-country, a single-country patent cost is effectively multiplied by the number of countries in which protections are sought. The total expense can easily add up to a sizeable amount. Second, a singular invention patent is unlikely to be effective in deterring potential imitators. This means that multiple patent applications have to be filed in order to achieve the desired level of legal protection (which further aggravates costs). Third, because patent applications include public disclosure of information, established firms (who may already be working on similar inventions or innovations) or new entrants may obtain key information from public disclosure sufficient enough to allow them to duplicate the invention on their own merits. The patent application may effectively teach a willing imitator how to reproduce the invention. Patent applications also make it relatively easy for competitors to invent around

patented inventions. Moreover, potential imitators can resort to hiring employees of the innovative entrepreneurial firm in order to obtain disclosure. This is why some of the most guarded inventions (like the formula for Coca-Cola or the source code for Google) are not patented. Fourth, many countries, especially those located in emerging markets, have poor intellectual legal protections; this allows local firms to imitate other products or services without any penalty. Fifth, defending patent infringement is likely to be expensive. Patent fraud, violations, piracy, or infringements are difficult to prove and litigate against. Even if damages are awarded by the court, they may be less than expected and insufficient to cover incurred legal costs and business losses. Finally, the mere existence of a patent application may alert the entrepreneurial firm's competitors that the firm is working on (or even commercializing) a unique product or service which may prove to be advantageous in the marketplace. The process of filing a patent application may awaken competitors and instigate undue competitive retaliation against the innovator. One may rightly presuppose that if the firm's competition is not alerted by the patent application, the innovative firm may operate relatively undetected for a period of time.

Trademarks

A trademark refers to a unique and distinctive consumer communication mechanism in the form of words (including unique spellings), names, sounds, symbols, logos, images, colors, characters, shapes, fragrances, signs, or any other features (or combinations thereof) that aim to distinguish the products or services of one firm from those of other firms. The concept of the trademark is deeply rooted in the desire of most firms to be recognized by consumers and potential patrons through unique distinguishing features that convey a central message reflective of their business orientation. A trademark allows for unmistakable recognition in the marketplace and serves as a device to convey messages about the firm's product or service, price, quality, consistency, reliability, superiority, and so on. The value of a trademark comes from being able to establish a proper standing in the marketplace without concerns that imitations, reproductions, substitutes, or outright replicas can unduly undermine the firm's hard-earned reputation. Of course, a strong reputation can enhance consumer perceptions that a particular firm's products or services are simply better than those of the competition, thus moderating consumers' propensity to switch to another product or service. A strong reputation can also allow the entrepreneurial firm to sell other products or services by "piggy-backing" on an existing portfolio. A trademark is necessarily used in promotional and advertising initiatives to establish a brand name. The most common symbols signifying trademark protections include the "TM" mark (which outlines that a special product or service characteristic is designed to be its distinguishing feature) or the "®" symbol (which confirms that a trademark is officially registered). The most widely recognized international trademarks include Coca-Cola, Google, Microsoft, Apple, McDonald's, Dell, and General Electric.

Similarly to patents, trademarks have to be registered with a patent and trademark office. To be registered, a trademark has to be unique and distinct (it cannot even be remotely similar to another trademark) and cannot be misleading to consumers. Trademarks are normally granted for a period of ten years (but have to be in active use after registration). The formal process of registering for a trademark is similar to the steps used for obtaining a patent, but the process is less intense and costly (usually costing less than \$1,000).

Copyrights

A copyright protects original works of authorship and affords the creator the legal right to use, reproduce, distribute, modify, perform, display, or license a tangible artistic work (be it literary, musical, dramatic, pictorial, or graphic). Some of the most common works sheltered under copyright protections include books, newspaper articles, sound recordings, songs, lyrics, plays, television programs, computer programs, motion pictures, and paintings.

Unlike trademarks and patents, this form of intellectual property does not need to be registered; copyright protection can simply be achieved by attaching a copyright symbol (©), often referred to as a “copyright bug.” Copyright is assumed to be granted “automatically” without any registration required. However, legal protection over certain copyrights may be enhanced by filing an application with a copyright office. Some countries offer a centralized system of registering and depositing an authored work; this can prove helpful to certain authors in the event of future legal disputes. Copyrights are normally protected for the life of the author plus a period of between 50 to 70 years. However, some flexibility exists in the use of copyrighted material (which is regarded as “normal” or “fair use”) for the purposes of reporting, teaching, training, education and scholarship, commentary, and so on.

Distributing copyrighted material requires substantial financial outlay, so many authors choose to transfer all copyrights to firms or corporations whose business is to focus on the commercial distribution of authored works. The author receives compensation for such a transfer in the form of a single lump-sum payment and subsequent royalty payments. Other authors choose to protect their rights by working directly with profession-oriented associations to which copyrights are transferred. These associations focus not only on the legal protection of the work of authorship, but are also responsible for the collection of royalty payments.

Trade secrets

Most entrepreneurial firms rely on confidential information as part of their normal, everyday business routines. A trade secret is defined as any mechanism that provides the firm with a competitive advantage in the marketplace. Trade secrets can range from a client list to a formula, design, or process. Trade secrets may also include financial statements, strategies, details of partnerships and alliances, management capabilities, employee relations, business plans, contact lists, supplier contacts, bank details, training materials, operational manuals, and so on. Trade secrets are normally recorded in physical forms such as paper documents, computer files, videotapes, etc. and are protected by general commercial laws, civil laws, espionage laws, and trade secret acts. The best way to protect trade secrets is through measures such as restricting access, maintaining access logs, protecting information with passwords, signing agreements with employees, and so on.

To protect or not to protect intellectual property

A common question for entrepreneurial firms is whether or not to seek protection for their intellectual property. If an entrepreneurial firm owns a strong intellectual property which is likely to translate into an improved competitive advantage in the marketplace (i.e., a brand name, logo, process, technology, etc.), then the intellectual property should be protected.

The basic premise here is that if the intellectual property is left unprotected, competitors are likely to imitate the product and erode any advantages stemming from it. Additionally, if the intellectual property is not protected, then any potential financial returns that could be derived from it may greatly diminish or even disappear. Conversely, if the entrepreneurial firm is successful, others will almost certainly imitate the intellectual property and legal protection may not be sufficient to protect against imitators. Copying intellectual property is relatively easy, while protecting it is difficult, time consuming, and costly. In most cases, competitors are able to duplicate innovative and novel products or services at less than half of their initial development cost; additionally, imitators do not have to recover any of these start-up development costs and can price their products or services accordingly. The most common forms of imitation and corporate espionage include reverse-engineering products (taking products apart to understand how they work), gaining insights from public disclosure of patent applications, and hiring a competitor's employees.

There are three key factors that may help an entrepreneurial firm to decide upon a stance with respect to intellectual property protection. First, it is important for the firm to determine whether or not the intellectual property is a source of its competitive advantage; if it is, then the intellectual property is almost certainly worth protecting. The rule-of-thumb is that the more successful the firm is based on the intellectual property, the more important legal protection becomes. The second factor is more complex and refers to the perceived value of intellectual property. Establishing the market value of intellectual property is complex because it is dependent on a combination of quantitative assessments (i.e., the market potential, consumer demand, the economics of the invention, etc.) and qualitative judgments (i.e., the possibility of imitation, ability to withstand competition, execution of the market strategy, the capabilities of the management team, etc.). Performing this valuation may be less challenging if the entrepreneurial firm's products or services are already commercialized and generating revenue. The valuation becomes more intricate if the specific intellectual property is still in a "virtual" stage (where a prototype may not even exist) or if its market potential is unclear. In such a case, the key concern is whether or not to incur the costs necessary to protect the invention in the early stages of its development (even though the invention may not yet be commercially viable). The third factor relates to the industry towards which the invention is targeted. Patents appear to be more successful in industries where production processes are complex and nuanced (manufacturing, for example, relies on special sequences, timing, temperatures, and so on), knowledge about the invention is tacit and not easily documented, and limited employees have access to key information; such industries include biotechnology, pharmaceuticals, chemicals, cosmetics, specialty plastics, and so on. On the other hand, industries that rely on mechanical and sequential production processes and methods are less successful at protecting patents; these industries include electronics, computers, medical devices, vehicles, and so on.

Non-legal protection of intellectual property

The strong motivation of potential imitators and often suboptimal legal protection mechanisms sometimes require entrepreneurial firms to resort to other means of protecting their intellectual property. Some products and services cannot be protected. For example, a new design for a street bicycle may not be easily protected by patents and immediate imitators are likely to emerge if a new bicycle design proves successful. Nevertheless, the best approach for an entrepreneurial firm is to combine certain legal protection mechanisms with other measures that can create efficient obstacles for potential imitators. The next

section discusses some of the most common strategies of protecting intellectual property by relying on operating or strategic measures. Some of these strategies may be more or less effective depending on the entrepreneurial firm.

One of the most effective strategies used to protect intellectual property is to limit the diffusion of information and knowledge related to the actual production of products or the provision of services; this involves limiting the number of people with access to information and knowledge. Moreover, processes can be loosely documented and remain tacit (it is relatively simple to get a physical copy of a document, drawing, production flow, and so on). Another measure for protecting intellectual property is to better control the production process or service delivery; this involves controlling the resources necessary to produce products or deliver services. Securing key input resources through acquisitions may not be viable for entrepreneurial firms, but developing exclusive contracting, permitting, or licensing relationships may be feasible. Another way of protecting intellectual property is to develop a strong market reputation. Of course, the stronger the reputation (and the brand name), the more reluctant the consumer is to switch to competing products and services. Unfortunately, developing a strong market reputation can be costly and this method may not be economically feasible for certain firms. Despite the high cost of promotional activities, many entrepreneurial firms are able to develop near-instant, “viral,” and repeat consumer recognition through modern media (i.e., internet) or word-of-mouth advertising. Gaining a competitive advantage from operating experience can also be an effective protective tactic for entrepreneurial firms. As noted above, the reluctance of established firms to pursue new technologies and embrace dominant designs may allow a smaller entrepreneurial firm sufficient time to move swiftly along the “learning curve.” The competitive advantage gained from the learning curve may be more effective if new products or services are developed through small-scale experimentation (i.e., small firms are much more efficient at experimentation compared with larger enterprises).

Intellectual property valuation methods

Earlier in this chapter, we highlighted that the general principles of valuation outlined in Chapter 8 also apply to valuing intellectual property – the valuation techniques used to value intellectual property and the methods used to ascertain the equity value of the firm are similar. Both approaches focus on the discounted cash flow method, the comparables method, and other supportive procedures. The primary purpose of valuing intellectual property is to determine the extent of value creation. Valuation also needs to be performed if the entrepreneurial firm is seeking to cash out through disposal of the intellectual property. Another reason for conducting valuation relates to the development of partnerships, mergers, or joint ventures. In such situations, it is important to determine a valuation range in which a transaction can be executed (of course, the ultimate value of any asset, including intellectual property, is determined by market forces). Last, the value of intellectual property has to be known before any transactions involving licensing to third parties or royalty payments can be executed.

Valuation of intellectual property is an important priority for entrepreneurial firms. Intellectual property is an important part of a firm’s strategic considerations and understanding the value of intellectual property is inherently connected with tactical and strategic decision making. Valuation is also an important determinant of whether or not to pursue a patent application. If the intellectual property has high intrinsic value, then it is worth protecting. Understanding the value of intellectual property is also important for risk management and

economic optimization. Valuation is especially critical for firms that are frequent generators of intellectual property and must make decisions about which projects to pursue.

Some of the more unique characteristics of intellectual property can make valuations challenging. There are at least three major challenges. First, intellectual property is not readily recognizable or visible in comparison to tangible assets – it can be difficult to quantify and define exactly what intellectual property is. Second, the true value of intellectual property may not be immediately obvious to the founder and the management team. For example, it is difficult to quantify how much trade secrets, product or service improvements, brand names, software codes, client lists, or unique business processes are worth. It can also be challenging to determine the precise revenue, profit, and cash flow streams associated with intellectual property. Third, there are limited secondary markets available for intellectual property assets. The absence of these markets makes it difficult to actually discover the true value of intellectual property in a timely manner (this is a reflection of the fact that intellectual property is often unique, novel, proprietary, and dissimilar).

There are three basic methods used to value intellectual property: the cost approach, the market approach, and the income approach. There are also other valuation techniques (briefly discussed later) that can serve as useful reference points in establishing the value of intellectual property. It is significant to note that we can also use the capital budgeting approach (discussed in detail in Chapter 10) to reflect the incremental value creation of developing intellectual property. The capital budgeting approach works well in cases where only the incremental revenues and costs of intellectual property have been forecasted.

The cost approach

The cost approach aims to determine the total costs of developing intellectual property. While basic cost aggregation may appear simple to achieve, the act of adding “appropriate” costs tends to be more challenging. The cost method aims to ascertain the total amount of cost required to “rediscover” intellectual property in current prices by replicating its purpose, characteristics, functionality, mode of operations, and so on. This method often sets the ceiling price for intellectual property as a potential acquirer is unlikely to pay more for a product than what it would otherwise cost to duplicate it.

The major complexity of this method relates to the fact that we must only add up the costs that are relevant to the development of intellectual property at the time of business valuation (rather than relying on historical expenditures which may be reflected in historical income statements). The only exception to this principle is when intellectual property has been developed within the last 18 months. In other words, we need to determine the total cost of intellectual property development as if we were developing the intellectual property today (i.e., at the time of completing the valuation exercise). Performing an evaluation of “current costs” can be challenging because while some costs are relatively stable, others are more likely to fluctuate over time. This fluctuation may occur for a variety of reasons: labor costs incurred to hire appropriate expertise may go up, manufacturing costs may increase or decrease (if products can be produced offshore), product testing requirements (as required by federal agencies) change, new technologies may emerge that can alter the production process, new input materials may appear that can increase product longevity, general overhead costs may escalate, and so on. The cost method should also incorporate any opportunity costs into its calculation; these are the costs of business opportunities that the inventor may have foregone as a result of pursuing specific intellectual property development.

There are also switch-over costs which reflect expenses incurred for adopting new intellectual property.

There are some obvious shortcomings to using the cost approach. First, this method does not outline the economic benefits of intellectual property in terms of profits or cash flows. By extension, it also does not incorporate future project risks. Second, the actual development cost may be irrelevant to a potential purchaser – this is a sunk cost. What matters is the future benefit that accrues to the owners of intellectual property. Third, it can be challenging to account for all of the historical costs committed to the development of an intellectual property project. Aggregating all relevant costs requires detailed monitoring and supervision.

The market approach

The market valuation approach (often regarded as “the fair market value”) involves using comparable transactions to determine the value of intellectual property. Here, the market price of intellectual property reflects the price that may be hypothetically paid to acquire it. The market approach is based on the assumption that intellectual property generates measurable financial returns and these benefits are as valuable as the returns generated by other intellectual property assets which have already been sold in the marketplace. Specifically, this valuation approach is based on how other firms in the marketplace have ascertained the value of intellectual property similar in nature, functionality, and characteristics to the intellectual property we are looking to value.

Intellectual property transactions must meet a number of requirements if they are to effectively qualify as “valuation comparables” or valuation standards. First, there must be an active secondary market in the industry involving comparable intellectual property transactions. Of course, it is best if there are many recent transactions that can be used as a valuation standard. Second, historical transactions must reflect “comparable” intellectual property. Comparable intellectual property reflects the specific industry, unique product or service characteristics, potential client base, and market potential of the intellectual property we are looking to value. Third, there must be public disclosure of the settlement price at which intellectual property has been sold. Last, an intellectual property transaction needs to be executed on an “arm’s-length” basis. In other words, the transaction must reflect agreements between two independent parties under no compulsion or pressure to execute the transaction. It is also assumed that the parties involved in the transaction are experts in their fields and have in-depth knowledge of all facts related to the intellectual property in question.

The market valuation method is not without its disadvantages. Most intellectual property transactions are not openly or publicly disclosed. Owing to the unique and proprietary nature of intellectual property, these transactions are often surrounded with secrecy and bound by confidentiality. It can also be challenging to find comparable intellectual properties to use as proxies for valuation purposes. Technologies, inventions, and innovations often have unique characteristics, features, purposes, and market targets that can make comparable intellectual property difficult to locate. In other cases, no useful reference points may be available because the intellectual property may be too new (no similar industry, product, or service exists).

The income approach

The income approach focuses on the ability of intellectual property to generate future financial returns. The underlying assumption is that intellectual property can be measured by

discovering the internal cash flows generated by the project and discounting these benefits to the present point in time. Despite being called the “income method,” this valuation technique is exactly the same as the discounted cash flow method. The income method is grounded in understanding annual cash flows, determining the appropriate capitalization rate (this reflects the risk of the intellectual property project), and capturing the project’s terminal value (the value of intellectual property beyond the point where we are able to ascertain specific cash flows with precision).

The most fundamental challenge faced in this method is determining the appropriate cash flows generated by the intellectual property project. Other steps in this valuation method are more or less mechanical (these steps are described in detail in Chapter 8).

Other methods of intellectual property valuation

One of the most common methods of valuing intellectual property is the so-called “25 percent rule.” This approach is often regarded as a rule-of-thumb and is applied by practitioners when valuing intellectual property. Using this technique, the value of intellectual property is estimated to be equal to 25 percent of the firm’s profit before tax; this is based on the assumption that a certain portion of the value of the business is based on actual usage of the underlying intellectual property.

Another method of establishing value for intellectual property is the “royalty rate method” or “relief from royalty method.” Under this valuation technique, the value of intellectual property is determined by defining the royalty rate that the firm would need to pay to license the specific intellectual property. In other words, these are the costs avoided by the firm that owns the intellectual property. A specific royalty rate is applied to the estimate of the revenue generated by the intellectual property. Royalty rates tend to range between 1 and 10 percent depending on the industry and circumstances (rates are normally much higher for software licensing, ranging from 10 to 50 percent). For example, in the computer industry, royalty rates vary between 1 and 5 percent; rates in the healthcare sector vary 1 to 10 percent; the automotive market varies 2 to 5 percent; and the consumer electronics industry varies between 1 and 5 percent. Many factors can affect the royalty rate, including the project’s possible profitability, market penetration, historical development costs, duration of product use, the prospective obsolescence of the project, the amount of invested capital, and so on.

Selling an intellectual property: the case of FlaxPlus and Natural Factors

A case which demonstrates a number of unique points related to the disposal of intellectual property is FlaxPlus, a Canadian entrepreneurial firm specializing in the processing of flax seeds. FlaxPlus commenced its operations in 2005 and now has annual revenues of \$25 million. The firm sells flax in the form of oil (in bottles and large totes) and flax mill (in bags, barrels, containers, and plastic boxes) in retail stores throughout Canada. The firm also distributes its products to international clients, mainly in Asia, Europe, Australia, and the US.

In 2009, the firm began to experiment with processing other types of seeds (i.e., canola and hemp), fruits and vegetables (i.e., avocado, coconut, nuts, bananas, carrots, and apples), and other raw materials (i.e., fish). One of the firm’s most successful experiments involved processing salmon to obtain fish oil with extraordinary high omega-3, omega-6, and DHA content. In 2012, FlaxPlus developed a complete business plan and began production set up (see the detailed free cash flows in Table 9.1; specifically view the free cash flow, FCF, line).

In late 2012, one of the scientists presented a paper at an academic conference about FlaxPlus's unique method of extracting high omega and DHA content. Shortly after the presentation, the founders of FlaxPlus received an expression of interest from a manufacturer of dietary supplements, Natural Factors, to acquire FlaxPlus. After a few meetings, FlaxPlus's founders discovered that Natural Factors was more interested in their novel method of extracting the omega and DHA content from fish than its flax operation, but was still willing to buy the entire operation to secure the new technology. Based on the initial business plan, FlaxPlus conducted a valuation of their intellectual property using two methods: the cost method and the income approach. The estimate based on the total amount of historical costs committed to the project was equal to \$0.8 million, while the income method generated a valuation of \$5.1 million. In addition to the specific free cash flow, FlaxPlus assumed a discount rate of 20 percent and a growth rate in cash flow equal to 1 percent (for the purpose of calculating terminal value).

The initial offer received by FlaxPlus from Natural Factors was equal to \$10 million (this offer was prepared on the basis of the numbers prepared by FlaxPlus). It is not difficult to see that if Natural Factors had changed the assumptions related to the discount rate (from 20 percent to 15 percent) and the cash flow growth rate (from 1 percent to 2 percent), the valuation of the intellectual property would have been equal to around \$10 million. The reduction of the discount rate was related to the perceived decrease of risk associated with the project, and the increase in the growth rate reflected the more robust assumptions around the future potential of the project. The initial offer proved to be a surprise to FlaxPlus and strongly encouraged its founder to pursue the transaction further.

Of course, the free cash flow prepared by Natural Factors had different parameters for the valuation. The initial valuation was equal to about \$22 million; Natural Factors would not offer a valuation at this level to FlaxPlus because it does not wish to pay a premium for its own capabilities (in other words, Natural Factors does not want to pay for the business components it effectively contributes to the project). The free cash flows forecasted by Natural Factors were significantly higher than those offered by FlaxPlus; this reflects the fact that the acquirer already has a strong distribution structure in place, solid brand recognition, a loyal customer base, and a capable production team. The valuation also reflects a difference in the risk profile of the project; hence, a reduction in the required discount rate from the project. The assumptions about current assets and liabilities reflect a different trajectory for the revenue and costs anticipated by Natural Factors – both of these working capital items are different from those expected by FlaxPlus.

In early 2013, the two sides reached a deal in which the fish innovation was valued at \$12.5 million and FlaxPlus agreed to transfer all intellectual property rights related to the invention to the acquirer. In May 2013, FlaxPlus received the first tranche of the consideration equal to \$11 million. The second tranche of \$1.5 million was transferred after six months. As part of the acquisition package, FlaxPlus agreed to transfer the design of the production line, provide detailed descriptions of the production process, and to train the employees and managers of Natural Factors for a period of six months post-acquisition (all training costs were to be covered by Natural Factors). In addition, FlaxPlus agreed not to relinquish any rights for using the process itself.

Let's consider the specifics of this case. When FlaxPlus prepared its original business plan in 2012, it considered two possibilities: expanding its current location to include the fish processing line, and building a new plant in western Canada to gain closer access to a steady supply of salmon. Ultimately, the firm made a decision to expand its current location in case it actually went ahead with the project.

Table 9.1 The key valuation parameters of the intellectual property project developed by FlaxPlus

(In \$'000)	<i>Valuation of intellectual property by FlaxPlus</i>					
<i>Income method</i>	<i>2012</i>	<i>2013</i>	<i>2014</i>	<i>2015</i>	<i>2016</i>	<i>2017</i>
FCF	−1,064	−198	763	1,260	1,768	2,186
PV	−1,064	−165	530	729	853	879
Sum of PV OF FCF	1,762					
TV						11,620
PV OF TV	4,670					
Total PV of FCF	6,432					
Plus current assets	1,465					
Less current liabilities	2,765					
Less L-T debt	0					
Value of intellectual property	5,132					
<i>Cost method</i>						
Labor cost	349					
Equipment purchase	250					
Materials	58					
Overhead	134					
Total expenditure	791					
<i>Valuation of intellectual property by Natural Factors</i>						
<i>Income method</i>	<i>2012</i>	<i>2013</i>	<i>2014</i>	<i>2015</i>	<i>2016</i>	<i>2017</i>
FCF	−769	1,569	1,960	2,765	4,309	4,756
PV	−769	1,308	1,361	1,600	2,078	1,911
Sum of PV OF FCF	7,489					
TV						34,311
PV OF TV	17,059					
Total PV of FCF	24,548					
Plus current assets	2,675					
Less current liabilities	4,590					
Less L-T debt	0					
Value of intellectual property	22,633					

FCF: free cash flow; PV: present value; TV: terminal value; L-T: long-term

Table 9.1 includes a summary of the free cash flow for the project prepared by FlaxPlus (we also present the cash flow for the project prepared by Natural Factors). The table also shows the key parameters of the valuation performed by both parties.

One of the key observations we can take from this case is that FlaxPlus did not appreciate the full value of its intellectual property. There is often a significant difference between what an entrepreneurial firm believes an invention is worth and its ultimate value in the

marketplace. In the case of FlaxPlus, the value differential was significant – the acquirers valued the invention at more than twice the value ascribed on the basis of the income method and over ten times the value ascribed on the basis of the cost method. Furthermore, FlaxPlus was able to develop a new intellectual property with relatively limited resources. While the entrepreneurial firm did not invest into the developmental stage of the project to earn a return, it was ultimately able to make an over ten-times return on its investment.

Questions to consider

1. Define intellectual property.
2. What are the major legal forms of intellectual property?
3. Describe under what circumstances patents are less likely to be effective.
4. Differentiate between the different methods of valuing intellectual property. What are the main advantages and disadvantages of each valuation method?
5. Explain the reasons why potential acquirers are willing to pay significant valuation premiums to acquire intellectual property.

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Part IV

Value enhancement

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10 Value enhancement through financial decision making

Chapter objectives

After reading this chapter, you should be able to:

- identify the time value of money principles and be able to apply them;
- describe different types of incremental cash flows in capital budgeting;
- conduct an evaluation of capital budgeting projects using four main techniques;
- understand the advantages and disadvantages of capital budgeting evaluation techniques;
- understand and be able to apply the concept of real options in strategic considerations.

Financial decision making is often guided by two fundamental principles: the time value of money and incremental cash flows. The first principle, the time value of money, states that a dollar received today is worth more than a dollar received tomorrow. We use this concept to understand the importance of cash flows generated over a specific period of time. We also employ this principle to analyze capital budgeting projects and how these can increase the value of the entrepreneurial firm. The second concept, relating to incremental cash flows, suggests that we only consider incremental costs and benefits which directly accrue from investing into a specific project. The incremental cash flow is defined as the cash flow that occurs if the project is undertaken; it will not occur if the project is rejected.

In this chapter, we focus on the specific tools used to evaluate investment decisions in the context of various strategic considerations. We will begin with an analysis of future and present values and progress to understanding capital budgeting projects and the key methods by which such projects are evaluated. Finally, we will examine a combination of strategic considerations and financial evaluations. The financial tools discussed in this chapter are especially critical to entrepreneurial firms.

The time value of money

The concept of the time value of money exists to recognize the basic fact that the money one receives today is worth more than the money one is expected to receive tomorrow. By the same token, a liability that must be settled today poses a greater burden on the entrepreneurial firm compared with the same amount that may be settled another day. This fundamental concept is grounded on the simple premise that no one can reasonably be expected to lend

money for free – money commands price. But what is the price of money? How can this be determined?

There are multiple perspectives that can be employed to effectively “discover” the right price for money. The price for money can be understood as the interest rate, the discount rate, the capitalization rate, or the required rate of return. The first way to discover the appropriate rate relates to the lender’s perspective (this orientation is discussed specifically in this chapter). Various other methods to establish discount rates were discussed in Chapter 8. Among these methods, the most common include the Capital Asset Pricing Model (CAPM) and the Weighted Average Cost of Capital (WACC). The CAPM approach captures the required rate of return that an individual needs to secure in order to be incentivized to invest in a particular project, asset, or firm. This required rate is determined in the context of the degree of risk in a specific project relative to overall market risk. The WACC considers various sources of capital to finance a specific project; it effectively represents the sum of compensations required by all capital providers (i.e., debt providers and equity suppliers) involved in the anticipated project.

The lender’s perspective can serve as a useful reference point for financial decision making. With this orientation in mind, the price of money is an interest rate, or compensation in the form of a return, that the lender demands for lending money. In this book, the prevailing rate of interest is called the discount rate because this rate is used to discount various values (i.e., future cash flows) to the present point in time. The process of using the discount rate is referred to as discounting (this process was discussed in Chapter 8, when we learned about the discounted cash flow model of business valuation). In the lending perspective, the discount rate is defined as the sum of two separate components: the nominal risk-free interest rate and risk premiums.

The nominal risk-free interest rate contains the real rate of interest and the inflation premium. The yield on short-term government Treasury bills (60 or 90 days) is often used as a proxy for the risk-free rate – this government-backed security is presumed to have a very small degree of uncertainty of non-repayment. The real rate of interest relates to lenders, who, in order to lend money, need to postpone their own spending (or consumption) and forego the opportunity to employ capital for the period of time equivalent to the lending period. To compensate for this, lenders demand a basic rate of return referred to as the real rate of interest. It is important to note that this rate does not include any other compensation that the lenders expect to collect (i.e., for the risk of default) – this is captured in other premiums that are “notionally” added to this basic rate. The inflation premium, on the other hand, addresses the fact that inflation erodes the purchasing power of money. In simple terms, if the lenders anticipate inflation to occur during the period that their capital is lent to others, then they would be able to purchase fewer goods and services after the money is returned. The existence of inflation further raises the expectation of lenders for higher compensation.

Lenders also expect other premiums related to default, liquidity, and maturity risks. A borrower can default to pay interest and principal on time or not do so at all – the default risk premium is expected to compensate for this. Liquidity risk relates to the fact that the lenders may wish to dispose of their loans to another lender, institution, or intermediary. Some loans may be easily sold in the marketplace while others may prove difficult to offload to other interested parties. The incremental interest that the lenders charge for potential illiquidity with respect to the loan is referred to as the liquidity risk

premium. Finally, the maturity risk premium reflects the fact that interest rates are unpredictable (they go up and down) and that lenders demand additional compensation for uncertainty over future changes to interest rates (this premium can be either negative or positive). On the one hand, lenders may be stuck with a lower interest rate on a loan when the interest rate goes up, while other lenders benefit from charging higher rates (a negative maturity risk premium). On the other hand, the lenders may be pleased if interest rates go down, as they may benefit from being “locked in” to having to charge higher interest rates.

Calculating the time value of money

Entrepreneurs can analyze their investment opportunities in terms of the time value of money; this is done by determining the future value and the present value of specific cash flows generated by a project. Future value and present value are mirror images of one another; the bridge that allows us to seamlessly move between these values is the discount rate. Future value is the value of a present amount at a future point in time, given the rate of growth per period (in percentage terms) and the number of periods until the predetermined future time. In simple terms, calculating future value allows us to determine how much an amount invested today is worth over a specific period of time into the future. Present value is the value of a future amount today, given the specific required rate of interest for the number of periods until the amount is realized. In other words, present value allows us to determine how much we would be willing to pay for the promise of receiving a specific amount today.

The formulaic approaches used to calculate future value and present value are summarized in equations 10.1 and 10.2. Here, focus is placed on present value calculations, as opposed to the discovery of the future value. Discounting (i.e., going from the future point in time to the present) is critical to capital budgeting evaluations. In order to calculate the future value of a single amount, it is important to recognize that once money is invested, it earns an interest rate that compensates investors (or lenders) for the time value of money. This interest rate is often compounded, which means that interest is earned on interest already accrued and on the original invested principal (compound interest causes the value of any present amount to multiply at an increasing rate of growth). For example, if the entrepreneurial firm invests its excess capital (i.e., \$1,000) at interest rates equal to 10 percent for five years (and the compounding is annual), it would receive \$1,610.5 ($FV = \$1,000 \times (1 + 10\%)^5 = 1,610.5$). A financial calculator can also be used to determine future value (please note that we will use the Sharp financial calculator to demonstrate various calculations).¹ To calculate the future value above, we can press the following keys: PV = \$1,000; i = 10%; 0 = PMT; n = 5. Next, we calculate CPT FV. The present value is equal to \$1,610.5 (the “compute key” on the calculator may be expressed as COMP).

Present value calculations aim to determine the present value for a specific amount in the future. For example, if the entrepreneur invests in a new project, future cash flows for the entrepreneurial firm can be expected. When the present value of a certain cash flow is expected, it is discounted (or marked down) because the future cash flows are worth less than if the entrepreneurial firm was to receive them today. On the other hand, future cash outflows are less burdensome to the entrepreneurial firm because payment occurs sometime in the future rather than today.

Future value of a single amount	Present value of a single amount
$FV = PV \times (1 + i)^n \quad (10.1)$	$PV = FV \times \frac{1}{(1 + i)^n} \quad (10.2)$
FV = Future value, the amount at the end PV = Present value, the amount at the starting point i = Discount rate of interest per period n = Number of time periods	

Discounting future values to the present is the opposite of compounding present value to a future period of time. Discounting causes the present value of a future anticipated amount to decrease at an increasing rate. To demonstrate the process of discounting, let's assume that the entrepreneurial firm expects to conduct a one-off sale of its products at a special event (i.e., an exhibition) to be held two years from now. The incremental cash flow generated from this event is equal to \$20,000; we also assume that the prevailing discount rate is equal to 10 percent. The present value of such cash flow (or its equivalent value today) is equal to \$16,528.9 ($PV = \$20,000 / [1 + 10\%]^2$). In order to calculate this amount, we can press the following keys: FV = \$20,000; i = 10%; 0 = PMT; n = 2. We then calculate CPT PV. The present value is equal to \$16,528.9.

Present value is inversely related to the discount rate (i) and the number of periods (n). In simple terms, present value moves in the opposite direction of i and n. If the value of the discount rate increases (denoting increased risk related to business operations, inflation, illiquidity, etc.), the present value of the cash flow decreases to reflect the higher uncertainty of the cash flow. On the other hand, if the number of periods increases (reflecting the fact that cash flow collection may occur further into the future), the present value also decreases; the further away the cash flow is expected, the greater the uncertainty towards it.

Annuities and perpetuities

Entrepreneurs often consider projects that produce a series of cash flows, rather than single amounts. Such cash flows factor heavily in financial decision making; hence, our discussion here relates to calculating annuity's future and present value. A series of equal cash flows spread evenly over time is called an annuity. Annuities may arise when settling rental payments, receiving coupon payments from bonds, paying for insurance, covering rent, and so on. There are two types of annuities. When evenly spread cash flows of the same amount occur at the end of the period, this is called an ordinary annuity. When cash flows occur at the beginning of the period, annuities due arise (when using a financial calculator, the BGN key has to be pressed to recognize that the timing of the cash flows has effectively shifted back for one period). Please note that in the case of annuities due, equations 10.3 and 10.4 would be applicable, with the exception that the formulas would be multiplied by an additional algebraic component $(1 + i)$ to recognize that cash flows occur at the beginning of the period. The formulaic approaches used to calculate the future and present values of an ordinary annuity are provided in equations 10.3 and 10.4.

Future value of an annuity $FVA = PMT \times \left[\frac{(1+i)^n - 1}{i} \right] \quad (10.3)$	Present value of an annuity $PVA = PMT \times \left[\frac{1 - \frac{1}{(1+i)^n}}{i} \right] \quad (10.4)$

PV = Present value, the amount at the starting point

PVA = Present value of an annuity

FV = Future value, the amount at the end

FVA = Future value of an annuity

i = Discount rate of interest per period

n = Number of time periods

PMT = Payment

In terms of practical applications of annuities, entrepreneurs considering investment projects in the future need to know how much money to put away (in equal installments) every period in order to generate a specific amount of cash; calculating the future value of an annuity helps entrepreneurs to do this. The future value of an annuity is the aggregate amount that a specific series of payments generate (i.e., the actual payment, PMT) over a number of periods (n) with the prevailing interest rate (i). Let's suppose that an entrepreneur who owns a small quick-print shop wants to save in order to purchase specialized printing equipment that allows for seven color offset printing. The entrepreneur needs to save a total of \$50,000 so she can save \$10,000 per year (the prevailing market discount rate is 12 percent). A simple analysis suggests that a period of five years would be an appropriate amount of time to achieve this goal ($50,000 / 10,000 = 5$ years). However, taking into consideration the effects of compounding, the entrepreneur would require 4.1 years to meet her goal. This problem can be solved on a financial calculator using the following steps: FV = 50,000; PMT = 10,000; PV = 0; i = 12%; calculate CPT n (please note that trying to complete this question using equation 10.3 would be cumbersome).

As entrepreneurs often consider the impact of future cash flows (which are generated by new equipment, investment projects, or acquisitions), it is important to consider how much these cash flows are worth in today's dollars. Let's consider that an entrepreneur servicing boats and recreational vehicles at a small lake resort plans to open an extra service bay and furnish it with additional equipment to expand the shop's capacity. The extra service bay is estimated to generate an incremental cash flow equal to \$25,000 per annum; we further assume that the equipment will only last for five years and that the prevailing interest rate is 7 percent. How much should the entrepreneurial firm be willing to pay for this undertaking? We can perform this calculation using a sequential approach where the present values of a single cash flow are calculated and where the annuity represents the sum of all present values (see Figure 10.1), or we can use the formula from equation 10.4, or the financial calculator (PMT = 25,000; i = 7%; n = 5; FV = 0; calculate CPT PV). Present value is ultimately equal to \$102,504.9. A graphical representation of this problem is included in Figure 10.1.

Perpetuity is a special type of annuity where cash flows are expected to continue into infinity. The most common form of perpetuity is the dividends on preferred shares; these shares are assumed to pay dividends for as long as they remain outstanding. Perpetuity is rare in finance; hence, our limited discussion here.

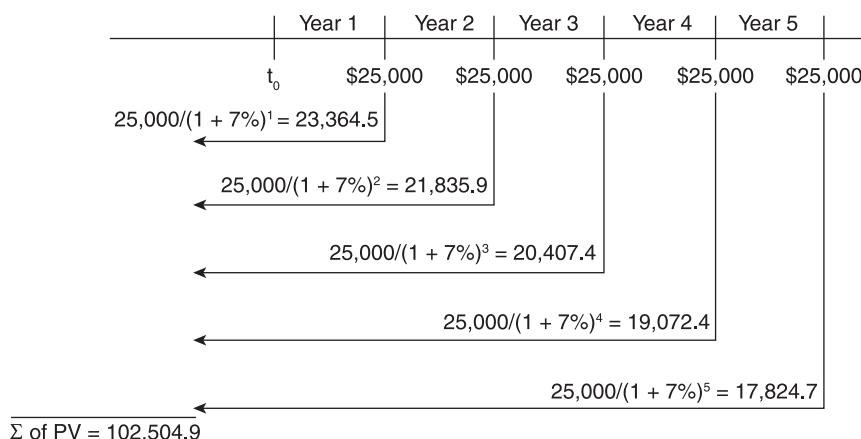


Figure 10.1 A graphical representation of an annuity

[Please note that the sum of present values is equal to \$102,504.9. This can be calculated as a sum of present value of individual payments discounted to the present point in time by using equation 10.2.]

Special considerations in time value calculations

Entrepreneurs may face other time value of money problems in situations where they actually know present and future values. Entrepreneurs may be interested in knowing, for example, what the rate of return is on a specific investment project; entrepreneurs often consider this when they are faced with multiple investment opportunities so as to maximize their return by pursuing the most attractive opportunity set. Entrepreneurs may also be interested in calculating what interest rate the bank will charge when extending a loan to the entrepreneurial firm. Alternatively, entrepreneurs may be interested in calculating the value of payments on the loan; this is important because entrepreneurial firms are often financially constrained and must be certain that their firm is able to meet the interest obligations associated with anticipated cash flows. Finally, entrepreneurs may be faced with the problem of choosing a specific alternative for different opportunities; in such cases, time value of money calculations can be helpful.

Entrepreneurs frequently look to understand the returns they make from their financial decisions. In such cases, entrepreneurs need to solve their time value of money problems by aiming to discover the interest rate, i . There are two eventualities to consider: whether the investment represents a single amount, or whether the investment is an annuity. Let's suppose that an entrepreneur operating a yard care business called Alternative Landscaping (AL) purchased a parcel of land ten years ago for \$50,000 with the intention to expand his operations. Recently, the entrepreneur sold the property for \$120,000, as the land proved to be too small for a rapidly growing business. The financial calculator should be used in the following manner to make the calculation: $PV = 50,000$; $FV = 120,000$; $n = 10$; $PMT = 0$; calculate $CPT\ i$ (this is equal to 9.1 percent). Please note that we can use equation 10.1 to calculate interest, but if calculations are more complex, the future value of a single amount formula would need to be rewritten as the following algebraic equation in order to solve the formula:

$$i = \left(\frac{FV}{PV} \right)^{\frac{1}{n}} - 1$$

The owner of AL may also be interested in solving his time value of money problem in order to purchase a larger lot for his expanding business. Let's suppose AL wishes to borrow a \$200,000 amortized loan from the bank over ten years to finance this land acquisition. An amortized loan is a loan that is paid off in equal amounts (like an annuity) and which includes a principal and the interest. The bank informs AL that the firm is expected to make payments equal to \$32,000 per year for ten years. What interest rate is the local bank charging for its loan? To solve this problem using the financial calculator, we can key the following variables: PV = 200,000; FV = 0; n = 10; PMT = 32,000; calculate CPT i. The interest rate (compounded annually) is equal to 9.6 percent.

Another change to the situation described would be if the bank informs the entrepreneur about the interest rate that it is charging; the objective here would be to calculate the value of payments (PMT). Let's assume that Eco-Clean Services, an entrepreneurial firm specializing in janitorial services using eco-friendly products, wants to obtain a bank loan to expand its operations to a neighboring city. The owners estimate that they need a total of \$250,000 and plan to pay the loan off in five years. The local bank indicates the interest rate is equal to 9 percent. In this case, we assume that the payments are made on a monthly basis (rather than annually). The approach to solve this problem is as follows: PV = 250,000; FV = 0; n = 60; i = 0.75; calculate CPT PMT. Eco-Clean Services would be expected to settle monthly payments equal to \$5,189.6. Note that in this example, we adjusted the number of periods; since the payments are monthly, the number of small, discrete periods or intervals increased to 60 (12 payment periods times five years). We also needed to adjust the interest rate period for it to correspond to each discrete time interval (9 percent divided by 12 periods in a year).

Another scenario may involve combinations (i.e., more than one calculation is needed to solve a specific problem). Let's imagine that the owner of Quick Food, a vending machine business, is looking to save capital to purchase additional vending machines. The owner needs \$250,000 and plans to add new machines in five years. If the cost of the machines goes up by 4 percent per year, how much would he need to deposit at the beginning of each year to be able to pay for the vending machines in five years (we assume that he can earn 11 percent on his deposit)? In this scenario, we require an initial calculation to determine the future value of \$250,000 in five years; this value is equal to \$304,163.2 (PV = 250,000; n = 5; PMT = 0; i = 0.75; calculate CPT FV). In this calculation, we must "travel" from the present value to the future value. In order to calculate the amount that the entrepreneur needs to deposit at the beginning of each year, we calculate the value of payments given the future value (we also recognize that each deposit occurs at the beginning of each period; hence, the BGN function); this amount is equal to \$43,999.6 (BGN, PV = 0; FV = 304,163.2; n = 5; i = 11; calculate CPT PMT).

Another unique application of time value of money principles would apply in a situation where the entrepreneur is either presented with a number of alternatives (for example, to receive payments or cash flows) or is presenting various choices to someone else (for example, for settling payments). Let's assume that a local plumbing business, Brandon Plumbing and Heating (BPH), has entered into a legal dispute over unpaid receivables with one of its commercial clients (BPH had to sue to effectively receive this payment from its client). Let's also assume that BPH's client presented BPH with three

settlement scenarios. The first scenario is for BHP's clients to pay \$38,000, today, in one lump sum. The second scenario is for the clients to pay a total of \$50,000 in five equal installments of \$10,000 over the next five years. The third scenario is for BHP to receive four equal annual installments of \$11,000, each beginning today (we assume that the prevailing interest rate is equal to 10 percent). So – which scenario should BHP choose?

The basic approach used to choose the most appropriate scenario is to calculate the present value of each of these alternatives and then choose the one that offers the highest present value (note that this is the only way to compare between these alternatives). The tendency of some entrepreneurs might be to calculate the future value of these alternatives and then compare them; this would be a flawed approach because these particular settlement scenarios have different time horizons (paying immediately, in five years, or in four years). With respect to the first scenario, the present value is equal to \$38,000 because the payment is made in the immediate present. For the second alternative, the present value of the stream of cash inflows (an annuity paying \$10,000 over five years) is equal to \$37,907.9 ($FV = 0$; $n = 5$; $PMT = 10,000$; $i = 10$; calculate CPT PV). The third alternative is computed as follows: BGN, $FV = 0$; $n = 4$; $PMT = 11,000$; $i = 10$; CPT PV = 38,355.4 (note that in this case, we need to press the BGN key on the calculator to recognize the fact that the cash flows begin immediately). Given the assumptions above, the highest present value is offered by the third alternative; hence, this is the scenario that should be chosen.

There are some general rules that are useful when solving time value of money problems where various alternatives or scenarios need to be considered. The analytical approach includes six steps:

1. Attempt to graph a problem on a time continuum where appropriate values are placed (i.e., prepare a graphical representation of a problem as in Figure 10.1).
2. Decide what type of a problem a specific case presents (i.e., an annuity, perpetuity, or something else).
3. Decide the “direction” of calculations (whether from the present value to future or vice versa; we always calculate the present value when we attempt to compare between various alternatives or scenarios).
4. Decide whether a specific situation represents a value minimization or maximization problem (we always attempt to maximize the present value of inflows and minimize the present value of outflows).
5. Watch compounding, which can be monthly, quarterly, or annually (the compounding period changes the number of discrete time intervals and the corresponding discount rate per period).
6. Calculate the desired outcome using the financial calculator.

Capital budgeting

Capital investment decisions can have a significant influence on the development of entrepreneurial firms. Such decisions impact virtually every aspect of the entrepreneurial firm's operations: financial performance, market position, competitive dynamics, etc. This is especially true for younger entrepreneurial firms, where access to finance is especially problematic, resources (human and otherwise) are limited, and previous experience managing and implementing sizeable projects may not exist. Capital budgeting is a formal process where the entrepreneurial firm decides whether a specific investment project is worthwhile.

Entrepreneurs evaluate and ascertain projects that are valuable to the firm and rank them. Capital budgeting usually refers to investments into fixed assets or facilities (i.e., land, machinery and equipment, buildings, and so on) that have long-lasting effects and implications for the entrepreneurial firm. Simply put, such investments are expected to benefit future periods in the development of the firm. Capital budgeting considerations, however, do not have to be limited only to “tangible projects” – any significant capital outlay that the entrepreneurial firm commits (such as marketing and promotion, human resources, acquisitions of other firms, working capital improvements, research and development, intellectual property, etc.) deserves a structured evaluation. The capital budgeting process provides the analytical framework for such an evaluation.

Capital budgeting is an investment appraisal tool which can result in two basic decisions: accept/reject and ranking. The first consideration addresses the question of whether a project is likely to add value to the entrepreneurial firm or whether it can generate an acceptable rate of return (which is presumed to be in excess of the rate expected by the entrepreneurial firm). Ranking is the process by which competing projects are graded on the basis of their desirability, given the availability of financial resources and other constraints. Generally, projects are accepted if they meet the entrepreneurial firm’s basic criteria (most notably, risk and return). In other circumstances, other standards of measure may factor into the evaluation: the number of years required to repay, the amount of the presumed increase in the value of the firm, and so on.

Capital budgeting projects can be classified in different ways and involve a vast range of orientations. The most common project categories include the following: replacement (replacing outdated equipment), expansion (increasing product lines), introduction of new products and services (developing new additions to the existing commercial proposition), and mandatory investments (meeting regulatory requirements mandated by governments, insurance firms, or agencies). Capital budgeting projects can be independent or mutually exclusive. Independent projects are those projects where cash flows are not influenced by decisions made on other projects; in other words, projects do not compete with each other for resources. If the project meets the specific capital budgeting criteria envisaged by the entrepreneurial firm, it should be accepted and undertaken. Mutually exclusive projects are those investment opportunities where only one project can be accepted at any given time. For example, if an entrepreneurial firm requires a specific piece of equipment, it would purchase it from one manufacturer over another; another example would be the firm choosing between building a hotel or a production hall on a parcel of land.

Another classification of capital budgeting relates to the types of incremental cash flows generated by the project at the point of termination. Standard cash flow capital budgeting projects involve an initial cash outflow which is then followed by cash inflows; this is commonly seen in new projects or expansion projects. The stream of cash flows is negative, then positive, positive, positive, and so on. Some projects begin in a traditional manner (as described) but require additional cash outlay along the way to sustain positive future cash flows (for example, to refurbish machinery or equipment). In such cases, the project’s cash flows may have the following profile: negative, positive, positive, negative, positive, positive, positive, and so on. With respect to the termination point, most projects are likely to be closed-ended, where the capital budgeting project has a predefined starting point and a clear termination point – these types of projects are the main focus of discussion in this chapter. The ability to estimate an exact termination date stems from the fact that manufacturers typically provide the time frame for how long a specific piece of equipment, machinery, vehicle, or other fixed asset is likely to last (and when it should be replaced).

Of course, the actual life of the project can be extended by such means as careful use of equipment, proper maintenance, upgrades, and appropriate downtime. Other types of projects may continue in perpetuity.

The capital budgeting process typically involves six steps. Entrepreneurial firms with limited experience in capital budgeting may collapse some of the steps into one or skip some steps altogether; they may also generate less detailed financial data for analysis. The first step is to generate ideas. Entrepreneurial firms normally have more projects and ideas than financial and human resources to execute them. Project ideas come not only from managers, but also from rank-and-file employees. Idea generation can be formal (a project description is developed and distributed on paper) or informal (ideas are only verbalized and recorded). At this stage, no financial data is typically generated. The second step is an initial screening where a formal evaluation of the project is undertaken; such an evaluation can be performed against pre-selected evaluation criteria or on an *ad hoc* basis (i.e., no specific criteria or expectations). The evaluation can be performed by specific individuals, managers, or committees. A more systematic evaluation of the project is performed in the third step; this involves finalizing all relevant details of the project and “running” through the financial numbers (i.e., the financial forecast). It is important to note that projects related to expansion and new products/services generally receive much more scrutiny than replacement projects. If detailed capital budgets have already been developed for various investment projects, traditional evaluation techniques (such as payback, net present value, internal rate of return, real options, and so on) are applied to the existing budgets. Sensitivity analysis can also be undertaken to understand the influence of certain variables upon the specific evaluation measures or criteria. If detailed budgets do not yet exist for selected projects, project committees are developed (with an assigned project leader) to generate the appropriate financial material for evaluation. When a specific financial analysis has been undertaken, the decision to reject or accept is made. Unprofitable projects are rejected and the remaining projects are ranked according to the entrepreneurial firm’s priorities; this represents the fourth step in the capital budgeting process. Priorities tend to include developing new products or services, reducing cost, improving production efficiency, addressing work safety conditions, completing incomplete projects, meeting legal requirements, and so on. Step five involves making a decision on the project. A decision is made not only on the overall project, but also on the desired source of financing (debt, equity, internal financing, or a combination of sources). Entrepreneurial firms have a limited ability to borrow or raise equity capital, so their financial resources need to be directed towards the best opportunities. Once approved, capital budgeting projects are incorporated into a broader three- to five-year financial plan for the entire entrepreneurial firm. The last step in the capital budgeting process (step six) is project evaluation; this occurs after completion of the project. Project evaluation is a critical step in the process because it allows the entrepreneurial firm to build and develop its “internal knowledge base,” which can be used to examine future projects. Evaluation typically involves the preparation of a completion report that compares predictions for the capital budgeting project with the actual outcomes achieved; this allows for corrective actions to be applied to future projects.

The capital budgeting process is especially useful to entrepreneurial firms. Any new capital investment forces the entrepreneurial firm to conduct a detailed analysis and generate financial forecasts. Developing and implementing the financial discipline needed to prepare financial forecasts (and the cash flow analysis) for projects and then evaluating them in detail is a useful process for entrepreneurial firms, as they will be more likely to avoid poor or unprofitable projects, efficiently process projects, and underline cash and cash flows as the

key financial ingredients in financial management (capital budgeting accounts for time and recognizes that early positive cash flows are preferred to later cash flows). Capital budgeting is also an excellent comparative tool for firms, as projects are judged against one another as part of the process. When considering the time value of money, it is important to be able to develop a risk profile for each project. Capital budgeting also forces the entrepreneurial firm to specifically evaluate the timing of the capital expenditure in the context of its broader strategic development; this leads to consensus on the most optimal time to implement the project in terms of the project's overall cost, the availability of human resources to implement it, and access to capital. Capital budgeting also has a strong orientation towards value maximization. Capital projects worth pursuing are presumed to enhance shareholder value. Finally, capital budgeting methods focus on cash flows rather than profits; this is tremendously useful for entrepreneurial firms, as maintaining project liquidity is critical for young firms.

Some capital budgeting projects are not so straightforward; complexities can arise on numerous fronts. Predicting the outcome of an entire project in terms of cash flows is often challenging to do and difficult to precisely quantify (predicting opportunity costs and externalities is even more problematic). Moreover, while we tend to ascribe specific time horizons to capital budgeting projects (as machinery and equipment may not last indefinitely), charting the actual time horizon of a project can prove challenging (benefits may extend well beyond the expected time horizon). The industries in which entrepreneurial firms compete are often very dynamic, uncertain, and unpredictable. Once developed, capital budgets may quickly become outdated; consequently, new realities may need to be considered and updated financial forecasts may need to be prepared.

Incremental cash flows

The starting point when developing the framework for capital budgeting is to determine the appropriate discount rate (a concept we discussed earlier, as well as in Chapter 8). The next step of the capital budgeting process is to estimate the appropriate incremental cash inflows and outflows. Incremental cash flows are cash flows that occur if the project is undertaken or do not occur if the project is not pursued; they are the additional cash flows attributable to the project. Incremental cash flows can be either positive or negative. Projecting incremental cash flows can be a complex process because they can reflect many variables (price, volume, costs, purchase price, installation, working capital, taxes, and so on). Please note that we will not attempt to consider the tax implications of capital budgeting decisions here, as taxation schemes vary from one legal jurisdiction to another. We raise this point because financial and taxation reporting often differs; hence, these implications need to be scrutinized in more detail.

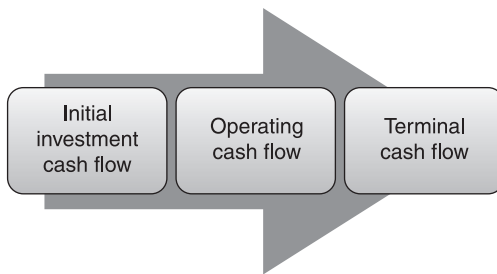
As a part of their capital decision making, entrepreneurs must carefully consider all incremental cash flows related to anticipated projects. There are at least three basic categories of costs: sunk costs, opportunity costs, and externalities. It is also important to highlight that entrepreneurs do not allocate resources to any of the existing costs of operations (such as overhead) when considering capital budgeting decisions; this would violate our principle of incremental costs. Instead, entrepreneurs must reflect on additional costs that could be added to overhead (like the extra managers and supervisors needed to manufacture new products) when these incremental costs are directly related to the project.

Sunk costs are costs that are borne by the entrepreneurial firm whether a project is accepted or rejected. Sunk costs have already occurred; they are pre-decision commitments that have

no impact on the ultimate investment decision and will occur no matter whether a project is rejected or accepted (they have or will occur irrespective of the investment decision). Entrepreneurs must exclude these irrelevant cash flows from capital budgeting decisions. If entrepreneurs misunderstand irrelevant cash flows, the capital budgeting decisions are likely to be flawed, distorted, or inaccurate. Let's demonstrate these costs using a simple example. Imagine that an entrepreneur wishes to expand his restaurant chain and commissions a feasibility study to understand the market and develop specific financial projections for a new outlet. The feasibility study costs \$25,000. While the study is highly related to the new restaurant, it is not an incremental cash flow because the consultant is paid whether the project is accepted or rejected. If we were to consider this as a part of the initial outlay, it would violate the very definition of an incremental cash flow.

On occasion, accepting a specific investment project will preclude the entrepreneurial firm from pursuing other opportunities. Such situations relate to opportunity costs, which can simply be defined as the costs of foregoing the best alternative in order to make a competing choice. Opportunity costs are the costs of foregone revenue that could otherwise be generated. If a specific resource at the entrepreneurial firm's disposal is used for one purpose, the opportunity cost is effectively the value of the next-best purpose that this resource could be used for. For example, if an entrepreneurial firm uses the same production facility to produce wooden toys and wooden chairs, the production facility would not be available to make toys if it is already producing chairs (we presume that the firm can only make one type of product at a time). The foregone benefit of the alternative that is not chosen (toys, in our example) effectively represents the opportunity cost. If the entrepreneurial firm's cash flow decreases by, say, \$100,000 due to the decrease in revenue from toys that the entrepreneur does not make, this amount represents the opportunity cost of choosing to produce chairs and not toys. Opportunity costs can be difficult to notice and estimate.

Externalities represent positive or negative effects that are likely to occur within existing operations if a new project is accepted. These costs are often omitted from capital budgeting because they are extremely difficult to estimate, measure, and quantify. Of course, these effects should only be considered in the incremental cash flow analysis if the project is accepted. Externalities are also highly subjective. Imagine that an entrepreneur who produces premium-quality soccer balls is also considering manufacturing high-quality, expensive soccer shoes. The new product (i.e., soccer shoes) may give the entrepreneurial firm more visibility in the marketplace (i.e., more shelf space; customers can buy the two products as a package) and may lead to increased sales of soccer balls; hence, a new incremental cash flow. Because cash flows generated from increased sales of soccer balls are incremental to the consideration of the soccer shoe project, they should be considered in the capital budgeting deliberations for the new project; this represents a positive externality. On the other hand, the same firm may begin to produce soccer shoes at the same facility it uses to produce soccer balls, with the same equipment, employees, and supervisors. Because the new product requires unique labor skills, employees who are very good at producing soccer balls may find producing soccer shoes more difficult (and vice versa). As a result, the manufacturing of soccer balls (the original product) may suffer in quality, which in turn may result in decreased revenue from the sale of soccer balls. The incremental cash flows from the loss of quality are considered to be a negative externality. Another example of a negative externality is the "cannibalization effect," where reduction of revenue from existing products occurs as a result of introducing new products.



	<i>Initial cash flow</i>	<i>Operating cash flow</i>	<i>Terminal cash flow</i>
Cash flows	Negative	Positive	Positive
Main components	Purchase price Delivery and shipping Installation Training costs Working capital Salvage value	Revenue Operating cost Depreciation Tax	Sale price of machinery at termination Reversal of working capital

Figure 10.2 The main components of capital budgeting

Components of incremental cash flow analysis

In order to properly evaluate capital budgeting projects, entrepreneurs must estimate many types of specific incremental cash flows occurring at various points in time. These cash flows can generally be divided into three categories: initial investment cash flows, operating cash flows, and shut down cash flows. The initial investment cash flows are those cash flows that are directly associated with the commencement of the project. The operating cash flows are cash flows generated by the ongoing operations of the project. The shut down cash flows (sometimes called end-of-life or terminal cash flows) are movements in cash triggered by the termination of the project. The three types of cash flows are presented in Figure 10.2. The graph also includes the main components of each category of cash flow.

Initial investment cash flow

Entrepreneurs begin their assessment of incremental cash flows by determining the start-up costs of the project. At this stage, cash flows are likely to be negative and would include the purchase price of the asset, the installation and delivery costs (please note that the two costs form the basis for depreciating the value of the asset; in other words, the purchase price and installation/delivery costs are used to calculate the level of depreciation expense), and incremental investments into working capital items. The approach used to calculate changes in cash related to working capital items is similar to the one used when constructing the cash flow statement (see Chapter 4 for details). If assets increase, there is a negative impact on the initial incremental cash flow. Accepting a new project often triggers an increase in cash outlay dedicated to accounts receivable (i.e., extending credit to customers) and inventory (i.e., the purchase of raw materials) – these items generate cash outflows. If liabilities increase (through supplier's credit), then there is a positive impact on the initial incremental

cash flow. In new capital budgeting projects, accounts payable, accrued wages, and accrued taxes may be affected; an increase in the balance of these items from zero to a specific level converts to a positive cash flow.

Let's discuss incremental cash flows in the context of a specific example. Imagine that two student entrepreneurs wish to invest further cash into their already successful vending machine venture at their university campus. The entrepreneurs plan to introduce additional vending machines focusing on healthy foods and snacks (i.e., fruits, vegetables, yogurts, freshly squeezed juice, and so on). The total purchase price of the new machines is equal to \$18,000. Based on their previous experience, the entrepreneurs estimate that the set up and delivery of the machines will cost an additional \$2,000. According to their financial projections, revenue is likely to increase by \$15,000 per annum in the first two years and then decline in subsequent years as the novelty of the machines wears off (year three – \$10,000; year 4 – \$8,000; year 5 – \$6,000). The entrepreneurs estimate that the incremental increase in operating costs is expected to be equal to 30 percent of the annual revenue.

The two students are aware that they need to make an investment into the contents of the machines (i.e., healthy food items – inventory) and that they must also pre-pay for the rental space. The resulting increase in current assets is expected to be equal to \$12,000. The entrepreneurs also have to pay suppliers to fill the vending machines. The students estimate that the suppliers will provide credit to them in the amount of \$4,000 (note that this is a cash inflow from the cash flow point of view – liabilities increase; hence, a cash inflow is created). The life of the new vending machines is estimated to be equal to five years, and no salvage value is expected at the end of this period. The students expect that their initial investment into working capital will be recouped at the end of year five; in other words, they will recoup all of their investments in current assets and repay all of their supplier credit.

The entrepreneurs further assume that the tax rate will be equal to 20 percent (commensurate with local taxation laws aiming to provide incentives for entrepreneurial activity) and that their required rate is 15 percent. Equipment, installation, set up, and delivery costs are

Table 10.1 An estimation of the initial cash outflow

<i>Item</i>	<i>Cost (in dollars)</i>
Cost of vending machines (outflow)	(18,000)
Installation and delivery cost (outflow)	(2,000)
Change in working capital	
Assets increase (outflow)	(12,000)
Liabilities increase (inflow)	4,000
Total initial cash outlay (outflow)	(28,000)

[We consider working capital items in terms of a change in cash flow. Please note that investment in assets (inventory and accounts receivable) increases from zero (as no investment was required at the beginning of the project) to \$12,000 – this represents an incremental cash outflow equal to \$12,000. An increase of liabilities from 0 to \$4,000 represents an incremental cash inflow. Please also note that in this project we do not deal with any disposal of old equipment (i.e., there is no salvage value). If the equipment is fully depreciated, then we would apply the tax to the proceeds (in our example this would be equal to 20 percent). If the equipment is not fully depreciated at the time of disposal, more complex tax rules may apply (the tax treatment varies from country to country, but generally involves the specific mechanics of the disposal of amortizable assets for the purpose of tax reporting).]

Table 10.2 An estimation of incremental operating cash flows

	<i>Incremental inflows and outflows from operations (in dollars)</i>				
	<i>Year 1</i>	<i>Year 2</i>	<i>Year 3</i>	<i>Year 4</i>	<i>Year 5</i>
Revenue	15,000	15,000	10,000	8,000	6,000
Operating costs	4,500	4,500	3,000	2,400	1,800
Amortization expense	4,000	4,000	4,000	4,000	4,000
Taxable income	6,500	6,500	3,000	1,600	200
Taxes	1,300	1,300	600	320	40
After-tax income	5,200	5,200	2,400	1,280	160
Plus amortization expense	4,000	4,000	4,000	4,000	4,000
Net incremental cash flow	9,200	9,200	6,400	5,280	4,160

amortized over five years (an annual amortization is equal to 20 percent per year under the straight-line depreciation method).

Table 10.1 presents all initial incremental cash flows. The newly contemplated project has an estimated initial cash inflow equal to \$28,000.

When the initial cash flow has been estimated, the next step is to estimate the operating cash flows for the project from year one to year five.

Operating cash flows

Operating cash flows are those cash flows that are actually generated by the project. Operating cash flows result in incremental changes to revenue and expenses. The main categories of these incremental costs include the project's specific operating expenses (i.e., labor, materials, electricity, logistics and distribution, advertising, etc.), amortization expense, and taxes; these costs should ideally include opportunity costs and externalities but not include any sunk costs. Table 10.2 presents an estimate of incremental cash flows for the vending machine capital budgeting project. In the first two lines, the summary sheet includes incremental cash flows related to revenue and operating costs; these items are based on estimates provided by the two student entrepreneurs.

The next line includes amortization expense. Amortization is a non-cash but tax deductible expense that provides the entrepreneurial firm with a "tax shield" or saving (amortization expense is deductible for taxation purposes). Incremental amortization expense is the change in amortization expense that results from accepting a proposed project; this relates specifically to the capital budgeting project. The two student entrepreneurs estimate that their equipment should be amortized over a period of five years (i.e., the amortization rate is equal to 20 percent). Given that the total purchase price and installation/delivery costs are equal to \$20,000, the annual incremental amortization expense would be equal to \$4,000 (\$20,000 times the 20 percent amortization rate). Since the amortization expense is calculated on the basis of a straight-line method, the annual expense will be equal every year throughout the entire period of consideration.

Deducting all incremental expenses (including operating costs and amortization) from incremental revenues generates incremental taxable income, to which taxes are applied. Taxes are an important part of incremental cash flow analysis. An increase in tax is equivalent

to a negative incremental cash flow and a decrease in tax is equivalent to a positive cash flow (tax shields or tax savings). In our example, we assume that the relevant tax rate is equal to 20 percent; by applying this rate to taxable income, we arrive at the after-tax income. However, this is not the end of the calculation. Because the amortization expense is a non-cash expense (we do not pay the equivalent of the amortization expense to anyone), we need to add it back to the after-tax income in order to arrive at the net incremental cash flow for the project (we sometimes call the final number a free cash flow, or FCF). The incremental cash flow would be equal to \$9,200 for the first two years of operations, but would decline to \$4,160 by the end of year five.

Terminal cash flows

Entrepreneurs must also estimate the total shut down (or terminal) cash flows that are projected to occur at the end of the useful life of the project. These costs are likely to include the residual value of the asset upon sale and the resulting taxes reflecting the disposal of the asset at the end of the project. For simplicity, let's assume that the asset (i.e., the equipment, machinery, land, etc.) is fully depreciated; otherwise, complex taxation laws may apply pertaining to the difference between the sale price and the value of the asset, which is not fully depreciated. The terminal cash flow also unwinds the early capital commitment to working capital; we effectively reverse or recoup the initial investment into working capital.

The terminal cash flow is often positive because of the positive residual disposal value of the asset and the reversal of working capital. If the capital budgeting asset is projected to have a positive residual value, then an applicable tax rate is also applied (we assume that there is no salvage value from the vending machines at the end of the five-year period). For our example, let's assume that the two student entrepreneurs are able to sell their inventory at a full price (in reality, this depends on the resulting aftermarket, the specificity of inventory items, and other considerations) and that their clients have repaid the balance of outstanding accounts receivable. The total of these two assets is equal to \$12,000. On the other hand, the vending business must repay an outstanding supplier credit equal to \$4,000. The incremental cash flows from working capital would ultimately be equal to \$8,000; this represents an exact reversal of the working capital position seen at the beginning of the capital budgeting project.

After all of this, we can determine the final incremental cash flows from the vending machine project. The calculations used to determine this are presented in Table 10.3. We

Table 10.3 An estimation of total net incremental cash flows for the project

	<i>Total incremental inflows and outflows (in dollars)</i>					
	<i>Time 0 (now)</i>	<i>Year 1</i>	<i>Year 2</i>	<i>Year 3</i>	<i>Year 4</i>	<i>Year 5</i>
Equipment/installation	(20,000)					
Salvage value						0
Working capital	(8,000)					8,000
Operating cash flow		9,200	9,200	6,400	5,280	4,160
Net incremental cash flow	(28,000)	9,200	9,200	6,400	5,280	12,160

would now be in a position to apply the capital budgeting techniques to the project to see whether or not the project can be accepted.

Evaluation techniques for capital budgeting

When all of the incremental cash flows have been developed, capital budgeting techniques can be applied to ascertain the contributions of specific projects. There are many methods used to analyze capital budgeting projects. The first category of techniques involves an evaluation of all cash flows generated by the project. Future cash flows are discounted to the present point in time. Early cash flows are discounted less while further cash flows are discounted more. These methods are implicitly biased towards early cash flows by making them “more critical” or important; the early cash flows are heavily weighted since they are perhaps more predictable than those cash flows further into the future. Specific methods that deal with all the cash flows generated by the project include the net present value, the internal rate of return, the profitability index, the equivalent annual cost, the replacement chain approach, and the modified internal rate of return. Since these capital budgeting evaluation methods generally result in the same decision to accept or reject, we focus in this chapter on the two most well-known and widely applied evaluation methods: the net present value and the internal rate of return.

Other capital budgeting evaluation approaches focus on specific time periods and the cash flows associated with these periods; these approaches effectively ignore other cash flows that occur beyond a certain point in time. The payback method is an example of such a method and is the most popular time-specific measure. We discuss the payback method in this chapter because it is an evaluation technique that has proven to be quite intuitive for entrepreneurial firms.

There are also accounting-based capital budgeting evaluation methods that focus predominantly on the income statement (i.e., operating and net profits). One such method is the accounting rate-of-return model, which considers a change in operating profit and the initial investment (accountants may use the average book value of fixed assets in place of the initial investment). Such accounting-based methods focus on profits (not cash flows) and ignore time value of money principles. We omit such analysis in this chapter as this approach is perhaps the least useful to entrepreneurial firms.

Table 10.4 provides a summary of the advantages and disadvantages of the three main methods: payback, net present value, and internal rate of return.

In this chapter, the application of various capital budgeting methods is illustrated through the example of an entrepreneurial firm, Healthy Pets, which specializes in providing healthcare services to dogs and cats. Healthy Pets is run by five entrepreneurial veterinarians who have developed unique methods of maintaining healthy domestic pets through natural nutrition, preventive screening, and non-invasive procedures. The entrepreneurs own five clinics in California, with each outlet run by a local partner entrepreneur. The owners are considering adding two additional locations with the aim of generating specific incremental cash flows; let's call these projects A and B (see forecasted cash flows for these projects in Table 10.5). Project A has an initial outlay of \$100,000 and an equally spread stream of cash inflows equal to \$60,000 (this effectively represents an annuity over a period of time). The total value of cash inflows is equal to \$240,000. Project B also has an initial outlay of \$100,000, but the cash inflows grow over time from \$10,000 at the end of the first year to \$180,000 at the end of the fourth year; the more meaningful cash flows in terms of value are “back-loaded.” Total cash inflows from this project are equal to \$290,000 – more than from the first project.

Table 10.4 Advantages and disadvantages of the payback method, the net present value method, and the internal rate of return method

<i>Evaluation method</i>	<i>Advantages</i>	<i>Disadvantages</i>
Payback	Simple and intuitive Easy to apply	Ignores time value of money principles Ignores cash flows occurring after the payback period
Net present value	Value maximization orientation Easy to interpret (wealth and value increase) Flexibility to incorporate various discount rates Avoids percentage returns Analyzes all cash flows for a project	Does not focus on percentages Requires knowledge of finance to calculate
Internal rate of return	Easy to interpret Return maximization focus Analyzes all cash flows for a project	Provides unrealistic rates of return Multiple rates of return possible – can lead to wrong decisions Reinvestment assumption may not be realistic Requires knowledge of finance to calculate

Payback period

The simplest capital budgeting evaluation tool is the payback method. This measure calculates the amount of time it takes before the cash inflows generated by a proposed project become equal to the amount of the initial cash outflow. In other words, the payback period defines how many years it takes to recoup the initial investment.

In order to calculate the payback period for Projects A and B, it is easiest to chart out a timeline, place the appropriate cash flows within it, and then calculate the amounts of the cumulative cash flows at each year end. In Figure 10.3, we consider the payback calculations for Projects A and B. In Project B, for example, calculating the amount of cumulative cash flows allows us to discover that the cumulative cash flow amounts change from negative to positive in year three; this indicates that the project will be fully paid off sometime during the third year. Since the payback occurs after the full second year, we need to calculate to what extent the next positive cash flow (i.e., \$60,000, which occurs at the end of the

Table 10.5 Cash flows from two capital budgeting projects (Project A and Project B)

<i>Project (in dollars)</i>	
<i>A</i>	<i>B</i>
–100,000	–100,000
60,000	10,000
60,000	40,000
60,000	60,000
60,000	180,000

Payback period for Project A					
	Year 1	Year 2	Year 3	Year 4	
Cumulative cash flow	-100,000	60,000	60,000	60,000	60,000
	-100,000	-40,000	20,000	80,000	140,000
$\text{Payback}_A = 1 + \frac{40,000}{60,000} = 1 + 0.7 = 1.7$					

Payback period for Project B					
	Year 1	Year 2	Year 3	Year 4	
Cumulative cash flow	-100,000	10,000	40,000	60,000	180,000
	-100,000	-90,000	-50,000	10,000	190,000
$\text{Payback}_B = 2 + \frac{50,000}{60,000} = 2 + 0.8 = 2.8$					

Figure 10.3 Calculations for the payback method for Project A and Project B

third year) effectively covers the end-of-previous-year negative cumulative cash flow (i.e., $-\$50,000$, which is the value of the cumulative cash flow at the end of the second year). In this case, the payback period would be equal to 2.8 years (1.7 years for Project A). Figure 10.3 provides detailed calculations.

Making decisions based on the payback method is simple: if the amount of time calculated for a specific project is less than the desired or acceptable time horizon, the project is accepted; if projects are mutually exclusive, we choose the project with the shortest payback period. In the case of Projects A and B, let's assume the entrepreneurs want to accept projects that will be paid off in two years or less; based on this criteria, only Project A can be accepted (Project B would be rejected because it exceeds the desired time frame). The desired time horizon usually reflects the actual experience entrepreneurial firms have with respect to implementing capital budgeting projects. In short, entrepreneurs basically decide upon the most appropriate time horizon for a project based on the success of past projects, the firm's preference for recouping its initial investment costs, the risk profile of the project, and the project's overall contribution to the firm's strategic considerations. If most of the firm's previously implemented capital budgeting projects have been repaid by the third year, then this becomes the desired time horizon for judging capital budgeting projects using the payback method. Start-ups and young firms sometimes experience challenges in this regard because they have often not implemented any or sufficient amounts of these types of projects to make an informed decision about what would represent an appropriate or acceptable time horizon for use in the payback method.

The payback method has advantages and disadvantages. Advantages are that the method is simple to apply and intuitive to use (entrepreneurs often consider the time horizon in their decision making because it constitutes an easy reference point). The payback method also provides a crude measure of the project's liquidity, as it outlines when the initial project will be paid off and when free (hopefully positive) cash flows are likely to be generated. The

method also focuses on the pattern of cash flows; this component is captured in time period calculations. Payback focuses mostly on cash flows in the near future (these are often more predictable); hence, some observers argue that investment decisions based on the payback method can be more accurate (as the method ignores more uncertain cash flows that occur further into the future). In terms of disadvantages, the most significant is the fact that the payback method ignores time value of money principles. Moreover, payback does not factor in the cash flows that occur after the project is paid off; this is a significant omission because these cash flows (even though they occur in the future) can influence the attractiveness of the project and add significant value to the entrepreneurial firm. For this reason, the payback method should never be used as the primary tool for decision making related to capital budgeting projects.

Net present value

One of the capital budgeting methods most consistent with value maximization principles is the net present value (NPV) method. The NPV method calculates the dollar amount of the change in value of the firm that results from undertaking a capital budgeting project. The procedure to calculate NPV is relatively straightforward and is grounded in the present value orientations discussed earlier. We discount specific cash flows to the present point in time (adjusting the value of the cash flows as if they occurred at a single point in time – the present value) and then deduct the value of the initial investment (this value is already expressed in the present time). To discount the cash flows, we use the required rate of return; choosing an appropriate required rate of return is critical because present value calculations are very sensitive to changes in the discount rate. If the sum of present values of cash flows exceeds the amount of the initial outlay, then we arrive at a positive NPV value. NPV is the present value of all costs and benefits measured in terms of incremental cash flows of a project. The methodological construct of this approach is as follows: $NPV = PV_{\text{inflows}} + PV_{\text{outflows}}$. The algebraic method to calculate NPV is presented in equation 10.5.

NPV can be negative, positive, or neutral (i.e., zero). Calculating NPV can have an impact on the entrepreneurial firm's rate of return and the rate of return expected from the project. If a negative NPV occurs, the overall value of the firm is expected to decline – not a desired investment scenario. In this case, the entrepreneurial firm generates returns from capital budgeting projects resulting in less than the desired rate of return. A positive NPV implies that the value of the entrepreneurial venture will improve as a result of investment into a project. In this case, the actual rate of return exceeds the required rate of return. If NPV is equal to zero, then the project's return is equal to the required rate of return.

The algebraic approach for NPV calculations

$$NPV = \left(\frac{CF_1}{(1+k)^1} \right) + \left(\frac{CF_2}{(1+k)^2} \right) + \dots + \left(\frac{CF_n}{(1+k)^n} \right) - \text{Initial Investment} \quad (10.5)$$

CF = Cash flow from a specific time period

k = The discount rate (the required rate of return)

n = Life of the project measured by the number of time periods

NPV = Net present value

Let's apply this methodology to Project A. We assume that the required rate of return for the two projects is equal to 15 percent. If we were to rewrite equation 10.5 specifically for Project A, it would look as follows:

$$\begin{aligned} \text{NPV} &= \left(\frac{\$60,000}{(1 + 15\%)^1} \right) + \left(\frac{\$60,000}{(1 + 15\%)^2} \right) + \left(\frac{\$60,000}{(1 + 15\%)^3} \right) + \left(\frac{\$60,000}{(1 + 15\%)^4} \right) - \$100,000 \\ \text{NPV} &= \frac{\$60,000}{1.15} + \frac{\$60,000}{1.32} + \frac{\$60,000}{1.52} + \frac{\$60,000}{1.75} - \$100,000 \\ \text{NPV} &= \$71,298.7 \end{aligned}$$

These calculations show that with a required rate equal to 15 percent, a stream of cash flows equaling \$60,000 for four years, and an initial investment of \$100,000, the NPV for Project A would equal \$71,298.7. The NPV for Project B is equal to \$81,308.0. Using the financial calculator, we would use the following sequence to solve the equation tied to Project A: $CF_0 = -100,000$; $CF_1 = \$60,000$; $CF_2 = \$60,000$; $CF_3 = \$60,000$; $CF_4 = \$60,000$; $i = 15\%$; press NPV. The net present value is equal to \$71,298.7.

Making decisions based on the NPV method is simple: if a project generates a positive value, it is generally accepted. The entrepreneurial firm should accept all projects with a positive value if capital budgeting projects are independent (capital budgeting projects should be ranked from the highest NPV value to the lowest and financial resources should be allocated to the highest-value NPV projects until available capital is exhausted; in the case of a mutually exclusive project, only the highest-value NPV project should be chosen). Projects with an NPV value equal to zero or negative should be rejected, as they are assumed to either generate no value for the entrepreneurial firm or actually diminish its value. In the case of Projects A and B, both should be accepted (provided that they are independent). If we are considering projects on a mutually exclusive basis, then we would accept Project B – the project with the highest NPV value.

There are both strengths and weaknesses tied to the use of the NPV method. In terms of strengths, the NPV approach reflects the value maximization principle in that value increase is the central theme of the method and any decision making is focused on this parameter. The resulting NPV values generated by this approach are easy to interpret, and we can also incorporate various required rates if the expectations or project risk profiles are perceived to change from one period to another (even though this is seldom done). In terms of disadvantages, the NPV method requires a more advanced knowledge of finance as the concepts of present value and discounting are incorporated into final calculations. Explaining discounted cash flows and the resulting NPV value to novice entrepreneurs can be difficult, and the approach may be less intuitive to entrepreneurs with no financial background compared with something like the payback approach. Entrepreneurs also sometimes prefer to operate on the basis of percentages, rather than values. Percentage-return calculations are promoted by the financial community. The percentage returns expected from specific capital budgeting projects can be easily compared with other investment opportunities because dollar values are unlikely to be reported for alternative projects; such comparisons are not possible when we calculate the NPV value for one specific capital budgeting project.

Internal rate of return

The internal rate of return (IRR) can be described as the estimated rate of return for a proposed capital budgeting project. IRRs are calculated on the basis of time value of money principles and are expressed as percentages. The methodological construct of this approach is similar to the NPV approach in that we look to discount the relevant cash flows (see equation 10.6); however, in this case, we look to actually discover the rate of return which causes NPV to equal zero. IRR is the discount rate that equates the present value of expected benefits from the project (cash inflows from the project) to its costs (an inflow occurring at the beginning of the project or the initial investment). Using equation 10.6 would be cumbersome in this case, since we can only do this on the basis of trial-and-error where we plug a specific rate of interest into the formula and see whether a specific interest rate causes NPV to equal zero. If we can observe how different interest rates affect the movement of NPV values (higher than zero and lower than zero), then we can determine a small range of values that represents the internal rate of return.

The algebraic approach for IRR calculations

$$\text{NPV} = 0 = \left(\frac{\text{CF}_1}{(1+k)^1} \right) + \left(\frac{\text{CF}_2}{(1+k)^2} \right) + \dots + \left(\frac{\text{CF}_n}{(1+k)^n} \right) - \text{Initial Investment} \quad (10.6)$$

CF = Cash flow from a specific time period

k = The rate of return

n = Life of the project measured by the number of time periods

Instead of calculating IRR on a trial-and-error basis, we can use the financial calculator. To do this, we input the appropriate cash flows and press the IRR key. Of course, we do not input any required rates of return into the calculation in this case because the rate of return is what we are attempting to determine. The steps to calculate IRR for Project A would be as follows: $\text{CF}_0 = -100,000$; $\text{CF}_1 = \$60,000$; $\text{CF}_2 = \$60,000$; $\text{CF}_3 = \$60,000$; $\text{CF}_4 = \$60,000$; press NPV. The IRR for Project A is equal to 47.2 percent (the IRR for Project B would be equal to 38.3 percent).

The decision-making process used in the IRR approach is similar to that used for the payback method: we compare the calculated rate of return with the desired rate of return (this is often called the hurdle rate). If the internal rate of return achieved by the project is higher than or equal to the required rate of interest, the project is accepted; if it is lower than the required rate, the project is rejected. If multiple projects are being considered (or if they are not mutually exclusive), they are ranked in accordance to the rate of interest (from highest to lowest IRR). The entrepreneurial firm may decide upon a specific percentage for the hurdle rate that they would like to generate from a capital budgeting project; such a rate can be established on the basis of previous experience, or may reflect the entrepreneur's desire to achieve a certain rate of return. Capital budgeting projects where the IRR exceeds the cost of capital are usually accepted (cost of capital is discussed in more detail in Chapter 8).

The IRR method is very popular among financial managers and business practitioners, but less so among entrepreneurs. Because the IRR method offers a percentage-based rate of return, practitioners often find it to be a more appealing method of evaluating investment opportunities because it enables them to do this on the basis of percentage-based returns; this allows practitioners to compare the projected rate of return with other investment opportunities where capital can be employed. The IRR method also focuses on the entire

stream of cash flows related to the project (as opposed to the pay-back method, which only considers selected cash flows). The IRR method is often cited as the preferred capital budgeting decision-making tool for practitioners; academics tend to favor the NPV method because of the severe shortcomings of the IRR approach.

Because IRR is percentage based, it actually does not signal the influence of the project on the value of the firm to the entrepreneur; as such, IRR may actually misguide entrepreneurs by presenting relatively high IRRs when the project's actual impact on the value of the firm may be negligible (this situation is more common for smaller projects). If one of the key objectives of any entrepreneurial firm is to increase its value, then discovering the rate of return on a specific project may be less meaningful.

In addition, the internal rate of return generated from the calculations can be somewhat theoretical; the method sometimes provides an unrealistic rate of return. Let's illustrate this important point with an example. In the case of Project A, the IRR is equal to 47.2 percent. Does this mean that the project should be accepted right away? The rate only means that the firm has an opportunity to reinvest future cash flows at 47.2 percent. If the past experience of the firm indicates that achieving such a high rate of return is unrealistic, then the achieved IRR of 47.2 percent is only theoretical because the firm would not be able to invest forthcoming cash flows at this rate. Therefore, IRR represents a rate of return projected "on paper" – not an actual rate of return that the entrepreneurial firm earns from the project. If the entrepreneurial firm were to earn the actual rate of interest equal to IRR, it would need to effectively invest all cash flows as they are generated at precisely the rate of return equal to IRR; otherwise, the actual return from the project would be much less. Such a scenario represents a reinvestment rate problem for the IRR method. Finally, the IRR evaluation can be negatively impacted by the fact that multiple rates of return can make NPV equal to zero; in other words, multiple IRRs can be generated using this approach. This problem commonly arises in non-standard capital budgeting projects where there are frequent changes in cash flows (from negative to positive and from positive to negative) – one or more negative future cash flows appear after the initial investment. Such streams of cash flows often occur if additional investment needs to occur during the life of the project; this effectively changes the pattern of cash flows over time. Any time there is a change in the cash flow pattern, multiple IRRs can result. Whenever there are two or more IRRs for one project, the IRR method becomes a less-effective decision-making tool and greater consideration must be given to NPV and other factors.

Resolving conflicts between the IRR and NPV

In the case of Projects A and B, we encounter a special problem where the two main cash-flow-driven methods of evaluating capital budgeting projects (i.e., the IRR and NPV methods) generate conflicting decision-making criteria. Such a conflict arises only in situations where projects are mutually exclusive. Although the initial cash outlays for the projects are the same (i.e., \$100,000), the incremental cash flows associated with the two projects differ in both amount and the lifespan of the project. Project A generates the same amount of cash flows over time while Project B generates more "back-loaded" payoffs. Table 10.6 summarizes the results of NPV and IRR calculations assuming that the required rate of return for the two capital budgeting projects is equal to 15 percent.

The NPV and IRR calculations from Table 10.6 show that Project B has a higher NPV than Project A (\$81,308.0 versus \$71,298.7) and that Project A has a higher IRR compared with Project B (47.2 percent versus 38.3 percent). The entrepreneurial firm is now faced with conflicting decision-making criteria based on the NPV and IRR methods. If the projects were

Table 10.6 A summary of net present value (NPV) and internal rate of return (IRR) results for Project A and Project B

	<i>Project</i>	
	<i>A</i>	<i>B</i>
NPV	71,298.7	81,308.0
IRR	47.2%	38.3%

independent (i.e., both could be selected), then there would be no problem, as both projects generate a positive NPV and the IRR exceeds the required rate of return equal to 15 percent. Assuming that the projects are mutually exclusive, the entrepreneurial firm has to choose one. In situations of conflict between IRR and NPV, the project with the highest NPV should be selected because NPV indicates the dollar amount of value that is purported to be added to the value of the firm as a result of undertaking the capital budgeting project. In our case, Project B would be selected because its NPV value exceeds that of Project A.

Strategic considerations and real options

Many entrepreneurial firms deal with multiple strategic concerns such as the purchase of assets, marketing expenditures, new product introductions, research and development (R&D) investments, acquisitions of other firms, mergers with other firms, or undertaking other initiatives. Many of these investment opportunities have unique characteristics in that they have choices (or options) embedded within them. This special characteristic of investment projects, where single or multiple revisions to the project are possible, is called a “real option” (please note that this type of option is not a derivative financial instrument). Real options are sometimes called “growth options” as growth opportunities are often among the most popular strategic considerations (other types of real options also exist). These options are called “real” because they often involve real assets such as land, buildings, equipment, or machinery; they do not, however, have to involve tangible assets (as observed earlier). Real options allow us to approach the problems of strategic choice and financial investment as a collection of interdependent decisions.

The flexibility provided by a real option to revise a project at a later date has value. Real options allow for a number of options: to grow (expanding the scope of operations by introducing new products or services); to expand or contract (increasing or decreasing the scale of operations depending on market opportunity and demand); to defer (adopting a “wait-and-see” approach to take action until another time when information can be received in order to allow for better decision making); to abandon (discontinuing the project); to tranche (committing to investing in stages or tranches in order to give rise to further evaluation); to switch inputs (altering the mix of inputs in the production process); to create another project on the basis of the initial investment (giving rise to follow-up opportunities that firms may or may not ultimately exploit); or to do something else. Real options allow a firm the flexibility to adapt its decision-making process in response to the changing conditions of the external market. Many industries in which entrepreneurial firms participate are filled with uncertainty, change, and competitive dynamics; hence, an understanding of real options can be valuable to entrepreneurial firms. In short, entrepreneurial firms can generate value by identifying, managing, and executing their real options in relation to their anticipated investment projects.

In terms of practical examples, a building with additional space for expansion is considered to be more valuable than a building without such a space (other considerations being equal). Similarly, an unsuccessful project that can be shut down before its scheduled termination is more valuable than a project that generates negative cash flows and cannot be stopped. A research lab designed for one project but which can be used for future projects and discoveries is more valuable than a lab without such potential.

Despite the obvious benefits associated with them, real options have not yet become decision-making “darlings” for business practitioners and entrepreneurs. Many specialists argue that the more traditional NPV and IRR analysis used in capital budgeting tends to overlook the value that real options provide because it can be difficult to capture this value in incremental cash flows; consequently, decision makers often omit real options as a consideration within the capital budgeting evaluation, potentially causing the NPV and IRR calculations to be understated. The NPV process can be modified to reflect the value that real options add to the project. A modified approach may include calculating NPV in a traditional manner and then adding the value of any real options that may be present in the project. Real options can also be incorporated into the capital budgeting process through the use of decision trees.

Other advantages of real options include that they can capture projects with multifaceted risks (by adjusting discount rates to various alternatives and considerations) and opportunities (by recognizing the different revenue potentials of various alternatives). In other words, other methods may ignore such uncertainties and therefore disregard the upside potential of a project, which may cause decision makers to reject highly promising opportunities. Real options also force decision makers to consider uncertainties related to the external environment, which can be very dynamic. In addition, real options present a better platform for combining strategic decision making and financial analysis because real options embed choices, alternatives, or other opportunities into the strategic decision-making process. Real options recognize the implied operating strategy as well as the interdependence between initial and subsequent strategic decisions. Real options also provide the formal means to consider strategic choices that may have a greater impact on value creation; they do not assume fixed scenarios for outlays and operational cash flows. Moreover, real options provide a formal structure for mapping out feasible strategic alternatives in anticipation of developments in the marketplace; they provide an opportunity to conceptualize the firm’s future strategic movements. Real options are also intended to supplement traditional cash-flow-based capital budgeting evaluation methods rather than to disregard them. Finally and most importantly, real options (especially in scenarios where multiple possibilities can be considered) can improve the estimate of a project’s contribution and its ultimate value creation.

The interconnection that occurs between capital budgeting and strategic decision making (these practices should not be separated in any instance) represents a critical step in bridging the gap between finance and strategy. This orientation should be considered for at least two reasons. Investments made into capital budgeting projects should not be done in isolation, but rather should represent a deliberate effort on the part of the firm to pursue a desired strategy (capital budgeting reflects strategy and represents an analytical assessment of strategy). Most investment decisions involve a sequence or series of decisions rather than a single discrete decision; this is especially true for entrepreneurial projects, which have complex risk profiles. Capital budgeting needs to be considered within a broader strategy. Capital budgeting projects are not independent of major strategic considerations; they are integral parts of these considerations. Most strategic decision making involves assets-in-place, new assets, new strategic initiatives, and real options. In our specific case, there is interconnection between capital budgeting decisions and directional strategies

(the most relevant strategic considerations for the entrepreneurial firm). Second, strategic decisions involve choosing between strategic alternatives and investments. Limited literature connects these two concepts even though this interdependence is critical in the entrepreneurial setting. Academic literature on finance considers capital budgeting in absence of strategic considerations. Strategic management literature considers strategic maneuvering without paying attention to the numeric and financial implications of strategic considerations. It is only when we apply financial theory to strategic decision making that we are able to resolve complex and risky business situations. Such a combined approach ultimately provides more flexibility when valuing strategic alternatives.

In the next section, we highlight the key strategic considerations relevant to entrepreneurial firms.

Strategic decision making in entrepreneurial firms and real options

There are many strategic choices available to entrepreneurial firms. Figure 10.4 provides a framework for strategic consideration in the context of growth opportunities for entrepreneurial firms. Entrepreneurs must consider each of the possible pathways and then select the one with the most advantages. It is difficult to imagine that an entrepreneur will consider each of these paths in detail by developing a set of financial projections for each (or considering capital budgeting projects for each path). The best entrepreneurial practice is to consider at least three attractive routes and then determine the financial implications for each option by performing a detailed capital budgeting analysis.

Entrepreneurial firms have to deal with three main strategic considerations: to decide upon their general orientation towards growth, to select appropriate industries, and to co-ordinate resources within their organization. With every product or service, entrepreneurial firms aim to improve their competitive position. Since the predominant orientation of entrepreneurial firms is towards growth (entrepreneurial firms operating in rapidly expanding

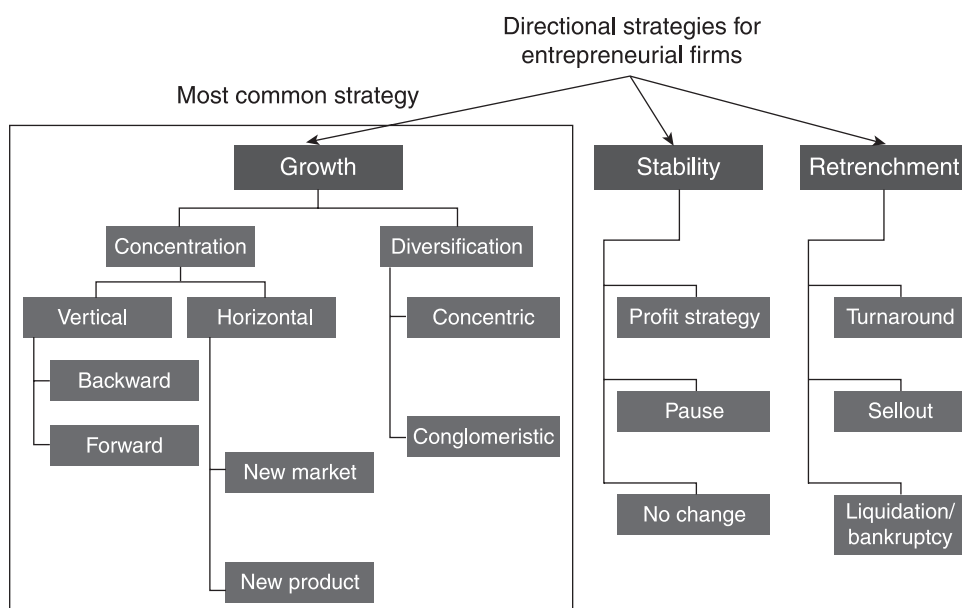


Figure 10.4 Strategic decision-making criteria for entrepreneurial firms

industries must grow to survive), we will focus our discussion on this aspect of the entrepreneurial firm's development. A general orientation of the entrepreneurial firm towards growth is referred to as a directional strategy.

Entrepreneurial firms have multiple choices to make with respect to their growth orientation. Entrepreneurial directional strategies tend to focus on two main themes: concentration and diversification. Concentration means that the entrepreneurial firm continues to expand its current product or service line in one industry. This growth strategy is especially attractive for firms whose products and services have strong growth potential. Diversification denotes that the entrepreneurial venture is interested in introducing new product lines for other industries that the firm has not yet participated in. If the entrepreneurial firm decides to expand its product line in its existing industry (i.e., the concentration strategy), it has two basic choices. The first relates to going up or down the industry's value chain – this is called vertical growth. This strategy works best for entrepreneurial firms with a strong competitive advantage in highly attractive industries. Vertical growth involves performing a function previously furnished by a supplier (backward integration) or by a distributor (forward integration); backward integration is generally more successful than forward integration. To illustrate this, let's assume that the entrepreneur owns a local television station. An example of backward integration would be to develop programming (i.e., local news) in-house for the station. An example of forward integration would be to expand into the provision of cable or satellite services. Horizontal growth denotes one of two things: expanding products or services into other geographic markets, or increasing the range of products or services within the firm's existing industry. Horizontal growth may be affected by internal growth, external acquisitions, strategic alliances, and partnerships; it can also be impacted by domestic expansion or international development through such means as licensing, franchising, joint ventures, or management contracts.

Diversification generally becomes more attractive for firms when their initial products and services have reached maturity; this tends to occur when the industry has matured or consolidated, or if expansion possibilities have become limited. There are two basic expansion strategies related to diversification: concentric diversification, which deals in related activities, and conglomerate diversification, which deals in unrelated activities. Concentric diversification requires firms to achieve synergies and explore their existing competencies. Evidence suggests that concentric diversification is one of the most survival-proof and profitable strategies for entrepreneurial firms. Continuing with our previous example of the television station, an example of concentric diversification would be for the entrepreneur to expand into print media, radio, or the internet. Conglomerate diversification is often pursued if the firm's existing industry has become unattractive (i.e., low growth, intense competition, changing laws, and so on) or if competitive advantages have been diminished. An unrelated expansion for the television entrepreneur would be to purchase apartment blocks or to build a restaurant.

Some entrepreneurial firms have a neutral orientation towards growth or may prefer to continue their operations in their current direction (at least for a period of time). These entrepreneurs tend to prefer stability or even retrenchment. Stability or retrenchment strategies are especially popular with smaller entrepreneurial firms that have limited growth aspirations but occupy a small-yet-profitable market segment. Stability strategies are also valuable for entrepreneurial firms that have been expanding rapidly over many years and may need to reassess their strategies moving forward. It is important to note that the stability strategy functions best as a temporary strategic consideration that is applied over a specific period of time. In the long term, the competitive position of any firm cannot be sustained in the marketplace by maintaining status quo.

The stability strategy involves three considerations. The first is the strategic pause – the entrepreneurial firm consciously decides to rest, reflect, and reassess its current situation. The second strategy involves a “do-nothing” orientation. To clarify here, this does not mean avoidance of action; rather, the firm must undergo a deliberate evaluation of its available options and come to the conscious realization that continuing its current direction (i.e., to take no action, or to do nothing) is the best temporary strategy. The last strategy focuses on profit maximization; this occurs when the entrepreneurial firm experiences declining revenues and profits (often in a declining industry where strong competition exists). In such situations, a sensible strategy would be to effectively maximize existing cash flows, withdraw from the industry over time, and direct the firm towards a new venture.

Entrepreneurial firms may also need to consider retrenchment strategies. These strategies can be especially useful for firms that have lost their competitive advantage or experienced falling sales or losses. The most popular of these strategies include turnarounds (improving operating efficiency by reducing costs, selling-off assets, and streamlining operations), selling the firm (assuming that buyers are willing to assign value to a problematic business), and bankruptcy or liquidation.

Strategic considerations and real options: the Case of Rubber Parts

Real options can be applied not only to a single capital budgeting project, but also to broader strategic considerations where a specific capital budgeting project may be only one of many potential strategic movements. Let's illustrate the principles of real options in this context using the example of Rubber Parts (RP), an entrepreneurial firm established in 2010. Based in Ontario, Rubber Parts is involved in the manufacture and distribution of a wide range of technical rubber goods for the household appliance industry. Key products include molded goods (i.e., primary seals, gaskets, and rings) and extruded rubber products such as sealing profiles and insulations. The entrepreneur Mark Norman wholly owns the business, and his business philosophy is based on reinvesting profits – no dividends have been paid in the past.

Norman plans to make an investment into new products (i.e., gaskets, seals, and belts) aimed at the automotive industry – this represents a significant shift in RP's strategy. RP's plant is located near a large automotive production facility in Ontario. On our strategic map (see Figure 10.4), such an undertaking represents an example of a growth strategy based on concentric diversification. Note that RP continues to use its core competitive advantage (i.e., manufacturing high-quality rubber products at reasonable prices), but is offering its expertise to another industry. RP also recently implemented a quality program (ISO 9000) which was a prerequisite for initiating discussions with the local auto manufacturing plant. After passing a number of quality inspections and receiving formal certification, RP is able to enter the tender process for delivering rubber parts to the auto plant. If successful, RP will begin to deliver new products to the rapidly growing Canadian automotive sector.

Figure 10.5 presents a decision tree examining the purchase of an additional three production lines to manufacture auto parts for the automotive industry. Please note that nodes A, C, and D can be viewed as decision nodes. Norman has to decide whether to commit an initial outlay equal to \$1.0 million, invest an additional \$750,000 at time t_2 , or decide whether to abandon the project entirely at t_1 . Nodes B and C are defined as outcome nodes. Figure 10.5 presents an analysis of the incremental cash flows that will occur if the project is undertaken. We assume that the cash flow streams are predicted for five years into the future (it may be more difficult to predict cash flows beyond this point in time).

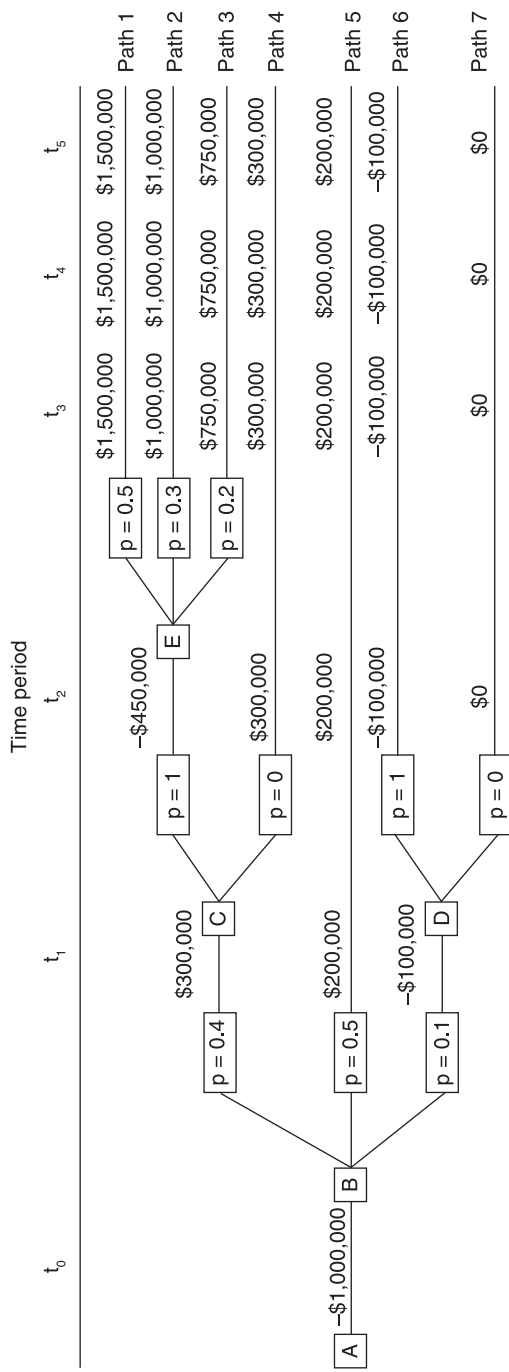


Figure 10.5 Analysis of strategic decisions for Rubber Parts

The initial cash outlay is presented on the left side of Figure 10.5 – this represents the first major decision (i.e., decision node A). Once the investment into the production lines has been made, the firm will obviously attempt to achieve commercial success. Norman estimates (with a probability of 40 percent) that the new production lines will contribute to the successful expansion of his venture. In this case, the incremental cash inflow would be equal to \$300,000 per annum. Norman also estimates that there is a 50 percent probability that the new venture will be moderately successful (\$200,000 cash inflow) and a 10 percent probability that the capital budgeting project will generate losses (\$100,000 cash outflow); outcome node B captures these possibilities. Note that the probabilities related to any node have to add up to one, as they need to account for all eventualities under consideration. If the new expansion proves successful after one year, Norman will commit an additional \$750,000 into expanding his production capabilities by time t_2 (please note that the incremental cash flow is equal to negative \$450,000; this comprises the investment of \$750,000, an outflow, and the revenue of \$300,000, an inflow; hence, the net cash flow is equal to negative \$450,000 in t_2). Decision node C indicates where additional investments need to be made and what options should be considered. Paths 1, 2, and 3 illustrate the outcomes when the entrepreneurial venture is expanded with an additional investment of \$750,000 (but a negative cash flow of \$450,000 at t_2). Path 4 indicates the outcome if the additional expansion at time t_2 is not undertaken. We can assume that this route will not be taken, yet it still needs to be considered; Norman will do much better if the production lines prove to be a successful investment.

When the additional investment into the production lines has been made in t_2 , there is a 50 percent probability that the entrepreneurial venture will generate an incremental cash flow of \$1.5 million, a 30 percent chance that it will generate \$1.0 million, and a 20 percent chance that it will produce \$750,000. If the expansion is moderately successful, it will generate a cash flow equal to \$200,000 – this is represented by Path 5. If the capital budgeting project proves suboptimal, it will produce a cash outflow of \$100,000 at the time of t_1 ; this outcome would likely cause the entrepreneur to abandon the project (decision node D shows this abandonment option). Path 6 shows what incremental cash outflows are avoided if the project is abandoned at t_1 . Path 7 highlights the simple and intuitive choice that zero cash flows are preferred to the negative cash flows presented by Path 6.

When all the information is plotted on the decision tree (decisions, outcomes, probabilities, and cash flows), the net present value and combined probabilities of each path can be calculated. As we captured in Figure 10.5, there are seven possible paths to pursue. To arrive at the combined or joint probabilities, we multiply the probabilities associated with each possible path to arrive at a joint probability for the path. For example, for Path 1, the joint probability is equal to 20 percent (40 percent times 100 percent times 50 percent; $0.4 \times 1 \times 0.5 = 0.2$); for Path 2, the joint probability is equal to 12 percent, and so on (please note that the sum of joint probabilities is equal to 1 for the reasons outlined above). When the present value for each path is multiplied by its joint probability and the results are added together, we receive the expected net present value of the entire project (considering all eventualities). The sum of these net present value calculations is equal to \$114,914.5 (see Table 10.7). Because NPV is positive, the project should be accepted.

In addition to calculating the NPV for the entire project, Figure 10.5 and Table 10.7 provide further insights for the entrepreneur. The positive NPV for the entire project rests on the assumption that the new undertaking will be successful and warrant additional expansion. If no expansion occurs, RP generates \$300,000 in incremental cash flows and the entire project appears marginal (NPV = \$4,910.0). If RP produces incremental cash flows of only

Table 10.7 The various developmental paths for Rubber Parts

Time period								
0	1	2	3	4	5	Net present value	Joint probability	Real options net present value
Path 1	(1,000,000)	300,000	(450,000)	1,500,000	1,500,000	1,313,281.9	0.20	262,656.4
Path 2	(1,000,000)	300,000	(450,000)	1,000,000	1,000,000	562,653.2	0.12	67,518.4
Path 3	(1,000,000)	300,000	(450,000)	750,000	750,000	187,338.8	0.08	14,987.1
Path 4	(1,000,000)	300,000	300,000	300,000	300,000	4,910.0	—	0
Path 5	(1,000,000)	200,000	200,000	200,000	200,000	(286,581.7)	0.50	(143,290.9)
Path 6	(1,000,000)	(100,000)	(100,000)	(100,000)	(100,000)	(1,161,057.0)	—	0
Path 7	(1,000,000)	—	—	—	—	(869,565.2)	0.10	(86,956.5)
							1.0	114,914.5

\$200,000, the NPV becomes negative (NPV = -\$286,581.7). In short, the analysis illustrates the importance of generating incremental cash flows in excess of \$300,000 for the overall success of the new project.

Of course, this analysis represents only one of many possible considerations. As previously noted, Norman can make any number of strategic considerations. Due to his strong relationships with manufacturers of household appliances, Norman could consider manufacturing other parts for appliances (i.e., parts made of plastic) – this would be an example of the concentration growth strategy (horizontal expansion). Norman could also offer rubber products to new clients from the appliances industry (the same strategy, but offering existing products in new markets). Another option would be for RP to purchase a small local manufacturer of appliances (a concentration growth strategy with forward vertical integration). Finally, Norman could engage in a “no change” strategy in which he and his team contemplate additional strategic alternatives over the next six to nine months. All of these considerations are possible, but it is only through the deliberate evaluations made during the process of capital budgeting (whether by more simple methods or real options) that they can be confirmed as truly viable alternatives.

Questions to consider

1. Discuss the significance of discounting in business decision making.
2. What are the main components of capital budgeting? What are the three main types of cash flows?
3. Differentiate between independent and mutually exclusive projects.
4. What are the three main techniques used to analyze capital budgeting projects? Discuss the advantages and disadvantages of each method.
5. What are the main components of corporate directional strategies?
6. Discuss the advantages of real options over other capital budgeting evaluation techniques.

Note

- 1 Other financial calculators may also be used. The most popular financial calculators include TI BAII Plus (Texas Instruments), EL-738 (Sharp), and HP 10 BII (HP). Different retail outlets also promote their own brands of financial calculators (i.e., Staples financial calculators). Please note that the specific steps needed to calculate present and future values will be described in the owner's manuals for these calculators.

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11 Entrepreneurial growth

Chapter objectives

After reading this chapter, you should be able to:

- understand the importance of growth for entrepreneurial firms;
- distinguish between two broad orientations of entrepreneurial growth;
- discuss the advantages and disadvantages of internal and external growth methods;
- point to the key reasons behind failures in acquisitions;
- define the concept of financial and operational synergy;
- use differential analysis to understand the value of acquisitions.

Growth in entrepreneurial firms is movement beyond their early stages of development; it is a natural evolutionary and non-homogenous process of adaptation and maturation. The pattern, the velocity, and the trajectory of growth vary from firm-to-firm. But growth also involves risk. Taking risks means being able to place larger “business bets” to grow the entrepreneurial firm; sometimes this may even involve forfeiting what the entrepreneurial firm has built in the past. These business bets can transform the firm’s approaches to acquiring resources, hiring new people, changing the location of the business, modifying the firm’s strategic direction, and engaging in innovative activities. In simple terms, growth involves moving the entrepreneurial firm beyond its comfort zone.

As we stated in Chapter 10, growth is critical for an entrepreneurial firm – it is the most widely pursued strategy for young entrepreneurial firms and more mature entrepreneurial enterprises alike. Growth is critical to an entrepreneurial firm’s survival and can be achieved internally or externally, or domestically or internationally. For the entrepreneurial firm, growth is a path that provides tangible benefits. Growth translates into a reduction of unit cost through economies of scale (economies of scale can also be achieved in purchasing, marketing, finance, management, and other areas). Revenue growth is especially important for entrepreneurial firms, which compete on price in the marketplace. Top-line growth (especially if the rate at which the entrepreneurial firm grows its sales exceeds the rate at which the market grows) converts into a strong competitive position and a growing market share. High market share, in turn, can often transform into sustainable profitability (though this is not always the case). Growth is also paramount for stakeholders (i.e., employees, customers, shareholders, the community, and so on). A growing entrepreneurial firm creates multiple opportunities for professional development, advancement, and promotion. Customers benefit from a wider commercial proposition (i.e., more products and services), better prices, and higher quality. Shareholders are less anxious about the fortunes of the

entrepreneurial firm if it is growing profitably and is generating strong cash flow. Growth may also result in independence and self-sufficiency for the entrepreneurial firm.

While growth is critical to entrepreneurial firms, it is not easy to achieve. The key impediments to entrepreneurial growth include lack of sufficient finance (it is challenging to obtain capital from external sources), human resource challenges (inability to hire the right people, lack of internal knowledge), improper organizational structures (concentration of decision making in the hands of the entrepreneur), and organizational transitional issues (inability to transform the early stage firm into a more functionally operated firm). Entrepreneurial firms also commonly overstretch their financial and managerial resources. Taking on large orders can bring substantial stress upon the organization, management, and employees and can stretch the firm's financial resources to breaking point.

The problem is not whether to grow the entrepreneurial firm, but how to determine the desired growth velocity (decisions on the trajectory, velocity, and pattern of growth are the key decisions entrepreneurial firms commonly get wrong). Managing growth is one of the most essential components of entrepreneurial success. The key strategic decision is how to best grow the entrepreneurial firm. A simple framework for how to do this is based upon three fundamental pillars. First, the entrepreneurial firm should grow at the rate it can control and afford. Second, the entrepreneurial firm should grow at the rate commensurate with its ability to secure appropriate human resources. Third, growth must be value generative.

Entrepreneurs must be prepared to grow their entrepreneurial ventures. Growth requires resources, effective management, finances, research, and so on, as well as the personal commitment of and sacrifices from the entrepreneur and his or her entire management team. Entrepreneurial firms must also decide when they will seek to change their velocity of growth (i.e., grow at an accelerating growth percentage). Entrepreneurs must understand the pressures associated with growth and its implications. Being disciplined enough to select the right growth trajectory is not easy; there may be temptations to bid for large contracts or orders. In other cases, customers may try to force the entrepreneurial firm to grow beyond its capabilities. In such cases, growth is allowed to manage the entrepreneurial firm rather than the other way around. It takes courage and discipline for an entrepreneur to turn down opportunities and admit that "my organization is not ready for that." Putting growth on hold can also be challenging; the entrepreneur's perception may be that such a move may have significant adverse consequences for the firm in the long term. Uncontrolled, haphazard, and chaotic growth can be fatal to an entrepreneurial firm. Growth can be difficult to manage for some entrepreneurial firms, especially those with less experience. Growth can also disguise certain profound shortcomings of an entrepreneurial firm. Growing firms sometimes "pretend" to create shareholder value by increasing their revenues, even though the revenue increase may not convert into increasing profits and cash flows. For entrepreneurial firms engaging in excessive growth, the end scenario is often the same: the firm generates new clients (i.e., growing revenue), existing clients leave, revenue declines, profits deteriorate, cash runs out, key employees leave, and the entrepreneurial firm hits "the growth wall."

Before we delve much deeper into the topic of entrepreneurial growth, it is important to note that an entrepreneurial firm has two broad orientations toward growth: to grow internally or to develop through a reliance on external relationships. In this chapter, we argue that the preferred route of growth for entrepreneurial firms is through internal, in-house development rather than through external means (i.e., acquisitions, mergers, etc.). Achieving success in an entrepreneurial setting means expanding at a rate that the entrepreneurial firm can control and afford; entrepreneurial development is about "healthy growth" and not the type that destroys the entrepreneurial firm's cash flow and value. This means having the

discipline to expand the entrepreneurial firm when revenue prospects are permanent rather than temporary (sometimes this means rejecting large orders if the entrepreneurial organization is not ready to fulfill them adequately, efficiently, and profitably; an entrepreneurial firm can severely damage its reputation if orders are not fulfilled well). Proper entrepreneurial development also involves being able to “perfect” the firm’s organization (i.e., internal processes, mechanisms, functions, and so on) and to incrementally improve its existing products and services before moving to another level of business activity. Also important is attracting the right employees and providing them with learning and maturation opportunities before further building the entrepreneurial firm. Above all, however, effective growth means pursuing value creation.

Entrepreneurial firms must be mindful that there are certain fundamental structural factors that emerge when a firm begins to grow too fast. Entrepreneurial firms are fragile in their early stages of development (a comparison of characteristics of new entrepreneurial firms with more mature ventures is included in Table 11.1). Many entrepreneurial firms operate with limited financial resources; they do not yet stand on a strong financial footing as their profitability and cash flow are vulnerable and susceptible to economic cycles (more mature ventures are likely to have a stronger financial resource base and are more financially stable as they have repeatable cash flow and can withstand external shocks). Any operational or financial events that upset the delicate balance between the entrepreneurial firm’s financial resources and its financial obligations require cautious evaluation or outright dismissal. Acquisitions or other external modes of expansion are events likely to exert undue financial pressure on an unstable entrepreneurial firm (acquisitions have high failure rates and can magnify financial risks in the entrepreneurial business). There is also the issue of availability of financing in order to affect growth. Entrepreneurial firms generally do not have sufficient financial resources to execute all viable investment projects generated internally (such projects are characterized by high estimated net present values and internal rates of return). Raising external capital to execute an expansion plan may increase the firm’s financial risk (a risk of default in the case of debt financing) and dilutive risk (a risk of disproportionate dilution to the founding entrepreneur’s ownership stake in the business in the case of equity financing).

Young entrepreneurial firms also face certain fundamental operational and structural risks. In the early days of their development, entrepreneurial firms are often “en route” to professionalizing themselves; this process continues for a considerable period of time. Being “en route” to professionalization means that the firm’s functional departments are in the embryonic stages of development; they are not yet fully developed and functioning

Table 11.1 A comparison of key characteristics of young entrepreneurial firms and more mature ventures

<i>Characteristics</i>	<i>Young entrepreneurial firms</i>	<i>Mature ventures</i>
Financial resources	Limited	Strong
Financial stability	Low to medium	High
Organizational structures	Flat, flexible, and informal	Hierarchical and rigid
Effectiveness in functional areas	Low	Medium to high
Strategic orientation	Opportunistic	Measured
Control of resources	Limited and cyclical	Partial or full
Decision-making capability	Swift	Lengthy

(more mature organizations are often filled with seasoned corporate professionals). Functional managers of young entrepreneurial firms are likely to face Herculean tasks when faced with organizational challenges during expansion. Many managers are likely to be ill-prepared if required to deal with extraordinary problems. At the same time, early-firm organizational structures are flat, flexible, and informal – this often allows for a quick decision-making process and for the firm to capture market opportunities. While internal flexibility is advantageous for a firm, it can pose significant problems if organizational controls need to be placed within the firm.

The organizational and strategic focus of the entrepreneurial firm changes as the firm transforms into a more mature business. The initial concerns of an entrepreneurial venture typically relate to defining the business venture and its scope, developing products and services, improving the firm's competitive position, and building appropriate organizational foundations. In this phase of development, entrepreneurial firms are often opportunistic and can change their internal profile "on a dime." Access to resources is often limited and cyclical (entrepreneurial firms often do not own resources, but rent them or rely on relationships to generate them). Later on in the development of the firm, the focus of the entrepreneur switches to controlling costs, improving profitability, identifying future growth opportunities, and formalizing internal relationships.

Acquisitions provide a potentially viable route to grow an entrepreneurial business. However, there is strong evidence pointing to major challenges with acquisitions, and evidence suggests that the vast majority are outright failures. Various studies describe the percentage of failure to be equal to between 50 and 70 percent; only about 20 percent of acquisitions are recorded to be marginally or moderately successful. The consequences of bad acquisitions are more severe for entrepreneurial firms than for larger corporations (large firms normally have excess financial and human resources to be able to address post-transaction turbulences). The majority of acquisitions also fail to achieve operational and financial efficiencies and synergies. Synergy should theoretically have a positive impact on the bottom line of the acquiring firm, but this rarely occurs in the event of an acquisition. Acquisitions often fail because of the excessively high premiums paid to acquire firms; these premiums diminish the return on investment, making it marginal or negative (the only true financial winners in acquisitions are the shareholders of the acquired firm, who pocket the premium). Moreover, the majority of acquisitions fail to provide returns equal to or better than the cost of the capital needed to acquire the firm in the first place. Additionally, the majority of these transactions are unwound shortly after the event (this is perhaps the most damaging and discouraging evidence found with respect to acquisitions). The "honeymoon" period lasts between two to three years after which the acquired firm is disposed of (many such disposals occur as "fire-sales," well below purchase costs). Acquisitions also do not play a transformative role in acquiring firms. There is no evidence to suggest that firms grown through acquisitions outperform those firms that engage in internal growth. Other reasons for acquisition failures include the lack of a post-acquisition plan, lack of accountability for managing the acquired firms, and organizational culture clashes between the bidder and the target (acquisitions are not like "organizational appliances" which can be plugged into an existing organizational system). Furthermore, acquisitions often have a negative impact on customers. In the majority of cases, customers are less satisfied with the performance of the combined entities after the event. Finally, there are significant financial outlays that need to be committed to the acquisition transaction upfront before it can be completed.

There are also behavioral issues grounded in the managerial self-interest associated with acquisitions. Many acquisitions are executed as a part of managerial "empire building,"

managerial ego (managers do not like losing, especially when competitors are involved), and managerial compensation and benefits (i.e., additional compensation to the management team for executing the transaction). Please note that the notions of “empire building” and ego may also reflect the entrepreneur’s orientation. Many managers appear to be prepared to risk their entire business to achieve silver-bullet-like growth. These behavioral issues may be less profound for younger entrepreneurial firms than for more mature firms.

Given the evidence above with respect to acquisitions, why would an entrepreneurial firm even consider this mode of growth? Even though the means of external expansions are not promoted here as a central theme, we will consider the specific cases and conditions under which acquisitions (and other modes of external development) can be suitable to achieve growth.

Internal versus external growth: a comparative case study

Before we delve into an in-depth consideration of the specific components and means of internal and external growth, we will consider the case of Kline Häppchen (KH), a German manufacturer of ice-cream in Hamburg. Kline Häppchen was founded in 1947 by two entrepreneurs who, as pastry and ice-cream specialists, began a small-scale company to produce homemade ice-cream. The entrepreneurs began production out of a small wooden booth, but with success moved into a larger facility and progressively improved on their original recipes, eventually introducing new flavors. KH’s products are sold in the retail market throughout Germany in tubs, buckets, scoops, and ice-cream sticks. The entrepreneurial firm also services the institutional market; its main client is PepsiCo, which sells KH products through its Pizza Hut chain. KH’s brand name is one of the best recognized consumer brands in Germany.

Three scenarios are considered in this case: two financial projections describing two development scenarios, and the actual financial performance. The full set of financial projections (i.e., income statement, cash flow statement, and balance sheets presented in abbreviated formats in Tables 11.2 and 11.3) are considered for a period of seven years (2009 to 2015); note that the year 2008 represents an actual financial performance of the firm. We consider KH because its management considered various modes of internal and external growth and eventually decided upon the path of acquisitions. The case of KH best exemplifies the nature of challenges experienced by entrepreneurial firms which engage into merger and acquisition activities. The first business plan scenario relies on internal growth. In the second scenario, KH anticipates pursuing a series of acquisitions. The third scenario represents the actual financial performance of KH (Table 11.4). We end the analysis with a comparative analysis and a summary of key conclusions and observations (Table 11.5).

Financial forecast: the internal growth scenario

In this first instance, KH focuses on growing its business by relying predominantly on its internal financial resources (see Table 11.2), supplemented by resources and some bank financing. The firm is expected to show continued strong growth; in 2009, KH is expected to grow by 55.7 percent while the growth rate in the following years is equal to between 15 and 25 percent. While the year 2009 sees a continuation of past trends, revenue growth in the following years is assumed to slow down considerably, a reflection of market saturation and competitive pressures in the marketplace. The slowdown is most visible in 2011 and 2012, when the firm’s revenue growth is reduced to about 15 percent. By the end of 2015, the firm

Table 11.2 A business plan for Kline Häppchen focusing on internal growth

(In '000)	Income statement								
	2008	2009	2010	2011	2012	2013	2014	2015	
Net sales	27,989	43,581	52,465	59,874	69,083	82,983	104,690	131,863	
Cost of goods sold	20,345	31,371	37,184	42,561	49,829	59,930	75,317	95,317	
Gross margin	7,644	12,210	15,281	17,313	19,254	23,053	29,373	36,546	
Selling and administrative expenses	3,474	5,910	6,530	7,840	8,012	9,652	11,974	14,398	
EBITDA	4,170	6,300	8,751	9,473	11,242	13,401	17,399	22,148	
Depreciation	355	755	1,155	1,555	1,955	2,355	2,755	3,155	
Operating profit (EBIT)	3,815	5,545	7,596	7,918	9,287	11,046	14,644	18,993	
Interest expense	750	637	637	537	437	237	0	0	
Earnings before taxes (EBT)	3,065	4,908	6,959	7,381	8,850	10,809	14,644	18,993	
Taxes	1,226	1,963	2,784	2,952	3,540	4,324	5,858	7,597	
Earnings after tax (EAT)	1,839	2,945	4,175	4,429	5,310	6,485	8,786	11,396	
Cash flow statement									
	2008	2009	2010	2011	2012	2013	2014	2015	
Net income	1,839	2,945	4,175	4,429	5,310	6,485	8,786	11,396	
Depreciation	355	755	1,155	1,555	1,955	2,355	2,755	3,155	
Decrease (increase) in accounts receivable	-690	-489	-730	-609	-757	-1,143	-1,784	-2,233	
Decrease (increase) in inventory	-982	-960	-2,191	-1,826	-2,271	-3,428	-5,352	-6,700	
Increase (decrease) in accounts payable	1,345	1,735	1,460	1,218	1,514	2,285	3,568	4,467	
Investments	-1,000	-4,000	-4,000	-4,000	-4,000	-4,000	-4,000	-4,000	
Proceeds from (repayment of) debt issue	0	2,000	0	-1,000	-1,000	-2,000	-2,367	0	
Capital Increase	0	0	0	0	0	0	0	0	
Net change in cash balances	867	1,986	-131	-233	751	554	1,606	6,085	

Balance sheet								
	2008	2009	2010	2011	2012	2013	2014	2015
Cash	351	2,337	2,206	1,973	2,724	3,278	4,884	10,969
Receivables	3,093	3,582	4,312	4,921	5,678	6,821	8,605	10,838
Stock	9,786	10,746	12,937	14,763	17,034	20,462	25,814	32,514
Fixed assets, net	2,342	5,587	8,432	10,877	12,922	14,567	15,812	16,657
Total assets	15,572	22,252	27,887	32,534	38,358	45,128	55,115	70,978
Payables	5,429	7,164	8,624	9,842	11,356	13,641	17,209	21,676
Debt	4,367	6,367	6,367	5,367	4,367	2,367	0	0
Equity	5,776	8,721	12,896	17,325	22,635	29,120	37,906	49,302
Total liabilities and shareholders' equity	15,572	22,252	27,887	32,534	38,358	45,128	55,115	70,978

EBITDA: earnings before interest, taxes, depreciation, and amortization; EBIT: earnings before interest and taxes; EBT: earnings before tax; EAT: earnings after tax

Table 11.3 A business plan for Kline Häppchen for growth by acquisitions

(In '000)	<i>Income statement</i>									
	2008	2009	2010	2011	2012	2013	2014	2015		
Net sales	27,989	43,581	65,715	91,133	109,696	127,477	145,080	163,092		
Cost of goods sold	20,345	31,371	46,928	64,879	77,601	89,587	98,763	113,673		
Gross margin	7,644	12,210	18,787	26,254	32,095	37,890	46,317	49,419		
Selling and administrative expenses	3,474	5,910	9,043	12,406	14,929	17,347	21,987	23,187		
EBITDA	4,170	6,300	9,744	13,848	17,166	20,543	24,330	26,232		
Depreciation	355	1,555	2,555	2,955	3,655	4,005	4,025	4,045		
Operating profit (EBIT)	3,815	4,745	7,189	10,893	13,511	16,538	20,305	22,187		
Interest expense	750	1,437	1,237	1,137	1,000	1,000	500	0		
Earnings before taxes (EBT)	3,065	3,308	5,952	9,756	12,511	15,538	19,805	22,187		
Taxes	1,226	1,323	2,381	3,902	5,004	6,215	7,922	8,875		
Earnings after tax (EAT)	1,839	1,985	3,571	5,854	7,507	9,323	11,883	13,312		
<i>Cash flow statement</i>										
	2008	2009	2010	2011	2012	2013	2014	2015		
Net income	1,839	1,985	3,571	5,854	7,507	9,323	11,883	13,312		
Depreciation	355	1,555	2,555	2,955	3,655	4,005	4,025	4,045		
Decrease (increase) in accounts receivable	-690	-489	-1,819	-2,089	-1,526	-1,462	-1,446	-1,481		
Decrease (increase) in inventory	-982	-960	-5,458	-6,267	-4,577	-4,385	-4,340	-4,441		
Increase (decrease) in accounts payable	1,345	1,735	3,638	4,179	3,051	2,923	2,894	2,961		
Investments	-1,000	-12,000	-10,000	-4,000	-7,000	-3,500	-200	-200		
Proceeds from (repayment of) debt issue	0	10,000	-2,000	-1,000	-1,367	0	-5,000	-5,000		
Capital increase	0	0	10,000	0	0	0	0	0		
Net change in cash balances	867	1,826	487	-368	-257	6,904	7,816	9,196		

Balance sheet								
	2008	2009	2010	2011	2012	2013	2014	2015
Cash	351	2,177	2,664	2,296	2,039	8,943	16,759	25,955
Receivables	3,093	3,582	5,401	7,490	9,016	10,478	11,924	13,405
Stock	9,786	10,746	16,204	22,471	27,048	31,433	35,773	40,214
Fixed assets, net	2,342	12,787	20,232	21,277	24,622	24,117	20,292	16,447
Total assets	15,572	29,292	44,501	53,534	62,725	74,971	84,748	96,021
Payables	5,429	7,164	10,802	14,981	18,032	20,955	23,849	26,810
Debt	4,367	14,367	12,367	11,367	10,000	10,000	5,000	0
Equity	5,776	7,761	21,332	27,186	34,693	44,016	55,899	69,211
Total liabilities and shareholders' equity	15,572	29,292	44,501	53,534	62,725	74,971	84,748	96,021

EBITDA: earnings before interest, taxes, depreciation, and amortization

Table 11.4 Actual performance of Kline Häppchen after acquisitions

(In '000)	Income statement							
	2008	2009	2010	2011	2012	2013	2014	2015
Net sales	27,989	43,581	68,239	98,702	127,692	147,623	187,390	220,467
Cost of goods sold	20,345	31,371	48,245	69,980	91,044	106,731	134,546	158,075
Gross margin	7,644	12,210	19,994	28,722	36,648	40,892	52,844	62,392
Selling and administrative expenses	3,474	6,737	12,983	19,653	24,764	26,897	33,873	42,873
EBITDA	4,170	5,473	7,011	9,069	11,884	13,995	18,971	19,519
Depreciation	355	1,731	2,819	3,307	3,897	4,394	4,736	4,971
Operating profit (EBIT)	3,815	3,742	4,192	5,762	7,987	9,601	14,235	14,548
Interest expense	750	1,437	1,637	2,137	2,137	2,137	2,137	2,137
Earnings before taxes (EBT)	3,065	2,305	2,555	3,625	5,850	7,464	12,098	12,411
Taxes	1,226	922	1,022	1,450	2,340	2,986	4,839	4,964
Earnings after tax (EAT)	1,839	1,383	1,533	2,175	3,510	4,478	7,259	7,447
Cash flow statement								
	2008	2009	2010	2011	2012	2013	2014	2015
Net income		1,383	1,533	2,175	3,510	4,478	7,259	7,447
Depreciation	1,839	1,731	2,819	3,307	3,897	4,394	4,736	4,971
Decrease (increase) in accounts receivable	355	-489	-2,027	-5,208	-3,177	-2,184	-4,358	-3,625
Decrease (increase) in inventory	-690	-960	-6,080	-10,216	-7,942	-5,461	-10,895	-9,062
Increase (decrease) in accounts payable	-982	1,735	4,053	5,008	4,765	3,277	6,537	5,437
Total cash from operations	1,345	3,400	299	-4,934	1,053	4,504	3,279	5,168
Investments	-1,000	-13,761	-10,885	-4,875	-5,901	-4,971	-3,420	-2,349
Proceeds from (repayment of) debt issue	0	10,000	2,000	5,000	0	0	0	0
Capital increase	0	10,000	0	5,000	5,000	0	0	0
Net change in cash balances	867	9,639	-8,587	191	152	-467	-141	2,819

Balance sheet								
	2008	2009	2010	2011	2012	2013	2014	2015
Cash	351	9,990	1,403	1,594	1,746	1,279	1,138	3,957
Receivables	3,093	3,582	5,609	10,817	13,994	16,178	20,536	24,161
Stock	9,786	10,746	16,826	27,042	34,984	40,445	51,340	60,402
Fixed assets, net	2,342	14,372	22,438	24,006	26,010	26,587	25,271	22,649
Total assets	15,572	38,690	46,276	63,459	76,734	84,489	98,285	111,169
Payables	5,429	7,164	11,217	16,225	20,990	24,267	30,804	36,241
Debt	4,367	14,367	16,367	21,367	21,367	21,367	21,367	21,367
Equity	5,776	17,159	18,692	25,867	34,377	38,855	46,114	53,561
Total liabilities and shareholders' equity	15,572	38,690	46,276	63,459	76,734	84,489	98,285	111,169

EBITDA: earnings before interest, taxes, depreciation, and amortization

is expected to achieve \$131.9 million in sales. The current average growth rate (CAGR) since 2008 is equal to 24.8 percent.

In terms of profitability, the gross profit margin is expected to improve slowly from 27.3 percent in 2008 to 29.1 percent in 2010 (volume discounts normally equal 1 or 2 percent and they become available as the firm increases its volume). Thereafter, gross profit margins are expected to decline slightly as KH introduces new product lines (here, volume discounts cannot be achieved due to relatively low orders). The earnings before interest, taxes, depreciation, and amortization (EBITDA) margins are assumed to grow slowly but steadily from 14.9 percent in 2008 to 16.8 percent by 2015; this improvement reflects growing sales and slow incremental expenditures on administrative expenses (limited new hires are expected at the senior and middle management levels as KH anticipates internal promotions). However, there is also some variability in the EBITDA margins; margins are choppy and inconsistent, particularly between the years 2009 and 2012. In this period, KH is required to incur additional costs, including promotional costs. In dollar terms, the EBITDA margin is expected to increase from \$4.2 million in 2008 to \$22.2 million in 2015 – more than a five-fold increase. Return on equity appears attractive throughout all the forecast years even though its trend is declining; the ratio is above the 30 percent mark until 2010 and approaches the mid-twenties throughout the remaining years.

The firm's cash situation is presumed to be stable. It is expected to generate approximately \$4 million in cash flow from operating activities (i.e., net income plus depreciation plus changes in working capital) between 2009 and 2011; cash flow is higher thereafter. This allows KH to afford investments of \$4 million per annum for a total of \$28 million over a period of seven years. The capital expenditure program is aimed at increasing KH's production capacity (KH needs to add capacity to double its production output from its current level of 10 million liters) and distribution capability (KH expects to recruit approximately 30 new distributors into its network, with an aim towards achieving an increased market penetration in the major German cities where it is already known and to gain exposure in other important regions; KH is expected to place an additional 2,500 freezers in retail outlets, doubling its freezer presence in the retail sector to nearly 6,000 units). The firm is able to finance almost all expenditures from internally generated cash flow (a bank loan flows to KH in 2009 that provides \$2 million of bank financing).

With additional debt financing in 2009, the firm's balance sheet appears vulnerable (if the firm were to experience a decline in trading, the result would be a decline in margins). In 2009, KH is expected to reach a debt-to-equity ratio equal to 155.1 percent (which is high). Higher percentages of debt-to-equity are expected to continue until 2013, when the firm is expected to reach a more manageable level equal to 55.0 percent (the ideal debt-to-equity percentage is below 40 percent). By the end of 2015, the firm is presumed to reach a debt-to-equity ratio equal to 44.0 percent. In spite of this, the firm is expected to maintain a strong current ratio (in excess of two times throughout the years; the rule-of-thumb is above two times). The quick ratio appears less optimal sitting at a level between 0.7 and 1.0 (again, it should ideally be above 1.0). Another debt ratio, times interest earned, is also expected to be well within its desired range (in excess of three times throughout the years of the financial plan).

KH's equity is expected to be valued at \$132.9 million, assuming a "six-times" EBITDA multiple on the 2015 EBITDA figure. The entire value generated in the business accrues to the founding entrepreneur, as the founding entrepreneur is the sole owner of the business.

Financial forecast: the growth by acquisitions scenario

The next scenario has three distinct features different from the previous case (see Table 11.3). First, in this scenario, KH is expected to complete three acquisitions in 2009, 2010, and 2012. The acquisitions are local ice-cream manufacturers that have achieved a strong local presence and brand recognition, but lack the financial resources to grow their firms further; they also operate in geographic areas in which KH's presence is weaker (Bavaria, Thuringia, and Hesse). For these reasons, the acquisitions are expected to be complementary. Second, the firm is presumed to raise an additional \$10 million in debt in 2009. This is a positive reflection on the part of KH's management team because most managers are even reluctant to pursue profitable projects (in this case, acquisitions) if they are ever required to raise additional financing. Third, the firm anticipates raising equity financing from private equity institutional investors. In 2008, the firm has already had preliminary discussions with a local venture capital firm and has agreed upon the key terms of the transaction. The local venture capital firm is expected to contribute \$10 million (in the form of a capital increase) in exchange for a 28.6 percent equity stake in the business. The pre-money valuation of the firm is set at around \$25 million (this represents an EBITDA multiple of six times). The CAGR in revenue since 2008 for this case is equal to 28.6 percent.

In this scenario, revenue growth is expected to be more robust compared with the internal growth case, allowing KH to achieve a significant increase in its revenue line. KH is expected to increase its revenue by 50.8 percent in 2010 and 38.7 percent in 2011; the growth levels off in the remaining years to a percentage in the high teens. By 2015, KH is expected to reach revenues of \$163.1 million. This revenue figure allows KH to achieve the highest market share among smaller entrepreneurial and family-owned firms in the German ice-cream sector (however, its market share is still below those of major industrial competitors such as Schöller and Algida).

A rapid growth in revenue allows KH to achieve significant discounts in raw material purchases, especially for sugar, milk, and butter. Gross profit margins are expected to increase from 27.3 percent in 2008 to above the 30 percent mark in 2015. No significant increases are expected at the EBITDA margin level. KH expects EBITDA margins comparable to the internal growth scenario (EBITDA margins are presumed to improve little more than one percentage point to 16.1 percent in 2015). Limited improvement to EBITDA margins reflects a planned increase in selling and administrative expenses. KH is expected to significantly increase its promotional expenditures to support the revenue growth of its acquired firms (these smaller family operations predominantly rely on word-of-mouth advertising). Additional expenses must also be incurred for equipment refurbishment. KH is also expected to commit to additional expenses in functional areas of the business and employ additional middle management. By 2015, the EBITDA dollar value is expected to be equal to \$26.2 million.

KH's cash flow appears strong. The firm generates between \$2 million and \$4 million per annum in cash flow from operations. However, the achievement of KH's long-term ambitions is not likely to occur without external financing. The total financing program to achieve KH's robust revenue growth (especially in 2010 and 2011) is equal to \$20 million (\$10 million in equity financing and \$10 million in bank debt). An increase in debt borrowing is temporarily expected to increase KH's debt-to-equity ratio to 277.4 percent in 2009; this percentage declines rapidly in subsequent years. A part of the bank loan is expected to be repaid in 2010 and 2011 and a further reduction of external borrowing is achieved in 2014 and 2015. In 2015, the debt-to-equity ratio is forecast to decline to 38.7 percent.

KH's equity is expected to be valued at \$157.4 million, assuming a "six-times" EBITDA multiple on the 2015 EBITDA numbers. Given that the founding entrepreneur is expected to be diluted by venture capitalists, the value of his or her shareholding is presumed to be equal to \$112.4 million (\$157.4 million times [1–28.6 percent]). Please note that the value of proceeds accrued to the founding entrepreneur would be less in this scenario compared with the internal growth case.

Financial forecast: the actual financial performance of Kline Häppchen

After a series of internal deliberations about the future of KH, it was decided that the firm would pursue a strategy of growth through acquisitions. The managers at KH claimed that the acquisitions would generate significant value for shareholders by increasing KH's market share, revenues, profits, and cash flow (please note that most managers exhibit a tendency to convince shareholders that target firms are acquired at bargain prices; this was no different at KH). Management and the founding entrepreneur viewed the acquisitions as a "shortcut" to achieving their strategic, operational, and financial objectives. As part of this strategy, KH received a \$10 million injection from a local venture capital firm at the end of 2009 in exchange for a 28.6 percent stake in the business; it also secured a \$10 million bank loan.

As often occurs in business, the financial reality proved different from KH's initial plan (see Table 11.4). KH has recorded a robust average growth in revenue equal to 34.3 percent; this was much higher than anticipated in either of the scenarios. Revenue growth was especially vigorous between 2009 and 2012 (i.e., 55.7 percent in 2009; 56.6 percent in 2010; 44.6 percent in 2011; 29.4 percent in 2012). The revenue growth reflects both internal growth and the four acquisitions made by KH (the firm executed one more incremental acquisition than in its initial plan). In 2015, KH is expected to achieve revenues equal to \$220.5 million and become the number two player in some of the key geographic regions in Germany behind Algida. As a side note, KH's strong performance ignited a series of retaliations against it by one of its main national rivals, resulting in severe price competition. Such a competitive approach is a tactic commonly seen in a marketplace where one of the market leaders is threatened by a smaller player and responds with vigorous price cutting and quality improvements to effectively drive a smaller competitor out of business.

While the revenue growth achieved by KH is impressive, the profitability numbers were below expectations. It was not able to achieve any meaningful gains in gross profit margins, which effectively stayed flat at the 28 percent mark throughout the entire period (2008 to 2015). The lack of improvement seen in these margins reflects the fact that the acquired firms used different types of raw materials to make their ice-cream. KH initially attempted to consolidate raw material sourcing, but reversed this decision after the revenues of its acquired firms began to decline after changes were made to their recipes and the raw materials used to create their products.

The most disappointing performance occurred with respect to EBITDA margins, which declined from 14.9 percent in 2008 to 8.9 percent (a decline of six percentage points, representing a severe underperformance). There are several reasons for this suboptimal performance (many of which also negatively influenced KH's cash flow position). First, the reduction in employment across functional departments did not occur as anticipated in the business plan. KH initially expected to reduce personnel in some functions such as human resources, accounting, supply chain management, transportation, and so on. Instead, it was required to employ more people to address some of the most pressing issues related to business consolidation. Second, the firm incurred significant costs to train employees from bought-out firms;

training occurred across various functional areas and cost \$1.7 million. Training also focused on bringing the acquired firms into the desired level of quality standards in order to extend the ISO quality certification across all the acquired facilities. Third, KH undertook significant promotional activities (totaling \$8.3 million) to support brand development and to cross-promote various products in various regions. Fourth, KH decided to invest in a new computerized management information system; this took two years to implement at a cost of \$2.5 million and was not a part of the original business plan. Fifth, KH decided to build a central freezer warehouse to better serve all of its geographic regions and co-ordinate the flow of products from one destination to another; this expenditure was also not anticipated in the original business plan. Sixth, acquisitions changed the cultural dynamics in the acquired firms. Many production and management employees of the acquired firms left, which resulted in a variability in product quality and some loss of revenue (especially from institutional clients, who appeared to be more sensitive to changes in product quality). Kline Häppchen also found it difficult to recruit and retain suitable production and management employees for its more remote production facilities. Last, after the acquisitions, KH intended to retain the founders of the acquired firms to continue on as head managers. Unfortunately, the managers seemed to lose interest in the business after the acquisition and had to be replaced.

Strong revenue growth (which necessitated an incremental investment in working capital), the planned expenditures, and the unexpected capital outlays placed a significant strain on KH's financial position. The financial constraints were so severe that in 2001 it was unable to settle its liabilities on time. Consequently, the venture capital firm agreed to provide an emergency round of financing (\$5 million) and the firm secured additional bank financing (\$5 million). The founding shareholder did not participate in the emergency financing round and suffered dilution as new shares were issued at a lower nominal value. The venture capitalists also terminated the management contract with the founding entrepreneur and requested that he assume the role of the firm's chairman (with no operating responsibilities). The founding entrepreneur instead requested to focus on product development, which was his initial passion as he was a former pastry specialist. An additional round of equity financing equal to \$5 million was secured in 2011, along with \$5 million of debt financing. Venture capitalists ultimately held 36.4 percent of the firm, while the original founder was diluted to 63.6 percent. The cash flow situation was stable for the remaining years.

The business story of KH ends well for the entrepreneur and less optimally for venture capitalists. The firm was sold to a Swiss strategic investor for \$70 million; this valuation represented 3.6 times EBITDA₂₀₁₅ and 24.8 times free cash flow₂₀₁₅. Venture capitalists made a small return from the deal equal to 4.9 percent (1.3 times cash-on-cash return on the original investment of \$20 million). The total proceeds for the founder were equal to \$44.6 million; this value represents a robust return on his initial cash investment (equal to \$120,000) and plenty of entrepreneurial "sweat" equity.

Key observations and conclusions from the case study

The case of Kline Häppchen is, of course, a single example of the effect that acquisitions can have on the overall financial performance of a firm. Nevertheless, the case study may be viewed as representative (and perhaps symptomatic) of the majority of situations experienced by entrepreneurial firms involved with acquisitions. Table 11.5 presents a comparative analysis between the business plan scenarios (internal growth and acquisitions) and the actual financial performance across various financial characteristics.

Table 11.5 A comparative analysis between the two planned cases and the actual case for Kline Häppchen

<i>Characteristics</i>	<i>Financial forecast</i>		<i>Actual performance</i>
	<i>Internal growth</i>	<i>Growth by acquisitions</i>	
Revenue growth rate (CAGR)	24.8%	28.6%	34.3%
Average EBITDA margins	16.8%	15.5%	10.6%
Cash flow stability	Moderate	Moderate	Low
Emergency rounds of financing	None expected	None expected	\$10 million
Anticipated synergies	N/A	Some expected	Limited
Business valuation (anticipated or actual)	\$132.9 million	\$157.4 million	\$120 million
Proceeds to the entrepreneur	\$132.9 million ¹	\$112.4 million ¹	\$76.4 million ²

CAGR: current average growth rate; EBITDA: earnings before interest, taxes, depreciation, and amortization
 [Note that CAGR and average EBITDA margins are for the period between 2008 and 2015]

Notes:

1 Proceeds to the entrepreneur are anticipated

2 Proceeds to the entrepreneur are actual

There are some important conclusions that can be drawn from our case study. First, slower, more measured, and deliberate growth is perhaps better suited for entrepreneurial firms than growth on “steroids.” KH did not have the necessary management and financial experience to navigate such a robust growth scenario; the firm grew faster than anticipated in its business plans (24.8 percent for internal growth; 28.6 percent for acquisitions; 34.3 percent in reality). This unanticipated growth placed significant undue pressure and stress on KH’s human capital and financial resources. Second, KH clearly underestimated the costs necessary to achieve its desired revenue growth. KH also overestimated potential operating and financial synergies. The net result was a severe decline in EBITDA margins, which fell to about 10 percent – significantly below the level anticipated in any of the scenarios. Third, robust growth in revenue (with a related need to invest in working capital) and declining margins is a sound recipe for financial calamity. In the case of KH, growth on “steroids” resulted in severe financial distress and a fatal case was narrowly missed (the firm was rescued with an emergency round of financing from venture capitalists and further bank financing). Last, there is value creation. The actual case of growth by acquisitions resulted in generating value (the firm was sold for \$70 million), but at levels well below those anticipated in both business plans. The projections for internal growth showed the potential to grow KH’s value to \$132.9 million (it is, of course, difficult to estimate whether such value would actually be realized). In this case, growth by acquisitions resulted in value reduction on a “relative and comparable basis,” albeit, only on paper. Acquisitions effectively worked as revenue accelerators rather than value generators. The value reduction occurred in comparison to what could have been possible to achieve.

While it may be difficult to place all the blame for the poor financial performance of KH on the acquisition strategy it adopted, it is clear that acquisitions exacerbated many of the problems KH faced and exposed the fundamental weaknesses of the firm in developing its business. It can be concluded that internal growth was perhaps a more manageable business scenario for the firm.

The universe of growth opportunities

Figure 11.1 provides a simple diagram depicting the key strategic expansion alternatives for entrepreneurial firms. The key criteria used to map the universe of these expansion opportunities are value creation (either high or low) and revenue growth potential (either high or low). Value creation was chosen as one of the axes because it is a central theme of this book. The other axis was chosen because we wish to highlight the need to grow entrepreneurial ventures. At the same time, we wish to illuminate the central point of this chapter, which is that revenue growth does not necessarily equate to value creation (our simple mathematical notation on this matter is: revenue growth $\neq$ value creation). Figure 11.1 shows that there are two distinct clusters of growth and value creation activity. Most externally based strategies are depicted in the lower right quadrant; these expansion strategies increase the risk profile of the entrepreneurial firm engaging in these activities (joint ventures $\rightarrow$ acquisitions $\rightarrow$ leveraged buyouts). Franchising, licensing, and internal growth are estimated to be outside of this high-growth/high-risk quadrant.

Opportunities for external expansion are numerous. External or “inorganic” growth is often perceived as a swift route to revenue generation. There are a number of strategies a firm can adopt. An “acquisition” is a purchase of another firm that is then completely absorbed into the acquiring firm. In an acquisition, the target firm is acquired by the bidding firm (the acquirer) and the target ceases to exist as it becomes a part of the acquirer. Acquisitions can require different transaction constructs and structures: an outright buy of the entire business on “a going concern basis” (i.e., purchasing equity), a purchase of selected assets (and liabilities), an assumption of “business contacts” (i.e., a client list), or other transaction formats. Acquisitions can be friendly or hostile. Similar to an acquisition, a “merger” is a transaction placing two or more firms together in a scenario where there is only one survivor. The emerging firm may be one of the firms participating in the merger or may be an entirely new venture that is established for the various merger participants to take an

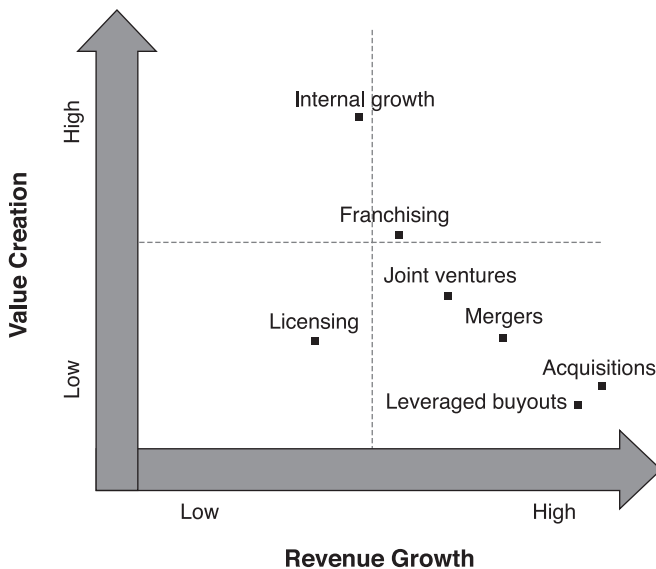


Figure 11.1 The universe of expansion opportunities for entrepreneurial firms

ownership interest in. Note that the differences between mergers and acquisitions can often be very subtle and the terms “acquisition” and “merger” are sometimes used interchangeably. “Licensing” is a completely different arrangement from acquisitions and mergers; it involves a contractual arrangement where the licensing firm provides rights to another firm to produce, promote, and sell products and services. The licensee normally pays a royalty to the licensing firm, which provides know-how, intellectual property, and technical advice to the licensee – these components are usually protected under patent, trademark, or copyright laws and regulations. Licensing normally involves an offer to use a specific form of know-how or intellectual property under predefined conditions over a specific period of time. This form of business expansion can be successfully used in industries based on new technologies (i.e., software, biotechnology, telecommunications, and media) or traditional production activities. “Franchising” is an agreement where the franchisor allows the franchisee to use its name and operating system to deliver products and services in the marketplace. A “joint venture” is a separate entity involving a partnership of two or more firms combining their resources and know-how to develop, produce, and sell products in the marketplace. “Leveraged buyouts” involve the use of long-term debt financing (along with some equity) to purchase an existing business for cash. Most leveraged buyouts occur because the purchaser believes that it can operate the acquired firm more efficiently than the current owner.

As previously noted, we do not regard these modes of external expansion as a panacea for entrepreneurial firms over internal growth; rather, we regard these modes as secondary choices. However, as we discuss later in the chapter, under certain conditions, these strategies can become viable alternatives to internal growth.

Another mode of expansion is internal or “organic” growth. This method of entrepreneurial business expansion is a measured, deliberate, “natural,” and often slow increase in the resource base of the firm (resources are defined here as assets, capital, management, and production). Internal growth is about plowing all profits back into the business; this means employing all free cash flow to the benefit of the entrepreneurial firm and its growth.

Table 11.6 presents the advantages and disadvantages of these strategies.

We will turn now to a discussion of the internal growth strategy and the institutional setups that can facilitate its effectiveness, efficiency, profitability, and value creation.

Internal growth for entrepreneurial firms

Organizational pre-conditions for successful internal growth

The evolutionary transformation of entrepreneurial firms

Most successful entrepreneurial firms rely on evolutionary and incremental processes rather than organizational or business revolutions. Avant-garde business results are often achieved by simple progressions and the compounding effects of small but appropriate business decisions – growth by constant mutation. In fact, some changes to certain aspects of entrepreneurial ventures are so subtle that clear shifts or turns are difficult to identify; there is no single wonder, miracle, or launch moment. These subtle shifts in business strategy, operations, marketing approaches, and product development are deeply rooted in entrepreneurial “Aha!” moments and grounded in simple observations (i.e., information from clients) or dedicated research. Entrepreneurial evolutions are fact-based and the best business decisions are based on the brutal facts of reality. Research allows entrepreneurial firms to get “major” business decisions right; it is virtually impossible to make good business

Table 11.6 Advantages and disadvantages of various modes of entrepreneurial expansion

	<i>Advantages</i>	<i>Disadvantages</i>
Internal growth	Reliance on internal resources (i.e., finance, expertise, employees, knowledge, and practices) More operational flexibility Evenly paced and natural growth tempo Significant control over development pace Preservation of entrepreneurial culture Higher utilization of available resources Often relying on internal finance Availability of promotions for employees	Potential limits to internal growth Foregoing opportunities available in the marketplace Need to develop new resources internally (time consuming) Unsuccessful projects may prove to be “expensive” Existing markets mature (limiting growth potential)
Acquisitions	Rapid revenue growth potential Access to new products, brand names, technical expertise, and clients Cost to acquire may be less than to build Potential to acquire management talent Potential to acquire intellectual property, resources, and capabilities Possible synergies	High failures rates Significant cash outlays upfront Synergies do not commonly materialize Excessive valuation of acquisition targets Departure of key employees of the target Limited control Disruption of organizational culture of the target (and potentially the acquirer)
Mergers	Access to new products and services Economies of scale across various functional units Access to new resources	Incompatibility of management Operational problems Culture clash Loss of organizational agility
Licensing	Strong revenue potential (upfront fee and royalty payments) Recouping development costs	Licensor may become a competitor Licensing can be exclusive (foregoing revenue potential from other contracts)
Franchising	Royalties and fixed fees A significant percent of franchisees achieve financial success Banks normally support franchisees with loans	Developing a franchise system to offer Finding and screening suitable franchisee candidates Significant assistance to franchisees required
Joint ventures	Access to valuable resources Strong innovation potential Cross-learning opportunities Potential synergistic benefits Risk moderations or spread	Venture management Complex decision making Sharing proprietary information
Leveraged buyouts	Potentially significant returns Limited outlay of own cash Tax shield Potential financial synergies	Significant financial risk due to high debt Strong financial and operating experience required Potential disruption of growth as the focus is on debt repayment

judgments without relying on facts. Once the desired path of development is chosen, the entire entrepreneurial organization uniformly pushes forward in a vigorous manner. Not asking the right questions often leads to a mindless pursuit of growth in any direction or all directions. Successful entrepreneurial firms are coherent, congruent, and single-minded; they have no problem answering the simple question, “What business are we in?” This answer is often not so simple for firms that grow in multiple directions through the use of acquisitions.

Successful entrepreneurial firms rarely make “growth at any cost” their primary business objective. Growth occurs because these entrepreneurial firms have a talent pool deep enough to pursue measured business expansion. Successful firms do not pursue growth for the sake of growth; such an approach is not regarded as a fundamental business concept. Size does not equal business success and certainly does not equate value creation. “Acquisitions indigestion” is more likely to be a cause of entrepreneurial death than “opportunity starvation.”

Entrepreneurial firms must learn how to evolve and adapt over time. Successful entrepreneurial firms are “knowledge” organizations that embrace business alteration; they are superb learning platforms designed to change and built around flexible and organically developed structures. At the core of this organizational learning is empowering and utilizing employees who exhibit a preference for innovation rather than the status quo. These entrepreneurial firms work on the assumption that the best results are achieved by protecting the core of the business, stimulating progress, and letting existing clients point the direction for future opportunity.

Institutional and organizational architecture

Many entrepreneurs believe that capital is not the most important consideration in growth. While access to capital is always a challenge for young entrepreneurial firms, they can rely on more creative methods of financing such as bootstrapping (as discussed in Chapter 6). The most critical component of entrepreneurial growth is the ability to employ the “right” people. In fact, many entrepreneurs believe that their ability to grow the firm is directly related to their ability to hire talented people.

Getting the right people is only a partial solution – talented employees need to feel “invested” in the entrepreneurial venture. The founding entrepreneur needs to be willing to share responsibilities within the entrepreneurial firm. This means engaging into spirited fact-based discussions, debates, and arguments. Sharing responsibility also allows employees to “buy” into the vision of the founding entrepreneur; the more ownership employees take in projects, tasks, and activities, the more they will work to achieve success. In addition to this, information disclosure is a prerequisite for decision making. Evidence suggests that employees and the entrepreneur benefit equally from “chaotic” and unstructured communication patterns – this is a lifeline of entrepreneurial development. Employees are able to engage with the entrepreneur in a less formal setting while the entrepreneur is able to spot subtle or difficult-to-observe trends in the venture. Finally, the organizational system of the firm must be designed to accept moderate amounts of experimentation and, consequently, failure.

The entrepreneur needs to be able to influence employees through interpersonal relationships rather than control mechanisms (even though properly structured monitoring and corporate governance functions are important). The role of the coach is always better than the role of the commander. People feel most empowered when they serve the organization rather than a “king”-like entrepreneur. The “genius with many helpers” entrepreneurial model rarely works. Most successful entrepreneurs understand that the only way to transition

their entrepreneurial firm from a “one-man” show to a professional business operation is to develop the organization’s human resources.

Evolutionary business results in entrepreneurial firms are rarely accomplished by hiring outside CEOs; in fact, there is no evidence to suggest that bringing an outside CEO into the firm correlates with business success in the long term (outside CEOs are at best correlated with short-term bursts in revenue and/or earnings). The best CEOs are often the ones who engage in a deliberate succession planning process in which any one of the internal CEO candidates can effectively lead the firm. The central idea is to promote people from within the organization in order to promote the core values of the firm.

The most successful firms are system-based social institutions where the final conception is the organization itself and its associated organizational mechanisms (the ultimate objective is not a business concept or product/service idea). These firms are consequently filled with self-disciplined employees who operate under minimal supervision, share responsibility and decision making, and are provided with the freedom to experiment. These individuals operate in an organization where bureaucracy and hierarchy are avoided at all costs.

Although the most successful entrepreneurial firms rely on the fabric of the “right” people, senior managers must focus on managing systems rather than people. Effective institutional systems are developed through an in-depth understanding of the economic turbine of the entrepreneurial firm. The entire management and labor capability of the organization is focused on a few select success factors (i.e., net profit or cash flow per a specific denominator, where the right “denominator unit” is industry or firm-specific).

Professionalizing the organization is important, but extreme administration of an entrepreneurial firm can be fatal to the venture. At the same time, if the transition to professionalization is made too late, management is likely to lose control of the entrepreneurial venture as the firm grows – this too can be fatal to the firm.

Pursuing clusters of objectives and goals

The most successful entrepreneurial firms have a multidimensional orientation towards their goals and objectives. Organizational goals and objectives that are more balanced and centered better extend to the firm’s various stakeholders, including the community, customers, employees, shareholders, and others. There is a balance to be achieved among the firm’s goals and objectives which at first glance can be difficult for the firm to reconcile with (i.e., bureaucratization versus centralization, openness versus structure, quality versus cost, freedom versus control, and so on). Many entrepreneurial firms aspire to achieve multiple goals at the same time rather than viewing them as mutually exclusive. The preference is to always lean towards an “AND” orientation rather than an “OR” approach.

The growth priority matrix

Table 11.7 presents the growth priority matrix for entrepreneurial firms. The graph captures directional strategies (concentration and diversification; we do not consider the pause or retrenchment strategies in this section) in the context of the most suitable modes of expansion (external and internal) for entrepreneurial firms. Our objective here is to consider the priorities for entrepreneurial firms with respect to best practices and research evidence. Note that our recommendations may not fit for all of the situations experienced by entrepreneurial firms and that the priority matrix is based on a certain degree of conditionality with respect to the entrepreneurial firm’s product potential, the maturity of the market, the degree of the

Table 11.7 The growth priority matrix for entrepreneurial firms

Modes of expansion									
Internal					External				
		Acquisitions	Mergers	Licensing	Franchising	Joint venture	Leveraged buyouts		
Directional strategies	Diversification ²	Concentric ¹	x ¹	x ³	x	x ²			
		Conglomerate ²	x ²	x ³	x	x ¹			
	Concentration ¹	Vertical ²	x ²	x ³		x ¹			
		Forward ²	x ¹	x ³		x ²			
	Horizontal ¹	New market ¹	x ¹		x	x ²			
		New product ²	x ¹	x ³	x	x ²			

[Please note that the superscript notations in Table 11.7 denote the preferred sequence of choice of expansion for the entrepreneur (they are not “footnotes”). For example, when the entrepreneur considers expansion, he or she should always choose the concentration strategy first (hence, “Concentration” with a superscript “1”) to diversification (hence, “Diversification” with a superscript “2”). Furthermore, when the entrepreneur chooses the concentration strategy, he or she should choose horizontal expansion strategy (hence, “Horizontal” with a superscript “1”) to vertical strategy (hence, “Vertical” with a superscript “2”). And, so on.]

firm's professionalization, availability of resources (i.e., financial, management, and otherwise), and so on. Table 11.7 provides a ranking of preferred or desired choices for entrepreneurial firms. The concentration strategy is ranked as the number one choice (concentration¹) compared with the diversification strategy, which is denoted as the second best alternative (diversification²). The subcategories are ranked in a similar manner as number one, two, or three.

In terms of priorities for directional strategies, if the entrepreneurial firm operates in a market with strong growth potential, it should focus its efforts on concentration strategies (please note that concentration is annotated as the best overall choice in Table 11.7, ahead of diversification). This strategy involves centering the attention of the entrepreneurial firm on the marketplace it knows best and focusing its available resources on existing product lines or services. The most natural expansion move for an entrepreneurial firm operating in an attractive market is the pursuit of a concentration strategy in the horizontal expansion context. This aspect of strategic consideration is reviewed next.

Horizontal growth

Horizontal growth typically involves two basic actions: product strategies and geographic expansion. With respect to product strategies, entrepreneurial firms can pursue two options. First, they can engage in new product development – designing, producing, and selling new products. As most entrepreneurial firms initially emerge in the marketplace by spotting market opportunities and filling them with new and innovative products and services, the product expansion route is often quite natural for firms provided that they continue to maintain innovation (note that the vast majority of innovations come from smaller entrepreneurial firms rather than large corporate ventures). The keys to successful product development are dedication, commitment to research and development (R&D), and innovation. Product offerings must also be adjusted to client requirements in a timely manner; this involves regularly scanning the market for opportunities, conducting feasibility studies, and connecting with clients. Most entrepreneurial firms are skilled at spotting business opportunities in distinct market segments or niches, and many can operate under the radar screen of more developed competitors for long periods of time. In slower-paced industries, innovation and R&D are critical, but not life-threatening. This is quite different in fast-paced industries where the product life cycle is typically short (12 to 18 months). Of course, introducing new products is not without risk. New products can fail if they are offered in a shallow market, poorly promoted, introduced during a suboptimal time, or poorly supported in the aftermarket.

Moreover, entrepreneurial firms can improve their existing product offerings. Most entrepreneurial firms continue their business development by “mushrooming” their existing product portfolio; this means slowly but diligently and incrementally improving products over time in response to client requirements and demands. This process may involve adding new features and characteristics, enhancing quality, updating product versions, reducing prices, increasing convenience, and so on.

Entrepreneurial firms can also attempt to penetrate deeper into the marketplace. This generally involves employing more sophisticated marketing techniques (i.e., advertising and promotional efforts), improving sales functions (i.e., increasing the sales force), and building out distribution structures (i.e., securing timely delivery). The market penetration strategy is often successful when supported by discounts. Another product strategy is extending the product line. This typically involves offering products to a new client base. Entrepreneurial

firms can offer a simpler version of the product for a novice user or a modified product for more demanding clients. They can also offer a low-end product or a high-end product.

Geographic expansion is another avenue of growth available to entrepreneurial firms. This mode of development involves expansion into nearby geographic markets or internationally. Expansion within the domestic market is often easier to accomplish as it involves entering a nearby community, market, or geographic region where client requirements and expectations are likely to be similar (though products and services may need to be changed), the existing business contacts can be exploited (i.e., distribution partners, suppliers), and existing employees can be deployed. International expansions offer significant growth potential as many export markets grow at rates exceeding those available domestically; this is especially true in emerging markets, where gross domestic product can grow at double-digit figures and growth in market demand in specific industries can easily range between 40 and 50 percent per annum. However, international expansion poses greater risks for entrepreneurial firms.

In terms of the preferred modes of expansion in the market development category, the entrepreneurial firm may consider multiple options: internal growth, licensing, franchising, or a joint venture. We propose that horizontal growth is best achieved through internal development (ranked as the number 1 expansion mode), followed by a joint venture. Note that we do not consider mergers and acquisitions as viable alternatives. This is based on the premise that if the acquisition (or merger) target is in a similar business to the acquirer, it adds little value to the acquirer; the most visible benefit is a rapid increase in revenue. Acquiring or merging with another firm operating in the same industry involves combining the same resources (the benefit of this, of course, is the elimination of duplicate facilities, operations, and functions; the firm can attempt to obtain economies of scale in production, distribution, and other parts of its operations) and seeking synergies (which, as evidence suggests, rarely materialize). A more viable option is to seek a contractual arrangement with a joint venture partner. This arrangement may be especially helpful in the case of an international expansion.

In the case of new product development, the entrepreneurial firm may consider internal development, joint ventures, or acquisitions. Here, if the internal strategies fail to deliver new products, the entrepreneurial firm can turn to external strategies. We suggest that a partnership in a joint venture provides advantages over acquisitions (the joint venture option is ranked ahead of acquisitions). The benefits of partnering in a joint venture include limited requirements of financial resources, access to needed expertise at “low cost,” and an easy “unwinding” of the partnership should it prove unsuccessful. Acquisitions may prove effective if the target firm has unique product offerings unlikely to be “reproduced” by the acquiring firm efficiently or in a timely manner.

Vertical growth

The second best route of expansion is moving up and down the industry value chain or, simply put, vertical expansion (note that this strategy is ranked lower than horizontal expansion). This strategy is especially appealing for entrepreneurial firms with a strong market position in high-growth, predictable industries; horizontal growth provides an opportunity to participate in the industry in a wider scale. Backward vertical expansion has proved to be more successful than forward integration since backward integration allows the entrepreneurial firm to reduce costs, secure access to valuable resources (or regular supplies), control the quality of inputs, or gain new clients in an industry it knows well (backward

expansion is ranked higher compared with forward integration). Forward expansion often involves taking over distribution and retailing functions (these are traditionally regarded as lower margin activities). The benefits of such a move include better control of distribution channels and prices.

In terms of the preferred expansion mode for backward integration, the most suitable options include internal growth, joint ventures, and acquisitions. We disregard mergers as viable options since the entrepreneurial firm does not have to incur “merger pains” in order to get more exposure to an industry it already participates in; there are other preferred means of participating in the marketplace. During backward integration, it may be difficult for the entrepreneurial firm to develop a function previously provided by a supplier; this is especially true if the supplier provides highly specialized inputs, relies on proprietary technology, has access to scarce resources, and so on. In such cases, acquisitions or joint ventures may be the most suitable modes of expansion. If it is possible for the entrepreneurial firm to develop the supplier function (even if this takes considerable time and effort), this would be the most preferred development option. The case of forward integration may be slightly different compared with backward integration. During forward integration, it may be easier for the entrepreneurial firm to employ its internal resources to take over the distribution of its products (this part of the value chain may be easier to develop compared with the backward integration function). A partnership with another firm may also be easier to navigate and manage compared with acquisitions.

Diversification

When the entrepreneurial firm’s products reach maturity and its market is no longer growing (or even worse, declining), diversification becomes an important way to further grow the business. Diversification becomes especially important when the industry matures, consolidates with a few market players, or otherwise becomes unattractive. As noted in Chapter 10, concentric diversification is one of the most survival-proof and profitable strategies for entrepreneurial firms (this strategy is ranked ahead of conglomerate diversification). The general success of this strategy is based on diversification of business activities in areas where the entrepreneurial firm has exposure, experience, and familiarity with the process (despite having to work with products or services that are perhaps new to it); in short, the entrepreneurial firm moves into a related business. This strategy works best when the entrepreneurial firm already has a strong competitive position in a high-growth industry and seeks to leverage its competencies, resources, capabilities, and talents by obtaining a different exposure to the industry. The key to success in concentric diversification is “leveraging” the core of the business against new activities. If the entrepreneurial firm already has strong internal competencies, it can successfully expand into related areas based on its own initiatives and merits. If the core competencies are weaker, then an external means of expansion is more viable.

The second diversification strategy (ranked lower than concentric diversification) is conglomerate diversification. This strategy can be pursued by the entrepreneurial firm if the general conditions of its current market are unattractive and the firm has not been able to develop superior competencies. In such cases, moving into an unrelated industry could prove to be an attractive option for the firm. In terms of a suitable mode of expansion, seeking external relationships may be practical; such relationships may include partnerships, acquisitions, mergers, and so on. The entrepreneurial firm can also steer its diversification efforts into unrelated activities, but it has to develop its market and competitive position

from the start (which takes significant time, effort, and resources). Starting from scratch often results in costly “teething” problems.

Entrepreneurial expansion: the case of Outdoor Living

A Calgary-based entrepreneurial firm, Outdoor Living (OL), is a perfect example of a firm that engaged into multiple modes of expansion, but predominantly based its development strategy around internal growth. The case of OL represents a typical expansion case for entrepreneurial firms.

Outdoor Living was started in 2002 by Matt Greb, who commenced his business venture as a 14 year old by removing snow from driveways and sidewalks in residential areas. He initially provided snow removal services for his immediate neighbors and gradually expanded his operations to neighboring streets. As a 16 year old, Matt had four other teenagers working for him. When Matt enrolled in a business program at a local university in 2006, he increased the size of his operations by hiring additional employees; by the end of 2006, Matt was removing snow from 47 houses. Matt’s business achieved revenues of \$176,000 and made a net profit of \$52,000. Because the cyclical nature of the business was bothersome to Matt, he looked for other complementary opportunities. The simplest option was to extend his services by including a summer-based product; hence, the idea to cut lawns during the summer time. Matt had already developed a captive audience to whom he could offer other products. The combination of snow removal and lawn care brought OL’s revenues to \$1.2 million by the end of 2008. The year 2009 marked a significant diversification of OL’s business when OL began to approach commercial clients. Matt ventured into snow removal and lawn care for commercial properties (including properties belonging to the city of Calgary). In 2012, Matt started to offer other services to residential clients. In addition to cutting lawns, Matt offered landscaping services including patio building and renovations, planting (i.e., trees, shrubs, and flowers), grass laying, grading land, pouring concrete walkways, and building fences.

In 2015, Matt made his first acquisition: one of his suppliers. He acquired farmland from a retired local farmer, who was growing “carpet grass” (i.e., sod) and selling it to local landscaping firms. Matt’s acquisition involved a purchase of land, machinery and equipment, and the client list for \$0.2 million. He also offered a two-year employment contract to the selling farmer, who was responsible for training OL’s staff in grass seeding, excavating, and laying. Matt noticed that the farmer’s business was poorly managed and had significant upside potential given the rate of growth in residential building in Calgary and the immediate geographic area. It was clear to him that the suboptimal performance of his acquisition was the result of poor management practices and not a reflection of weak market potential.

In 2015, Matt developed another side of his business. He noted that during snow removal from commercial parking lots, the yellow lines marking parking spaces would become erased. He began offering to repaint these lines every year for his clients. From the beginning, this activity has proved a high margin business for OL. In 2015, Matt bought road painting machinery and began to paint parking lots. His total investment in this area (including staff training) was equal to \$0.4 million. By the end of 2015, OL had revenues of \$5.4 million and a net profit of \$1.2 million (a net profit margin of 22.2 percent).

What conclusions can be reached from the case study of Outdoor Living? First, the development of the entrepreneurial venture took significant time. Matt took over ten years to build his business. He avoided speed and committed to controlled growth. Only when he achieved a critical mass of clients, revenue, profits, and cash flow, did he begin to expand

and diversify his business. Second, with the exception of the acquisition of the sod operation, Matt continued to develop the business on his own by spotting opportunities, buying equipment, training employees, and nurturing and developing a client base. He systematically rejected offers to take over other landscaping, snow removal, and one-man outdoor carpentry businesses. He resisted the temptation to build his business too fast. He also chose not to participate in bidding for larger contracts. Though often sought to provide his services as a subcontractor, Matt only agreed to such contracts when he had spare time from his business. He also resisted the temptation to diversify too quickly. Third, Matt continued to expand into business areas similar to his main “outdoor” theme. He took small incremental steps towards growth by offering new products to his existing clients after developing a strong reputation for quality workmanship, competitive prices, and timely delivery (in other words, Matt had a strong core business). Fourth, when Matt decided to pursue an acquisition, he did not buy an entire business; instead he focused on select assets. He also secured access to appropriate know-how by offering a contract to the previous owner. Moreover, the acquisition price was low and did not stretch the financial standing of OL. Fifth, Matt’s expansion plans reflected a clear vision; the specific expansions and business movements were strategic. OL has built upon its business by protecting the core of the business and expanding on the periphery through its strong competencies, skills, capabilities, and resources. Sixth, OL has been able to develop through its own cash resources. At the end of 2015, the firm had only a \$225,000 bank loan.

Key steps in acquisitions

If the conditions for an external mode of expansion are right and the entrepreneur feels that this is the most sensible way to grow the venture, then the entrepreneur can choose to execute an acquisition. The acquisition process follows a basic financial decision-making model which is used by a wide selection of investors (i.e., venture capitalists, fund managers, angel investors, and so on). This model consists of five key steps: identifying suitable targets, due diligence and screening, business valuation, financial contracting, and post-acquisition activities.

The first step in the acquisition process refers to the identification of suitable acquisition targets. This activity can be performed by internal or external means. If relying on internal resources, the entrepreneurial firm can use internal knowledge, know-how, and its database to identify suitable acquisition candidates. Possible acquisition targets include other firms in the industry perhaps already well known to the acquirer. The entrepreneurial firm may already compete with the target or have come across it in business dealings. If the entrepreneurial firm wishes to engage into an acquisition in an unrelated industry, it would not be able to rely on internal information; it must find suitable targets on its own. One of the ways to identify suitable acquisition candidates is to perform a bottom-up review and investigation of the sector. Another option is to purchase industry reports; these outline key industry trends and identify key market players. If the entrepreneurial firm has limited internal resources, it can also rely on external assistance. Support in identifying suitable acquisition targets can come from professional business brokers, consulting firms, independent “rain makers,” or other sources (i.e., accountants, lawyers, bankers, business associates and partners, and so on).

One of the most critical components in acquisitions is the strategic fit between the bidding firm and the target. Another key area is to find a suitable acquisition target that is mispriced (overpaying for the acquisition is one of the most common problems in acquisitions).

Acquisitions also depend on motivation. For example, if the acquirer is looking for an inexpensive target, the target should be undervalued. If the motivation for the acquisition is diversification, the acquiring firm should look for firms unrelated or uncorrelated to its current business (for example, a cyclical firm should purchase a counter-cyclical or defensive firm). If the motive is operating synergy, the acquiring firm should be strong in functional areas where the target is weak.

The next step in the acquisition process involves due diligence and screening. In Chapter 3, we focused on the key determinants of entrepreneurial success; these parameters would normally be applied to understand the commercial success of the acquisition target (these areas of investigation can be successfully applied to young and more mature firms). In terms of the commercial assessment of the target, the entrepreneurial firm would investigate such business components as the management team, the market in which the target firm operates, the competitive standing of the target in the market or specific market segments (including customers, product pricing and quality, distribution structures, production capabilities, and so on), and the business model the target employs. As noted in Chapter 7, a financial analysis is performed focusing on revenue growth, EBITDA or EBIT margins, liquidity, and the strength and repeatability of the cash flow. Financial and non-financial screening needs to be performed on the historical performance of the target, but also in the context of its anticipated performance moving forward (i.e., the financial projections). The last area of screening is done in the context of the acquiring firm. This means that the acquirer examines and explores all possible synergies that are likely to be generated from the acquisition. Note that achieving operating and financial synergies is one of the most widely used (but also abused) rationales for acquisitions. This analysis is often difficult to perform, as synergies rarely materialize in reality.

Synergies can generally be categorized in two ways: operating and financial (please note that the operating synergy is quoted as the primary motivator for acquisitions). Operating synergies refer to those activities that allow entrepreneurial firms to increase revenue and/or reduce cost, resulting in higher profit and stronger cash flow. Operating synergies can result in economies of scale (increasing production efficiency), significant market pricing power (ability to adjust prices), consolidation of functional areas (reducing cost), and more robust growth in new or existing markets (relying on distribution networks and brand recognition). Financial synergies lower the cost of capital and allow realizing tax benefits (for example, when one firm has carry forwards, which it cannot use). Financial synergies also result from combining the potentially lucrative, high-return projects of one firm with the excess cash resources of another. Combining the profits and cash flows of two firms may reduce their overall cyclicity and make them more predictable. Financial synergies may also increase the two firms' debt potential and reduce costs.

In preparation for the development of a financial offer to the target firm, the entrepreneurial firm must perform a business valuation of the target firm. In Chapter 8, we learned that any common equity of business can be valued using two methods: a multiples method (i.e., EBITDA multiples method) and a capitalization method (a discounted cash flow (DCF) method). Of course, the valuation may be more complex or less complex if the entrepreneurial firm decides to purchase items other than common equity (i.e., selected assets, intellectual property, "customer lists," and so on). Nevertheless, the valuation of the target should reflect its current status of operations (i.e., existing clients and revenue, cost structure, financing, dividend policy, and so on). The valuation of the target should be the value of the target with its current practices and approaches rather than with value added contributions from the acquiring firm – this is called the "status quo" valuation. Valuing the target on this basis

should be obvious because the acquirer does not want to pay for something it is looking to provide to the target after the acquisition. As we note in Chapter 8, the most relevant methods of valuation are the EBITDA multiples method and the DCF method; other methods are less common, but can be useful in determining the floor or ceiling price of the business. One of the most crucial elements of the EBITDA multiples method is finding the appropriate EBITDA multiple to apply to the target firm. Typically, this is found by consulting internal research or research reports (please note that EBITDA multiples can change depending on the economic business cycle). EBITDA multiples often need to be adjusted downwards by at least 25 percent and as much as 50 percent to reflect that the target is illiquid, has lower quality of earnings, and so on. The DCF method requires a discount rate which is normally generated through the Capital Asset Pricing Model (CAPM), the weighted average cost of capital (WACC) approach, or some other way. As we observed in Chapter 8, the “on paper” valuation is developed as a guide for arriving at the true value of the firm. The ultimate price is always determined through negotiations between the buyer and the seller. Another consideration in determining the price for the acquisition target is the actual mode of payment for the acquisition. The most basic options for this include paying with cash, borrowing, or raising equity. The bidding firm can also settle the transaction price by offering its own equity in exchange for that of the acquired firm. Another point is that accounting considerations in acquisitions can be complex. The most basic question to be asked in an acquisition is how to account for an acquisition.

When the value of the underlying target firm is determined, the entrepreneurial firm prepares a financial offer for the target – this is normally regarded as deal structuring. The major distinctions in acquisitions are whether the acquirer intends to buy equity in the firm, purchase all or selected assets, and assume some or all liabilities. The key terms are normally captured in an offer letter, letter of intent, terms sheet, or heads of terms. This simplified document is normally converted into a more complex document in due course.

Finally, there are the post-acquisition activities. Post-acquisition activities are often the most difficult part of the acquisition process. Challenges occur at this point because the analysis of all possible synergies (analyzed during the screening part of the acquisition process) must now be implemented. Evidence suggests that achieving cultural and operational integration is extremely difficult. Acquisitions exacerbate personality conflicts.

Financial analysis of acquisitions

Approaches to the financial analysis of acquisitions

Financial analysis of acquisitions is typically centered on discovering the value of synergy; this is no surprise, as obtaining synergies is the most widely quoted reason for an acquisition. The assumption, of course, is that synergy is expected to exist if the value of the combined firm is greater than the sum of the values of the bidding firm and the target (operating independently). The basic notation to determine the value of synergy is shown in equation 11.1.

$$V(AT) > V(A) + V(T) \quad (11.1)$$

$V(AT)$ = The value of a firm resulting from combination of firms A and T

$V(A)$ = The value of the acquiring firm (A)

$V(T)$ = The value of the target (T)

Table 11.8 Valuing synergy from acquisitions for Kline Häppchen (in \$'000)

<i>Target A</i>	<i>2010</i>	<i>2011</i>	<i>2012</i>	<i>2013</i>	<i>2014</i>	<i>2015</i>
FCF	(2,704)	(763)	(654)	176	656	765
PV of FCF	(2,704)	(663)	(495)	116	375	380
Sum of PV of FCF	(2,991)					
TV	8,033					
PV of TV	3,994					
Total PV of FCF	1,003					
Plus current assets	4,498					
Less total liabilities	1,212					
Value of equity	4,289					
<i>Target B</i>	<i>2010</i>	<i>2011</i>	<i>2012</i>	<i>2013</i>	<i>2014</i>	<i>2015</i>
FCF	(1,543)	(673)	(1,245)	355	564	542
PV of FCF	(1,543)	(585)	(941)	233	322	269
Sum of PV of FCF	(2,245)					
TV	5,691					
PV of TV	2,829					
Total PV of FCF	584					
Plus current assets	3,765					
Less total liabilities	1,275					
Value of equity	3,074					
<i>Target C</i>	<i>2010</i>	<i>2011</i>	<i>2012</i>	<i>2013</i>	<i>2014</i>	<i>2015</i>
FCF	(3,054)	(1,287)	(1,564)	454	565	713
PV of FCF	(3,054)	(1,119)	(1,183)	299	323	354
Sum of PV of FCF	(4,380)					
TV	7,487					
PV of TV	3,722					
Total PV of FCF	(658)					
Plus current assets	3,892					
Less total liabilities	1,989					
Value of equity	1,245					
<i>Kline Häppchen</i>	<i>2010</i>	<i>2011</i>	<i>2012</i>	<i>2013</i>	<i>2014</i>	<i>2015</i>
FCF	(130)	766	1,751	2,555	3,973	6,084
PV of FCF	(130)	638	1,216	1,479	1,916	2,445
Sum of PV of FCF	7,564					
TV	34,476					
PV of TV	13,855					
Total PV of FCF	21,419					
Plus current assets	19,456					
Less total liabilities	14,991					
Value of equity	25,884					

<i>Combined entities</i>	<i>2010</i>	<i>2011</i>	<i>2012</i>	<i>2013</i>	<i>2014</i>	<i>2015</i>
FCF	(7,512)	630	1,110	6,905	12,814	14,196
PV of FCF	(7,512)	534	797	4,203	6,609	6,205
Sum of PV of FCF	10,836					
TV	97,479					
PV of TV	42,609					
Total PV of FCF	53,445					
Plus current assets	24,269					
Less total liabilities	23,169					
Value of equity	54,545					

FCF: free cash flow; PV: present value; TV: terminal value

The formula implies that we need to perform a number of valuations to discover the potential value of synergy (if any). First, we undertake valuations of the acquiring firm (A) and the target (T) as independent businesses. We perform EBITDA and discounted cash flow (DCF) valuations (using the discount rates appropriate to each firm) for each of the firms and add them together. Second, we ascertain the value of the combined firm (without synergy) – this is done by simply adding the valuations obtained from firms A and T (this was done as a part of step 1). In the last and most challenging step, we attempt to ascertain the effects of synergy; this is achieved through a detailed analysis of the revenue, costs, margins, and cash flows of the combined firms. Of course, the hope is that the value of the combined entity is greater than its independent parts. The value of synergy is often regarded as a net advantage to an acquisition or merger.

Table 11.8 presents the valuation figures for the three acquisition targets for Kline Häppchen (Targets A, B, and C). As noted earlier, KH anticipated three relatively small acquisitions valued at about \$8.6 million (prices for these acquisitions range from \$1.3 million to \$4.3 million). Note that the values presented in Table 11.8 reflect actual prices; the exception is the acquisition price for Target C, which marginally differs from the a priori valuation (these values reflect “status quo” valuations without any value added by KH).

The acquired firms generate strong revenues and EBITDA profits commensurate with industry averages. However, the acquisition targets appear to struggle with cash flow management (as reflected in their forecasted cash flows); this aspect of operations is expected to be significantly improved after the acquisition. This supports a generally well-understood finance principle that the cash flows of combined firms are less variable than the cash flows of individual entities. Table 11.8 also provides the valuations of KH based on its internal growth scenario and that of the combined entities (based on anticipated operational and financial synergies). The value of KH is estimated to be equal to \$25.9 million, while the value of the combined entities after the acquisition is anticipated to equal to \$54.5 million. Let's consider the value of synergy by applying equation 11.1.

$$\begin{aligned}
 V(\text{Combined entities}) &> V(\text{Kline Häppchen}) + V(\text{Target A}) + V(\text{Target B}) + V(\text{Target C}) \\
 \$54.5 \text{ million} &> \$25.9 \text{ million} + \$4.3 \text{ million} + \$3.1 \text{ million} + \$1.2 \text{ million} \\
 \$54.5 \text{ million} &> \$34.5 \text{ million} \\
 \text{Value of synergy} &> \$20.0 \text{ million}
 \end{aligned}$$

The estimated value of synergy from acquisitions is expected to equal \$20.0 million – a substantial figure given that the valuation of KH is estimated at around \$25 million.

The differential analysis of acquisitions

In this section, we consider a specific analysis of two investment cases for KH. As noted earlier in this chapter, KH considered two cases for growth: internal and through acquisitions. The firm ultimately decided to execute the strategy based on acquisitions. In a nutshell, this strategy resulted in a rapid increase in revenue, a decline in profitability, and severe liquidity challenges.

In this section, we propose a strategy of analyzing the differential and incremental impact of acquisitions over and above the results anticipated on the basis of organic growth – we call this a differential analysis. In this mode of examination, we employ the principles of capital budgeting to analyze the incremental effect of acquisitions over a base case (i.e., internal growth); acquisitions can be regarded as major capital budgeting projects. A capital budgeting orientation can be useful as it is a method that looks at incremental values. Capital budgeting analysis is specifically focused on value creation, and value creation is at the core of net present value (NPV) calculations. As noted in Chapter 10, a positive NPV value indicates that value has either been created (a positive NPV outcome) or destroyed (a negative NPV). Other methods, such as the internal rate of return (IRR), can also be useful to gauge the return on investment compared with the entrepreneurial firm's cost of capital.

Differential analysis has many advantages. First, it extends the use of capital budgeting methodologies into the domain of acquisitions. Acquisitions are traditionally analyzed by determining the value of synergy rather than the net change in the value of the firm as a result of the acquisition (the determination of NPV). Second, differential analysis highlights specific areas of incremental change; this includes revenues, costs, cash flow, and so on. This allows for a clear identification of the potential operational and financial synergies in the investment project. Third, differential analysis specifically looks at the areas of the value creation process critical to business valuation (such as the EBITDA line and cash flows). The disadvantages of this approach are two-fold. Differential analysis does not consider the terminal value, which in our case would capture the performance of the acquiring firm and the target into “infinity”; instead, differential analysis looks at the acquisitions over a discrete time horizon during which the entrepreneurial firm only considers short-term financial differentials. Second, this approach is perhaps less concerned with the various aspects of financial engineering that can contribute to a significant “pop” in the value of the bidder.

In our case, the analysis is based on generating incremental revenues, costs, investments, and working capital between the acquisition case and the internal growth case. These disparities are recorded in each category as “differences.” All “differences” are subsequently used to generate a differential cash flow (a standard procedure of developing an incremental cash flow from Chapter 10 applies in this case).

Table 11.9 presents a detailed differential analysis for KH. The analysis shows that in the first two years post-acquisition, the differential cash flows are anticipated to be negative (equal to \$6.2 million in 2009 and \$7.0 million in 2010). Cash flows become positive in 2011 and are expected to steadily grow and reach \$8.1 million by 2015.

In order to complete the differential analysis using the capital budgeting approach, we need to estimate the discount rate. Chapter 8 described various methods of estimating the applicable discount rate: the CAPM, the WACC, or other means (i.e., estimating the

Table 11.9 The differential analysis for Kline Häppchen

(In \$ '000)	2009	2010	2011	2012	2013	2014	2015
Net sales							
Acquisition	43,581	65,715	91,133	109,696	127,477	145,080	163,092
Internal growth	43,581	52,465	59,874	69,083	82,983	104,690	131,863
Difference	0	13,250	31,259	40,613	44,494	40,390	31,229
Cost: Goods sold							
Acquisition	31,371	46,928	64,879	77,601	89,587	98,763	113,673
Internal growth	31,371	37,184	42,561	49,829	59,930	75,317	95,317
Difference	0	9,744	22,318	27,772	29,657	23,446	18,356
Costs: Selling & administrative							
Acquisition	5,910	9,043	12,406	14,929	17,347	21,987	23,187
Internal growth	5,910	6,530	7,840	8,012	9,652	11,974	14,398
Difference	0	2,513	4,566	6,917	7,695	10,013	8,789
Depreciation expense							
Acquisition	1,555	2,555	2,955	3,655	4,005	4,025	4,045
Internal growth	755	1,155	1,555	1,955	2,355	2,755	3,155
Difference	800	1,400	1,400	1,700	1,650	1,270	890
Change in working capital							
Acquisition	286	-3,638	-4,178	-3,051	-2,923	-2,894	-2,961
Internal growth	-1,218	-1,514	-2,285	-3,568	-4,467	-4,467	-4,467
Difference	1,504	-2,124	-1,893	517	1,544	1,573	1,506
Capital expenditure							
Acquisition	12,000	10,000	4,000	7,000	3,500	200	200
Internal growth	4,000	4,000	4,000	4,000	4,000	4,000	4,000
Difference	8,000	6,000	0	3,000	-500	-3,800	-3,800

Differential analysis

Revenue	0	13,250	31,259	40,613	44,494	40,390	31,229
Costs	0	12,257	26,884	34,689	37,352	33,459	27,145
Depreciation	800	1,400	1,400	1,700	1,650	1,270	890
Net operating profit before tax	-800	-407	2,975	4,224	5,492	5,661	3,194
Tax	-320	-163	1,190	1,690	2,197	2,264	1,278
Net operating profit after tax	-480	-244	1,785	2,534	3,295	3,397	1,916
Depreciation	800	1,400	1,400	1,700	1,650	1,270	890
Working capital	1,504	-2,124	-1,893	517	1,544	1,573	1,506
Investment	-8,000	-6,000	0	-3,000	500	3,800	3,800
Differential cash flow	-6,176	-6,968	1,292	1,751	6,989	10,040	8,112
Discount rate	20.0%						
Net present value	41.1						
Internal rate of return	20.1%						

probability of entrepreneurial success and discovering the resulting discount rate). In our case, we use the WACC method to estimate the applicable discount rate. As we noted in equation 8.2, the formula to estimate the WACC is described as follows: $k_{wacc} = (w_d \times AT k_d) + (w_p \times k_p) + (w_c \times k_c)$. In our case, KH must earn a rate of return equal to the WACC to pay their suppliers of capital the return they expect. Since KH does not have any preferred shareholders nor does it intend to issue any preferred shares, the WACC formula can be reduced to the following notation: $k_{wacc} = (w_d \times AT k_d) + (w_c \times k_c)$. Of course, before using the formula, KH must first estimate the cost of capital for each component source of capital. The component sources in this case include the after-tax cost of debt ($AT k_d$) and the cost of common share equity (k_c). The interest rate is effectively the cost of debt for the firm. However, since the interest rate on the debt is tax deductible, KH's effective cost is much lower and is calculated according to the formula $k_d = k_{int} (1 - T)$, where k_d captures the cost of debt, k_{int} represents the interest rate on borrowing, and T is the tax rate. In our case, KH borrows funds at 10 percent and its tax rate is equal to 40 percent; therefore, the effective after-tax cost of debt would be equal to 6.0 percent ($10\% \times [1 - 40\%] = 6.0\%$). Estimating the cost of common equity is more complex because there are three groups of shareholders expected to contribute capital to KH in 2009: the founding entrepreneur (initial investment equal to \$20,000, with the expected return commensurate with early risk equal to 60 percent), angel investors (\$100,000; 50 percent), and venture capitalists (\$10 million; 35 percent). The weighted average cost of common equity according to the financial contributions is estimated to equal 35.2 percent ($[\$20,000/\$10,120,000] \times 60\% + [\$100,000/\$10,120,000] \times 50\% + [\$10,000,000/\$10,120,000] \times 35\% = 35.2\%$).

The next step in ascertaining KH's overall cost of capital is assessing KH's capital structure. For most entrepreneurial firms, assets are financed with a mixture of debt and equity. The mixture of capital used to finance the firm's assets is called the capital structure of the firm. In order to analyze the capital structure of KH, we need to calculate the percentage of each type of capital source; this calculation is presented in Table 11.10.

Our calculations show that in 2010 (after a capital increase and new debt) KH's capital structure is expected to consist of 52.1 percent debt and 47.9 percent equity. Of course, if KH believes that this capital structure is optimal and wishes to maintain it in the future, it will finance new capital budgeting projects with a mixture of debt and equity in the same proportions (note that KH may change its financing structure in the future). Most entrepreneurial firms are likely to seek a capital structure that is optimal for their business; these capital structure averages often mimic industry averages (i.e., capital structures maintained by most firms in the industry).

The last step in estimating the cost of capital for KH is to calculate the actual WACC of each individual financing source. For KH, it is estimated that the cost of capital is equal to 20.0 percent ($52.1 \times 6\% + 47.9 \times 35.2\% = 20.0\%$). This is the discount rate which can be used to discount the cash flows estimated in the differential analysis. Note that the WACC

Table 11.10 Estimating the mixture of capital sources for Kline Häppchen at the end of 2009

Abbreviated balance sheet items	Value (in \$ '000)	Percentage
Total assets	44,501	100.0%
Long- and short-term debt	23,169	52.1%
Common equity	21,332	47.9%
Total liabilities and equity	44,501	100.0%

rate is close to the internal rate of return (20.1 percent), which implies that the resulting NPV value will be negligibly positive (see Table 11.9 for details).

When we apply the discount rate of 20.0 percent to the estimated differential cash flows, we are able to calculate the present value of cash flows, or their NPV. In the case of KH, this value is marginally positive and equal to \$41,060.1, which indicates that the incremental value of the financial projections based on acquisitions (over the anticipated investment case and based on organic growth) is estimated to increase the value of the firm by only \$41,060.1. The differential analysis clearly demonstrates that acquisitions are unlikely to add significant incremental value to KH.

As noted earlier, an additional analysis that can often assist entrepreneurial firms in making a decision in the context of capital budgeting is the real options consideration. Entrepreneurial firms can also run a range of differential scenarios by assuming different outcomes for each of these scenarios – this is known as a sensitivity analysis.

Questions to consider

1. Define concept growth. What does this mean to entrepreneurial firms?
2. Differentiate between the external and internal growth approaches for entrepreneurial firms.
3. Define the concept of differential analysis. How is this concept different from the traditional approaches used to assess acquisitions?
4. Find a successful entrepreneurial firm in your community and attempt to chart its development plan. Recognize what methods of growth they have employed.
5. Discuss the major problems with acquisitions. Why are acquisitions often less suitable for entrepreneurial firms?

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12 Value enhancement through corporate governance and social responsibility

Chapter objectives

After reading this chapter, you should be able to:

- define the concepts of corporate governance and social responsibility;
- outline the most important components of corporate governance and how these evolve over an entrepreneurial firm's life cycle;
- understand the main paradigms of social responsibility;
- identify the ways by which entrepreneurial firms can improve their corporate governance structures.

Financial scandals that have plagued large corporations in the United States (i.e., WorldCom, Enron, Global Crossing, Tyco, and Qwest) and Europe (i.e., Maxwell, Marconi, and Parmalat), in addition to the recent financial troubles seen in the global economy, have reignited the discussion on corporate governance. As a result of these events, boards have been reshuffled, senior management teams have been changed, and more robust procedures for managing operational and financial risks have been established. Old corporate governance regimes have been restructured and many new regimes have been installed. In addition, numerous public debates and legal proceedings, shareholder activism, and investor outrage have spurred government involvement in the matter. Legislators in different countries have focused on introducing more corporate laws and stock exchange regulations aimed at adopting a set of commonly accepted corporate conduct standards for more equitable treatment of shareholders, for the establishment of accountability and control over directors and management, and for improved transparency in financial reporting. In 2001, the US Congress enacted the *Sarbanes–Oxley Act*, which introduced new measures into federal securities and corporate laws. The Act was “designed to protect investors by improving the accuracy and reliability of corporate disclosure.” While the Act is broad and general, it provides useful guidelines related to disclosure of off-balance sheet liabilities, conflict of interest on the part of security analysts, timing of bonus payments to corporate executives, and more. Regulators in the United Kingdom have followed a similar pattern, amending *The Combined Code* (aka *The Combined Code: Principles of Good Governance and Code of Best Practice*), which contains the corporate governance principles and code provisions to be applied to the UK's publicly listed firms. These amendments incorporate the recommendations of the Higgins report (on non-executive directors) and the Smith report (on audit committees). Similar initiatives have been undertaken in other countries. Even though these undertakings have gone a long way towards identifying key problems and proposing new methods of corporate

conduct, some experts have argued against a regulation-based approach in favor of establishing best market practices based on principles. Such a principle-based approach has been successfully implemented in the field of accounting (for example, in generally accepted accounting principles).

In this chapter, we will explore two concepts: corporate governance and social responsibility. The first concept, corporate governance, has traditionally been associated with larger and public firms where clear separation of ownership and control exists. While adherence to and compliance with the various regulations has become the norm, a custom, a “daily bread” for public firms, this is not the case for entrepreneurial firms. Vigorous corporate governance is rather rare in private entrepreneurial firms; many academics and practitioners argue that instituting the right corporate governance platform is a necessary pre-condition for the growth or robust development of an entrepreneurial firm. Conscientious corporate governance encourages sustainable business habits and enforces “right” behaviors. The second concept, social responsibility, simply relates to the firm’s general orientation towards “giving back” to society.

The two concepts are interconnected by the effects they can have on both small and large firms. There is a growing amount of academic literature and practitioner evidence to confirm that corporate governance and social responsibility are connected with improved financial performance and value creation; hence, our discussion here.

Corporate governance: definitions, overviews, and advantages

Corporate governance refers to the interface between management, shareholders, and the board of directors; it is an interactive conduit that brings the interests of these parties together. Corporate governance is the formal process by which rights, obligations, and responsibilities are distributed to the key players in private firms; it is also the mechanism through which managers are responsible to owners. In broader terms, corporate governance refers to the manner by which the activities and affairs of the firm are run, directed, and controlled. Corporate governance involves processes, procedures, and measures; it can also entail the firm’s culture, which has the potential to predispose management, employees, or even shareholders to behave in illegal ways (an effective and responsible corporate culture, on the other hand, can protect against such temptations). Corporate governance is an implicit and explicit structure that defines the exchange of power within the organization. However, the objective of corporate governance is more than just establishing effective relationship management – it is to establish sustainable value creation for the firm.

There are tangible benefits to strong corporate governance. Corporate governance can be an effective tool to deal with opaque business activities, unethical behavior, self-interest, and self-dealing. Most importantly, strong corporate governance is associated with superior profitability, higher credit ratings, and elevated stock performance (i.e., higher business valuation); it can also moderate risk when key strategic decisions have to be made. Moreover, firms with strong corporate governance standards have easier access to finance, which is raised at a lower cost than would otherwise be possible. Firms with healthy corporate governance structures also have an easier time reaching public markets; transitions from public-to-private are more effortless and calm. Strong corporate governance structures often result in a more balanced treatment of all shareholders.

On a broader, economy-wide scale, corporate governance provides a considerable level of confidence to market participants; this is a prerequisite for properly functioning capital markets. Proper corporate governance reduces agency problems, thereby minimizing

monitoring costs, which in turn is perceived to moderate or significantly reduce investment risks for the investment community. In addition, corporate governance is an integral part of legal systems across the globe.

At the center of most corporate governance considerations are agency issues. An agent is an individual who possesses actual or implied authorization to act on behalf of another person or group. The owners of the businesses (i.e., the shareholders) whom the agents represent are the principals; agents effectively run firms on behalf of principals and for their benefit. While the goals of agents and principals are always intended to be similar, this rarely occurs in business practice. When the goals of agents and principals conflict, agency problems arise. Most agency problems relate to the separation of the management and ownership functions. Agents may be tempted to engage in self-serving behavior rather than pursue the firm's mission, strategic considerations, market objectives, and value maximization goals. Agents may engage in risky activities (i.e., engaging in a stream of haphazard acquisitions) in order to develop a reputation of strong business leadership (such activity may perhaps lead to a better and higher paying position) or avoid risk entirely because if specific projects fail, their employment may be terminated. An example of an agency problem would be if the managers were to purchase a corporate jet for their travel despite the availability of suitable economy and business class air travel; this decision is of no benefit to and difficult to justify to shareholders.

In order to monitor, control, reduce, and address agency issues, firms spend time and financial resources. One of the most basic methods to address agency issues is an accounting audit (the issue of proper financial disclosure and monitoring is discussed in more detail later in the chapter). The activities of the agents can prove quite expensive for the firm and its shareholders if not aligned properly with the interests of the shareholders; from time to time, such activities may even threaten the very existence of the business. There are two common approaches to aligning the goals of agents and the principals and developing the right incentive structures to reduce, if not entirely eliminate, agency problems. The first approach relates to connecting the managers' compensation to the performance of the firm and its value (academic evidence suggests that this is not done well in the marketplace). Such compensation can come in the form of bonuses, awards, extra time off, and so on. The best way to align the goals of the agents with those of the principals is to convert the agents into principals by offering them a small or more significant part-ownership of the business; in short, the managers become the shareholders.

Components of corporate governance

Corporate governance does not only involve directing the activities of the corporation; it also refers to the systems, structures, and processes that ensure that the managerial activities of the firm focus on the goals of the corporation and its owners. Most corporate governance systems have four components: information disclosure, conflict of interest, the board of directors, and ownership and rights (these components are outlined in Figure 12.1). It is important to note that corporate governance challenges differ depending on numerous issues: whether the venture operates as a private business or a public firm; what its legal constitution is; where it was established and founded (i.e., offshore or onshore); where the firm is at in its development life cycle; and so on. In short, the nature of the firm determines the types of potential corporate governance challenges.

Getting corporate governance right is not easy. For example, in private firms, shareholders (both existing shareholders and new investors into the firm) may appoint their own directors.

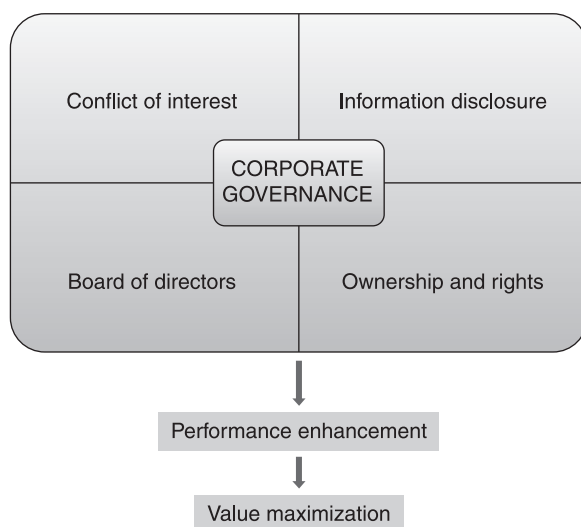


Figure 12.1 The key components of corporate governance and their influence on the entrepreneurial firm's performance and business valuation

In some cases, depending on the legal status of the firm, the business is not required to have a formal board of directors; instead, the entrepreneurial firm may elect to use an informal advisory board. In the case of a corporation, appointees to decision-making bodies may be family members. In public firms, as described in detail later, the process of appointing nominees to the board of directors can be cumbersome and complex, and shareholders may have limited influence in the selection process.

Information disclosure

Corporate governance is first and foremost about disclosure of information. Adequate information is the cornerstone of the process, the basis on which the various decision makers inside of the firm (i.e., shareholders, members of the board of directors, potential investors) monitor management's actions as well as the financial and operating performance of the business. The disclosed information is also critical to external stakeholders (i.e., suppliers, financiers, the public, etc.) who may also make business judgments that affect the financial and operating standing of the business. Appropriate disclosure is critical as it can change or influence the behavior of decision makers and influence decision making. Information disclosure is always about quality rather than volume. Disclosure is also about proper timing.

Financial monitoring and control is an essential function of corporate governance. In a nutshell, shareholders must have a clear understanding of the financial affairs of the business and have a high degree of comfort that the presented financial statements truly and accurately reflect the underlying financial reality of the firm. The monitoring and control functions are often fulfilled by an appointed auditing firm, and the activities undertaken during this process are termed as financial audits. Financial audits are achieved by evaluating a firm's internal system of controls in order to determine their reliability, thereby providing a reasonable assurance to shareholders that the audited financial reports reflect the firm's actual financial

standing. Proper financial disclosure means adopting internationally recognized accounting standards (whether international accounting standards (IAS), or generally accepted accounting principles (GAAP)). Financial disclosure goes beyond “historical” disclosure; the future plans of the firm must also be communicated in the form of financial forecasts and budgets.

The transparency requirement dictates that the proper disclosure of information must reach far beyond financial disclosures to involve the non-financial aspects of business operations. This means that disclosure should include analysis of the firm’s operations, its competitive position and market share, market threats and opportunities, and its strategic plans for the future. In order to provide more meaningful operational information, firms can engage in internal or external audits focusing on specific parts of the business (i.e., manufacturing, logistics, sales and marketing, etc.). Operational audits, for example, review the internal procedures used to evaluate the firm’s internal operational efficiencies. Comprehensive audits include all aspects of the firm’s activities, including strategic planning, budgeting, financial forecasting, operational performance, financial performance, etc. Compliance audits focus on whether the firm’s managers are following certain corporate laws, environmental regulations, internal procedures and by-laws, provisions outlined in various corporate documents (i.e., articles of association, deeds, and shareholders’ agreements), external contracts (i.e., loan agreements, supplier contracts, partnership arrangements), and so on. Of course, the purpose of auditing should not only be to detect corporate fraud, but to prematurely identify and reduce the risk of a crisis (rather than responding after the fact).

Conflict of interest

A conflict of interest arises when one individual’s actions or intentions have the potential to benefit his or her personal interest at the expense of others. In a situation of a conflict of interest, an individual (be it a manager, an entrepreneur, a shareholder, or an employee) has a private or personal interest (this may be financial or non-financial, accruing to him/herself, his or her business, or the person’s significant others) which is substantive enough to impact his or her professional duties or conduct (note that “duties” are generally defined as the professional responsibilities of an individual expected to exercise professional, objective, and independent reasoning). Conflicts of interest undermine professional judgment and cause individuals not to act impartially in situations where their personal and professional interests collide. Conflicts may represent a simple divergence of interests or may entail simple favoritism or personal gain; regardless, they cast doubt on personal integrity. In conflict of interest situations, it may be believed that private and personal interests could confuse objectivity. A conflict of interest can be apparent (where professional judgment may be impaired or compromised), potential (in circumstances leading to actual conflicts of interest), and actual. Conflicts may also arise regardless of whether or not an individual is actually influenced by a potential gain. Conflicts of interest typically involve a misuse of power and trust. Conflicts may also be “situational” and can arise depending on specific circumstances and situations.

There are multiple areas in which conflicts of interest can arise. Conflicts may emerge in situations where there is a direct or indirect financial interest in a decision, where family and interpersonal relationships exist, where strong emotional (whether positive or antagonistic) ties subsist, and where cross-company directorships are present. The most common categories or situations involve self-dealing (using one’s official professional position to obtain a benefit), self-policing (monitoring and controlling one’s own activities), accepting

benefits (including gifts, expenditures, unofficial payments), exchanging influence (soliciting benefits in exchange for advancing another individual's interests), using business property for personal use (this may involve using business property outright or engaging in a barter exchange), exploiting confidential information (benefiting from knowledge acquired during business dealings), and extending false employment (by hiring unqualified family and friends to management positions or maintaining family and friends on payroll).

There are multiple mechanisms for reducing or eliminating conflicts of interest. The most effective method involves recognizing the areas in which conflicts of interest may arise and then avoiding them entirely. In situations, the best defense involves disclosure, openness, and transparency; an individual should always reveal any situation or case that could result in a potential conflict of interest. A stakeholder may avoid participating altogether in a situation where conflict of interest may arise (in judicial terms, this is referred to as "recusal"). In situations where there is some doubt as to whether a conflict of interest may occur, it is appropriate to seek an independent third party appraisal and confirmation.

Related party transactions

A special category of corporate governance involves "related party transactions." These transactions refer to special business dealings or arrangements between parties who are connected by a unique relationship prior to the transaction (this relationship can be personal or otherwise). Such transactions involve a transfer of resources, property, or obligations between the related parties. It can be construed that without such a "special" relationship, or if the parties were unrelated, a transaction may not have ever occurred between them. Parties to the transaction are viewed as related if at any point prior to the transaction one party involved in the transaction has had the ability to exercise indirect or direct control, power, or authority over the other party in making financial, operational, or managerial decisions; in simple terms, one party can affect control, power, or authority in a specific situation over the other party. For example, a private business may wish to contract its main shareholder to supply key raw materials. If the raw materials were to be supplied to the firm at a high price, the main shareholder would make a financial windfall in one firm at the expense of the other. Other examples could involve an entrepreneurial firm employing the owner's son to perform building renovations at a "premium" price well above the market price for the specific job, or hiring the owner's brother to audit the firm's accounting books (resulting in a "clean and unqualified" audit statement, even though significant issues may exist).

While related party transactions consummated on an "arm's length" basis (on business terms that can be reasonably expected in the marketplace) are perfectly legal, acceptable, and legitimate (firms often transact with their own managers, executives, shareholders, associates, and board members), if abused, they can lead to fraudulent behavior, illegal business practices (i.e., fabricating transactions), a misleading financial statement, and financial scandals. No matter what the nature of the situation may be, a related party transaction has the potential to involve a conflict of interest and can be a dangerous tool in the hands of an unscrupulous individual.

Some related party transactions can be difficult to detect. The first reason for this relates to basic awareness: firms need to be vigilant about the areas of their business in which conflicts of interest may arise. If managers and employees are not expected to recognize related party transactions, they are less likely to report them. Furthermore, poor awareness and appreciation of related party transactions leads to poor disclosure or no disclosure at all. Consequently, related party transactions may not be disclosed in the firm's financial

statements and may not have the proper accounting and business recognition. As business activity can also be conducted through multiple firms (i.e., subsidiaries) with different ownership structures, related party transactions may be missed. In addition, private firms may be registered on- and offshore (for example, to optimize taxation); in such circumstances, related party transactions are impossible to detect without proper disclosure.

Related party transactions are well accepted in the domain of public firms, where such transactions must be disclosed and are often “navigated,” controlled, and approved by the board of directors. Disclosures of related party transactions often involve describing the nature of the previous relationship between the parties, a description of the transaction, the level of transaction value, the volume of transactions, the means of transaction settlement, and the effect of the related parties on the firm’s financial statements (this may include, for example, write-offs, off-balance sheet liabilities, doubtful debts, and so on). These transactions are often judged on the basis of their transparency, materiality (whether they are deemed to be of minor or major consequence to the firm), and correctness.

The most common related party transactions include: lending or borrowing money (such transactions may occur at no charge or below market interest rates; loans may not be documented and no payment schedule or methods of repayment may be established; no price may be charged; loans in some cases may not be expected to be paid back); making payments to company officers or employees (such transactions arise for unapproved or even non-existent services); disposing of or purchasing real estate (such transactions may arise at values different from the appraised market value or what may be perceived as a “fair” value by independent business valuers); participating in a barter agreement or a non-monetary exchange of property (such instances involve receiving personal benefits by bartering the firm’s resources to achieve a personal gain); transferring property outside of the firm (such transactions are often called “tunneling,” as valuable intangibles and tangible assets are outside of the firm); recognizing contributions in-kind as a part of financing (this can be done at an inflated value); transferring intellectual property and innovations; and providing guarantees and collaterals.

The board of directors

The board of directors plays a dual role in the corporate governance universe. On the one hand, they are an important component of the firm’s corporate governance structure and the value creation process. On the other hand, they are often the creators and monitors of corporate governance inside the firm; the chief responsibility for effective corporate governance rests with the board.

The key functions of the board of directors include hiring and firing the CEO, approving corporate strategy, controlling and supervising senior management, installing corporate governance infrastructure, approving the use of resources, establishing internal policies (and monitoring their fulfillment), and balancing the distribution of value among stakeholders. While some of these functions are effectively “backward looking,” the most important tasks of the board are “forward looking.” Because of their forward-leaning orientation, board members ensure that their managers select investment projects with an appropriate time horizon. Managers often exhibit a short-term strategic orientation; they often select those projects expected to have immediate positive effects and pay-offs. This bias towards short-term projects often occurs at the expense of long-term orientation; longer-term projects may be more uncertain and risky, but more appropriate for the firm in the long run. Similarly, financial investors who exhibit a preoccupation with short-term goals may not be concerned

about the long-term viability of the business. Furthermore, shareholders with such a limited outlook may limit investment into research and development, innovation, and employee training and development. Balancing these aspects is an important component of corporate governance that the board of directors must effectively manage.

The subject of boards is one of the most researched areas in corporate governance. The critical importance of this topic relates to how boards are at the center of organizational structure – they facilitate interaction between internal and external actors and stakeholders. Boards are also charged with fiduciary responsibility; they must act in the best interests of shareholders. Boards are often perceived as one of the most important conduits for value creation. In establishing the right incentives for management, they can reduce agency costs and mitigate agency problems (for example, by improving management).

There are numerous controversial issues related to the manner in which boards operate: the board of directors' level of involvement in strategic decision making; the composition of the board; the election of board members; the organization of the board (including the dual CEO–chairman role); etc. These issues are now discussed in more detail.

The level of involvement or active participation of the board members in the firm's activities is an important consideration. Directors can have an impact on strategic decision making; their involvement can vary from “phantom” participation (no involvement), to rubber stamping decisions, to being a catalyst for change in the firm (by taking an active leadership role). The involvement of directors in strategic decision making has evolved over time. Before the 1980s, directors had limited involvement in strategic decision making (exceptions included periods of crises management, during which directors were involved in daily decision making). Since the 1990s, however, boards have become more actively involved not only in overseeing the firm's strategic direction, but also in crafting its business strategies. In practice, most boards tend to operate somewhere between nominal involvement (limited involvement in key decisions) to active participation (monitoring, approving, questioning, and so on). A director's role may involve providing occasional active counseling to the CEO and the management team, continuous involvement and participation in management's decisions, and crisis management. At the same time, most directors believe that their talents and skills are not fully utilized. The most effective boards accomplish their duties by being involved in various committees (i.e., auditing, compensation and remuneration, strategic planning, and so on). In order to ensure objectivity and the proper supervision of management, most boards prefer that there is not an excessive number of “insiders” involved in important committees.

Most boards comprise four to five members. Members may include inside directors (the CEO and top managers) and outside directors (non-affiliated management directors such as major shareholders, members of the community, academics, business leaders, etc.). A high proportion of outside directors on the board is often associated with less conflict of interest, less bias in evaluating the firm and management, long-term strategic orientation, creativity, innovation, more coherent business expansion (less risk of a haphazard stream of acquisitions), more balanced distribution of value to stakeholders, less excessive executive compensation, and better corporate governance. All of these components have a direct or indirect link to the financial performance and valuation of the firm. Separation of ownership and control is critical.

The election of members to the board of directors can pose another corporate governance challenge. This issue is most pronounced in public firms (please note that in privately held firms, board memberships are established upfront and shareholders nominate their own directors). Typically, the CEO decides which individuals to invite to the board, extends them

a formal invitation, and subsequently asks the shareholders for their approval (this is done by proxy statement). Most nominees are subsequently elected. Such an approach creates multiple challenges. Most importantly, CEOs may exhibit a tendency to only invite those candidates who are unlikely to “rock the boat” and who agree with their views. In such circumstances, a non-active board that simply rubber stamps the CEO’s decisions may result – the board members are effectively under the control of the CEO. This defeats the entire philosophical and practical construct of the board, since in such circumstances the board feels loyal and accountable to the CEO. The problem of undue influence on the part of the CEO in the selection of “his” members can be overcome by nominating committees. The best candidates to bring to the board are the ones who are not afraid to challenge management, who possess unique expertise relevant to the firm, who understand the industry in which the firm operates, and who have sufficient time to assist the firm outside of formal board meetings.

Another corporate governance challenge relates to the dual role of the CEO–chairman. This concern is more pronounced in some jurisdictions (e.g., North America) than others (e.g., Europe). If the board’s primary roles are to effectively monitor management on behalf of the shareholders and to protect the shareholders’ interests, then the dual CEO–chairman role is not conducive to proper governance of the CEO–chairman (who is a part of the board of directors). If the chairman is also a part of the management team, then the board is unable to effectively oversee, monitor, and control management. This issue represents one of the most pronounced conflicts of interest in a corporate setting. Agency and asymmetry problems, as well as any goals or objectives that arise as financial risks, are vested with shareholders while operating risks lay within management; this may give rise to distinctly different circumstances for shareholders and managers during times of severe financial underperformance (i.e., bankruptcy, liquidation). Ultimately, “shareholders lose while managers just do not win.”

Ownership and rights

Corporate governance also includes mechanisms that define the nature of ownership and the rights associated with such ownership. Ownership is grounded in commercial law and is defined as the owner’s claim on the firm’s assets. Rights are the principles and normative rules bestowed to shareholders by the law. Various laws (commercial, property, contract, etc.) and the underlying legal systems enforce these rights.

Understanding the ownership structure of the firm is critical when assessing the risks associated with corporate governance. The existence of a single owner, a majority owner, or multiple owners acting as a block or engaging in collusive behavior can give rise to multiple challenges. A common problem is cross-subsidizing one firm owned by the entrepreneur with another owned by the same person. In practice, this may include one firm covering the other firm’s expenses until such time that the unprofitable business becomes a viable venture (this may also occur if the owner wishes to optimize tax liabilities and use the unprofitable or less profitable business as a “tax shield”). Transfer pricing, or trading on non-market terms and conditions, may also occur among related or associated firms.

One of the most challenging aspects of participating in entrepreneurial firms relates to minority shareholders’ rights. Most legal jurisdictions around the world operate on the principle of equal treatment of all shareholders and aim to protect these rights from infringement and abuse. Most legal systems tend to protect minority shareholders against a decline in the value of their holdings or dilution of their percentage holdings (this can be

done through a “wash-out round” of financing by issuing shares at a low nominal value). Improving minority shareholders’ rights means easing their ability to attend meetings, exercise their rights, review minutes from previous meetings, vote on relevant issues, and have timely access to information. Some of the specific privileges of minority shareholders include the ability to make the firm’s management call extraordinary shareholders’ meetings and then ask questions during these meetings. Minority shareholders can also insist that certain discussion items be placed on the agenda. They can demand to vote on a resolution to wind-up or liquidate the business if, in their opinion, the firm is not able to reach its original business objectives. Furthermore, they can formally request a buyout of their shares by the remaining shareholders at net asset value (which is often below the market value).

Another topic related to ownership and rights is voting. Most decisions are made by a simple majority vote (50 percent of votes plus one vote). However, shareholders can insist upon a higher voting threshold in order for certain resolutions to be passed (67 percent, 70 percent, or 80 percent). Common voting issues include raising external finance, approving mergers or acquisitions, granting options to management, selecting or changing financial auditors, extending loans to management and employees, and changing strategic objectives. At the beginning of a firm’s life cycle, when the firm is owned by a single owner or a number of related shareholders, the constitutional documents of the firm rarely specify the areas for which special votes would be required; the key decisions are taken as necessary.

In the next section, we will briefly outline the legal organization of businesses. We focus on three main forms of legal structuring. Different legal forms involve different levels of complexity for shareholders.

Legal forms of business organization

Firms can be legally organized in different ways. The three most common types of legal organization are sole proprietorships, partnerships, and corporations. These forms of business organization differ with respect to ease of formation and termination, the owner’s liability, the degree of control, taxation, the degree of legal separation, and so on. While it is not our objective to discuss the complexities of these legal forms, it is important to highlight their key features (see Table 12.1).

A sole proprietorship is the most common form of legal business organization for a small business operator. The entity is often registered with its local municipality in the business activity register. The owner has unlimited liability and is fully responsible for any tax liabilities of the proprietorship.

Two or more individuals may establish a firm in the form of a partnership. Partnerships have limited legal personality and do not pay taxes on their profits (they are regarded as “flow-through” legal entities). Partners instead pay taxes on their share of the profits and file an individual tax return. Partnerships can be established on an informal basis (without any written documentation) or on the basis of a legal contract (a partnership agreement or partnership deed) where the rights and obligations of the parties are clearly outlined. A partnership agreement captures the cash or in-kind contributions of each partner, the level of ownership, allocation of profits, partners’ duties and obligations, and other matters. Partners are legally liable for the business conduct of the partnership and are jointly and separately liable for the partnership’s liabilities. In the event that the partnership’s assets are insufficient to cover the partnership’s liabilities, the partners’ assets may be seized, liquidated, or used to cover the outstanding liabilities of the partnership.

Table 12.1 Legal forms of business organization

	<i>Sole proprietorship</i>	<i>Partnerships</i>		<i>Corporations</i>
		<i>Limited (LP)</i>	<i>Limited liability (LLP)</i>	
Legal status	No	No	No	Yes
Ease of formation	Easy – no formal document required	Simplified constitutional documents required	Simplified constitutional documents required	Complex – intricate articles of association, additional documents (i.e., shareholders' agreement)
Capital required	Limited	Limited	Limited	Local requirement ¹
Termination upon	Death, liquidation, sale, termination notice	Death, liquidation, sale, termination notice	Death, liquidation, sale, termination notice, loss of professional designation	In perpetuity
Control functions	Owner	GP, partners' resolution (occasional)	Partners' decision	Management, board of directors
Owner's liability	Unlimited	Unlimited for GP, limited to LPs	Limited to invested capital	Limited
Taxes	Based on personal tax	Based on personal tax	Based on personal tax	Corporate tax
Rights	Basic	Simplified	Simplified	Complex – subject to detailed descriptions

Notes:

GP: general partner; LP: limited partner; LLP: limited liability partner

¹ Please note that some legal jurisdictions require a minimum level of capital to establish a corporation

Two types of partnerships exist: limited partnerships (LPs) and limited liability partnerships (LLPs). A limited partnership is one of the oldest legal organizations. An LP has two classes of partners: a general partner (GP) and a limited partner (LP). A GP will actively participate in the management of the business while the LP does not (the LP is often only a source of capital). GPs normally have unlimited joint liability for their partnership activity but often contract for a more favorable division of profits; LPs are only liable for the amount of their capital contribution. Such partnerships are often created as investment vehicles and cannot be created informally; a deed of the partnership must be prepared by a public notary and filed with an appropriate public office (the purpose of the filing is to provide a notice to the public about the nature of the partnership). Limited liability partnerships are legal structures designed for situations in which partners seek to limit their liabilities, but for some reason are not able to form a corporation. This form of business organization is generally structured as a general partnership that is allowed to operate like a corporation with limited liability features much like those of capital companies. Professionals such as lawyers, medical doctors, accountants, architects, or engineers often use this legal business structure.

The last major form of business organization is corporation. In comparison to proprietorships and partnerships, corporations are separate legal entities formed on the basis of rules set out in the corporation's constitutional documents (i.e., articles of association, articles of incorporation, memoranda of association, etc.). These documents must be incorporated either locally or nationally and are registered in the registration court. Shareholders of the corporation have limited liability; they cannot lose more capital than what they have contributed to the corporation or what they have paid to acquire the corporation's shares. The corporation's main governing body is a management board. Corporations also have boards of directors appointed by shareholders. There are two types of corporations: private (regarded as closely held) and public (widely held).

The constitutional documents of these different legal organizations include different rights, covenants, obligations, and restrictions. These clauses refer to the level of ownership (determining a percentage-based ownership stake in the firm; determining the percentage of assets accruing upon liquidation, winding up, or bankruptcy), voting power (election of directors, decisions related to major strategic initiatives), ownership transfer (allowing share transfers for existing and new shareholders), dividend entitlement (claiming profits), and information rights (access to the firm's records).

The evolution of corporate governance in entrepreneurial firms

Corporate governance challenges are not static; rather, they are dynamic – they evolve as entrepreneurial firms move through various stages of development. The challenges differ depending on the nature of the entrepreneurial firm (small versus large; corporation versus non-corporation; offshore versus onshore; family managed versus non-family operated; public versus private). In this part of the chapter, we will discuss the evolution of corporate governance concerns in the context of the four key building blocks described earlier: information disclosure, conflict of interest, the board of directors, and ownership and rights. Our discussions will mainly focus on the early development of an entrepreneurial firm (i.e., introduction, development, and growth), as these stages are more applicable to our considerations. The later stages of development (i.e., maturity and decline) are discussed as one block later in the chapter.

Figure 12.2 captures the key corporate governance concerns that occur throughout the various stages of the entrepreneurial firm's life cycle (a more detailed description of these stages of development is provided in Chapter 5). As can be seen in Figure 12.2, the entrepreneurial firm is likely to experience significant corporate governance challenges; therefore, entrepreneurs need to be especially vigilant about these concerns and must aim to address them early on in the process of developing their successful business. Luckily, many of these challenges will subside as the firm develops and external financiers become involved.

It is noteworthy to state upfront that in order to realize the ambitious development plans often set out by entrepreneurial firms, external financing typically needs to be raised. External financing can occur in the form of equity (private or public) or debt (also private or public). Raising equity is likely to have a more profound impact on the entrepreneurial firm's corporate governance structure and regime. In the case of raising public equity and "going public," the entrepreneurial firm will either be subjected to the specific corporate governance expectations of external financiers (as in the case of venture capitalist financing) or broader regulations (in the case of going public). Debt providers are unlikely to have a similar level of impact on the establishment and refinement of corporate governance in the entrepreneurial firm. Banker involvement is limited to resolving conflicts of interest, establishing a proper

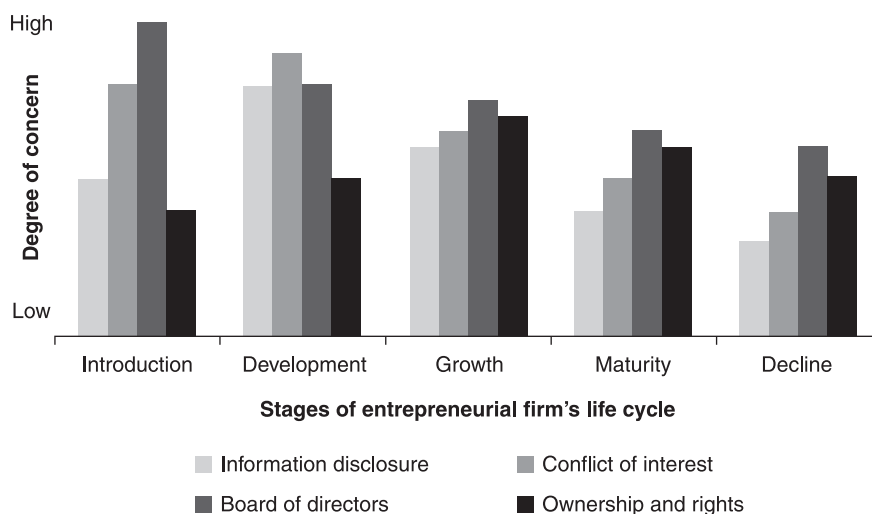


Figure 12.2 The degree of concern related to corporate governance challenges at different stages of an entrepreneurial firm's development

board of directors, and influencing the execution of rights. The participation of bankers in the entrepreneurial venture can be considered “more remote” because bankers are not considered to be “hands-on” financiers and do not display significant corporate activism. Having said this, entrepreneurial firms may benefit from having regularly to prepare financial reports as a part of this relationship (financial information is regularly monitored by bankers).

The introduction stage

In the early development of an entrepreneurial firm, agency problems may be non-existent or negligible because separation of control and ownership does not exist. The firm is owned at this stage by a single owner who also operates as the general manager, the CEO, and the ultimate decision maker. The founding entrepreneur has intimate knowledge of all business affairs (i.e., financial, operational, accounting, production, etc.); hence, there is no need to incur any incremental costs for monitoring the firm's operations. At this stage of development, improving products and services, correcting any operational challenges, developing new clients and attending to existing ones, and employing the right people are critical tasks often requiring the direct oversight of the founding entrepreneur (there is often no proper management structure at this stage). Moreover, cash management and financial control rest solely on the entrepreneur, who authorizes all expenditures in the business. At the same time, the development of a properly functioning accounting department is often neglected, and the accounting department is often staffed with unqualified employees. Any financial reports generated by the accounting department tend to focus excessively on taxation, which is of limited value to financial decision making. Historical financial statements are rarely audited as the entrepreneurs can rarely justify the expense given their small scale of operations, the limited profitability of the venture, and the lack of perceived benefits of this to the owner. The lack of the financial audit itself may not pose a significant problem for a young business; however, business practice suggests that entrepreneurial firms often produce significant

errors in their accounting books. The major problems relate to improper revenue recognition, inappropriately recognized expenses, and mistreatment of certain expenditures (i.e., expensing instead of capitalizing them). As a result of such issues, the financial statements may become unreliable and the accounting discrepancies may ultimately result in significant problems (i.e., tax liabilities). This *laissez-faire* orientation towards the accounting function often continues for a considerable period of time, even after the entrepreneurial firm's revenue and profits have become significant.

There are numerous areas in which corporate governance may fail to identify conflicts of interest and related party transactions. At this stage of development, all of the decision-making powers of the firm are vested with one individual who is the entrepreneur, the owner, and the only or majority shareholder – this triple role can give rise to multiple conflicts of interest. Key conflicts include appointing unqualified family members to senior management positions, keeping uninvolved family members on payroll, cross-subsidizing other businesses owned by the entrepreneur, using company assets for personal gain, engaging in unaccounted cash withdrawals, extending undocumented loans to oneself or to one's friends and family, and so on. If a lack of accountability exists, such behavioral patterns will continue as the firm starts to generate more cash.

If the entrepreneurial firm is not registered as a corporate entity (where a board of directors is mandated by law), then the firm may not be governed by a board of directors or advisory board (which has a similar function to the board of directors); there is often no legal requirement for establishing the board. If the entrepreneurial firm is created as a corporation, the standard practice is to appoint the entrepreneur or his or her own representatives to the board; consequently, the board of directors is often made up of the entrepreneur's family members, business associates, former classmates, golf partners, high school friends, and so on. In such situations, the relationship between the board members and the management team is very informal. Boards composed in this manner generally tend to be less actively involved in strategic decision making, reviewing the firm's financial performance, developing its financial forecasts, hiring managers, and so on. In the long term, this "rubber stamp" approach proves to be unhelpful to the entrepreneurial firm. In contrast, limited entrepreneurial firms choose to operate in a different manner. These entrepreneurs openly acknowledge their own limitations and actively seek input from more experienced individuals who come from outside of their immediate circle; this participation typically occurs in a formal (i.e., the board of directors) or informal (i.e., advisory board) setting.

In the early phases of their life cycle, entrepreneurial firms are closely held; there is often a single owner (i.e., the founding entrepreneur), and there is no need to protect the interest of shareholders (as the interests are identical). Consequently, rights can be violated – especially those of minority shareholders (this group is often very vulnerable, as limited protections apply in various jurisdictions). In terms of legal conduct, the entrepreneur often relies on a generic set of constitutional documents that afford him or her all of the decision-making power in the business. The only legal controls come from appropriate commercial laws (these govern special types of legal entities relevant to the entrepreneurial firm) and relevant taxation regulations.

The development stage

When the entrepreneurial business is relatively small, the founding entrepreneur is often capable of overseeing many of the business functions personally (he/she can effectively be involved in every decision of the venture). A critical point in an entrepreneurial firm's

development occurs when ownership, control, and management are separated and functional departments of the business (i.e., accounting, marketing and sales, distribution) are created. The separation of ownership and control becomes more pronounced when the entrepreneur begins to employ “outside” managers to assist with the daily and strategic challenges of the business; at this point, agency problems tend to increase. It is ironic that the professionalization of the entrepreneurial firm often gives rise to corporate governance issues.

Once functional departments and a new organizational structure are established (this usually occurs by developing an organizational chart), day-to-day management of the firm involves more information exchange between functional departments, more collaboration and co-ordination of their efforts, and more brainstorming to solve emerging problems. The withdrawal of the entrepreneur from the daily activities of the venture often necessitates increased monitoring and control. At the beginning of this process, functional departments share information by way of verbal updates and internal (often informal) discussions. Over time, these informal interactions give way to written material (i.e., reports, documents, and updates), the quality of which improves over time.

The behavioral patterns of the entrepreneur, which impact the introductory stages of the firm’s development, often carry over into this next stage of development and become even more pronounced. If the entrepreneurial firm becomes even more profitable at this second stage of development, the entrepreneur may face greater temptation to engage in activities that give rise to conflicts of interest and related party transactions. The behavioral patterns exhibited in the previous stage (i.e., hiring family members, giving favorable contracts to related parties, using the firm’s assets for personal gain, cross-subsidizing other firms) may increase in volume and transaction size. By this stage in the process, however, the entrepreneur may encounter resistance to such behavior. If the entrepreneur brings “outside” employees into the firm (as opposed to family members, friends, colleagues, etc.) to manage the functional areas of the business, they may observe or raise issue over conflicts of interest or related party transactions involving the founding entrepreneur. Such activities are perceived by “outsiders” as a hindrance to effective management of the entrepreneurial firm. While employees and managers are often aware that verbalizing such observations may get them into trouble (i.e., the entrepreneur may terminate their employment if they are too vocal about such abuses), if not addressed, such corporate governance issues become demoralizing and frustrating and push some managers and employees to seek other suitable employment elsewhere.

The initial “teething” problems of a young firm may effectively force the founding entrepreneur to employ other available resources for future strategic considerations. Entrepreneurs typically have two orientations towards seeking additional help or assistance. The first and most common category of entrepreneurs believe that there is no need to involve anyone else in the entrepreneurial venture. These entrepreneurs believe that they were able to generate a “winning idea” for the marketplace and therefore can capably and effectively navigate the entrepreneurial business moving forward. The confidence of these entrepreneurs in their abilities and their business is further reinforced by hiring external, non-family managers. The second (less common) group of entrepreneurs sees limitations to their knowledge and experience and is more open to receiving external assistance from other entrepreneurs, seasoned executives, colleagues, and consultants and advisors. These entrepreneurs often attend seminars and conferences to help them with their daily management of the business, planning, decision making, hiring, and so on. These entrepreneurs are also open to establishing either a formal structure (i.e., inviting individuals to the board of

directors) or an informal structure (i.e., establishing an informal advisory board). Some of the external individuals are rarely compensated for such services (there may be a nominal reimbursement of costs), while other contributors (i.e., consultants and advisors) who are brought in to assist the entrepreneurial firm are paid at full price.

The ownership structure in this stage often sees no change. The founding entrepreneur, being the only owner of the firm, continues to rely on basic legal structures (i.e., the legal system, commercial law, taxation regulations, and the firm's constitutional documents). However, if the founding entrepreneur has not been able to find ways to better align the goals of the principals and the managers, there may be growing concern over the increased separation of ownership and management.

The growth stage

When an entrepreneurial firm ends its initial years of development and begins to expand rapidly, a number of changes may occur to its legal structure. As previously noted, entrepreneurial firms can rarely accomplish their ambitious expansion goals by solely relying on internal financing (of course, exceptions exist where major international firms are built with small or no access to external financing); rapid expansion often necessitates the need for external financing. External financing can come from private equity (including financing by business angels), public markets, or debt providers (public or private). The involvement of outside financiers has many implications for the entrepreneurial firm in terms of information disclosure, conflict of interest, the establishment of the board of directors, the execution of rights, and the ownership structure. Whether the entrepreneurial firm raises financing from public markets or private equity firms, the organizational and corporate governance dynamics will be transformed (we previously noted that bankers are less likely to impact the corporate governance structures of entrepreneurial firms; an exception would be in the area of financial disclosure).

Whether the entrepreneurial firm goes public or raises capital from private equity, the involvement of external financiers forces the entrepreneurial firm to develop a more proactive and robust agent-principal relationship by granting ownership to management (of course, the alignment of goals and objectives between agents and principals can occur during earlier stages of the firm's life cycle if the entrepreneur takes initiative in this matter). In the case of going public, the entrepreneurial venture is subjected to public market rules and regulations; these affect virtually every aspect of the entrepreneurial firm's corporate governance structure and can be costly to implement.

When external financiers are involved in the business, information disclosure becomes regular, timely, and decision-driven. External financiers require monthly or quarterly summary reports, each including a review of the firm's financial performance (including a comparison of budgeted versus actual results), an operational update, competitive analysis, strategic plans, compliance reports (with general and environmental laws), and so on. The reports focus on key business drivers (i.e., revenue per square foot, revenue per customer visit, profitability per contract, etc.) and the major milestones to be achieved in the next 18 months. Audited financials must also be provided (annually for venture capitalists and bankers and quarterly for public markets). Venture capitalists normally require reports generated from data gathered by management in the normal course of business (no incremental new information is generated). Disclosure in public markets is more intense, cumbersome, and costly. Public firms need to produce an annual report and quarterly reports and are expected to meet with analysts and potential investors. Although such activities may

be beneficial to the entrepreneurial firm, they also place significant strain on the organization to generate the required information and data sets.

After external financiers enter into the firm, conflicts of interest (as well as any related party transactions) are often brought up openly, addressed, and then totally or partially resolved (if they cannot be unwound immediately, the conflict is resolved over time). Of course, there is always a chance that some of the more intricate business dealings and arrangements have been purposefully hidden and not disclosed by the entrepreneur. Venture capitalists are conscientious about potential conflicts of interest in private firms and attend to them promptly. On the basis of past practical experience, venture capitalists instinctively know the potential negative impacts associated with conflicts of interest: misleading financial statements, potential tax liabilities, decreased business value. Conflicts of interest are typically discovered during preliminary discussions or during the screening process (venture capitalists inquire about conflicts early on in the process). Entrepreneurs often opt for complete and full disclosure even if this discussion may place them in a slightly uncomfortable situation or cause embarrassment. This is because most entrepreneurs are mindful that most conflicts are likely to be discovered; external due diligence involves detailed legal and accounting investigations. Conflicts of interest are also raised in the final stages of venture capital negotiations where “warranties and representations” are negotiated. Warranties and representations include detailed disclosures of “sensitive” information related to the entrepreneur’s personal conduct and business activities, as well as an agreement on financial penalties if the warranties and representations prove untrue. Warranties and representations effectively force the entrepreneur and his or her firm to provide information that would otherwise be difficult or costly to establish and confirm. Once the venture capital deal is consummated, venture capitalists commonly adopt a policy wherein any actual or potential conflicts of interest are brought to the attention of all shareholders in writing. If the entrepreneurial firm goes public, many conflicts of interest are discovered and subsequently “cleaned up” during the due diligence process (this is a part of the underwriting process), leading to the appropriate preparation of an application to the stock exchange and the prospectus. Any outstanding conflicts of interest or related party transactions must be fully disclosed in the prospectus and filings. When the entrepreneurial firm becomes public, it falls under the rules and regulations of the local stock exchange (corporate governance is a significant aspect of public market regulations). Bankers are often regarded as the external financiers who are most “tolerant” of conflict of interest; they are more reactive than proactive compared with venture capitalists and public market investors. Bankers generally do not require any specific disclosures in this area and take a more proactive role only if they become aware of any problems that could impact financial disclosure; this rarely occurs unless the conflicts of interest are raised in the financial audit (which bankers may request from the entrepreneurial firm).

External financiers typically necessitate significant changes to the composition of the board of directors (the exceptions are bank financiers; bankers traditionally do not take board seats and only occasionally request “observer rights” where they are invited to participate in board meetings but not allowed to vote). Despite their minority position in the firm, venture capitalists typically require one or two board seats as a condition of their financing in order to maintain veto rights over critical decisions in the firm; in effect, no material decision can be made without their prior approval. As previously noted, venture capitalists are “hands-on” investors and their participation further professionalizes the board of directors’ activities by setting suitable monitoring and reporting standards, establishing appropriate corporate governance regimes, and conducting sound management reviews. When the entrepreneurial

firm anticipates going public, changes to the composition of the board of directors are often recommended by the underwriter. Once the entrepreneurial firm is publicly quoted, the composition of the board and its dynamics reflect the ownership structure of the firm, the recommendations of the CEO, and the expectations of the investors. Public markets clearly outline appropriate regulations for the board's conduct.

Entry of external financiers into the business also necessitates changes related to ownership and rights (again, bank financing is the exception). The rights and provisions normally included by venture capitalists are often the most complex among external financiers. Venture capitalists commonly hold their financial interest in the business in the form of convertible preferred shares. Among other things, these shares include "protection" of capital through priority of claim upon any disposal, bankruptcy, liquidation, or winding up of the venture. Venture capitalists typically hold a minority stake in the venture, and they use their various rights to protect their economic interests. The entrepreneur and the venture capitalists must negotiate a complex agreement (i.e., the shareholders' agreement) that ultimately necessitates multiple changes to the firm's constitutional documents. These rights may be simple, such as pre-emptive rights (acquiring newly issued shares in proportion to the level of shareholding) or rights-of-first-refusal (selling shares in proportion to the level of shareholding), or more complex. Venture capitalists also use different legal provisions to adjust their level of shareholding (through share adjustment mechanisms or "ratchets"), to create liquidity opportunities (through exit incentive provisions such as "drag-along" rights), to approve key operating decisions (through shareholder approval of key decisions such as significant changes to the business plan, hiring or removing key management, or increasing capital), and to protect against unfavorable rounds of financing (through anti-dilution protections). Venture capitalists also rely on default provisions that capture venture capitalists' rights in the event that the entrepreneurial firm or its other shareholders do not adhere to the shareholders' agreement. In addition, venture capitalists maintain prompt access to information through inspection and information rights and seek to approve transactions between related parties. Venture capitalists also often introduce "change-of-control" provisions (known as "voting flip-over" clauses) whereby under certain conditions (i.e., significant financial underperformance or criminal conduct on the part of managers or the founding entrepreneur) venture capitalists assume the right to a voting control in the venture.

In comparison to venture capital arrangements, the rights assigned to shares in public firms are relatively simple. Public offerings generally aim to simplify legal and ownership matters in the prospectus. Shareholders in public firms rely on the rights afforded to them by commercial and securities laws; special rights are often limited to pre-emptive rights. Voting occurs by majority vote, with limited special rights assigned to shares. The exception may be legal jurisdictions with dual-class shares where economic interests and voting interests are effectively decoupled; in such cases, a shareholder holding a small economic interest in the firm may have a sufficient number of votes to exercise full control of the public firm.

The subsequent stages (maturity and decline)

During subsequent stages of development, the systems and structures already in place for disclosing information, resolving conflicts of interest, operating the board of directors, and exercising appropriate rights continue to be followed. By this point, the behavioral patterns of employees, managers, the entrepreneur, and the remaining shareholders are well established and the "ways of doing things" are well ingrained within the organizational culture. The corporate governance orientation of the entrepreneurial firm may change,

however, if there is a change to its ownership structure (for example, if venture capitalists were to exit the entrepreneurial firm by selling their shares back to the owners).

Looking toward an optimal corporate governance structure in entrepreneurial firms

There is no one reliably tested model of corporate governance that can work across the vast range of entrepreneurial firms. A single “unified” code of behavior would be incredibly difficult to establish as appropriate models of behavior vary from country to country. Corporate governance is deeply rooted in social, cultural, religious, and economic antecedents. For example, some countries may prefer corporate governance structures that “promote” shareholders. Other corporate governance models are more balanced between various stakeholder groups. Nevertheless, entrepreneurial firms strongly benefit from designing and implementing a corporate governance system. A point of caution: the implementation of the corporate governance regime should not weaken the value creation process, but should complement it.

The benefits of installing an appropriate corporate governance structure are clear. Establishing sound corporate governance practices prepares an entrepreneurial firm for robust growth, value creation, and value capture (usually by an initial public offering or trade sale; these topics are specifically discussed in Chapter 13). Second, entrepreneurs learn to instill proper corporate governance discipline into their organizations; corporate governance provides an appropriate platform for internal control, restraint, and management. Corporate governance is likely to aid in a smoother transition from a smaller entrepreneurial firm to a larger business and is especially valuable for entrepreneurial firms on a “steroid” growth trajectory. Last and most importantly, entrepreneurial firms are likely to improve their chances of obtaining external financing if they establish sound corporate governance structures.

The concept of corporate governance should be tailored to each specific firm. Nevertheless, any system of corporate governance has to be grounded in four basic components: accountability (guaranteeing that management is responsible to the board, and the board to shareholders), fairness (ensuring that all the stakeholders and shareholders are included in the decision-making process), transparency (providing timely and accurate disclosure of all relevant information), and independence (minimizing or avoiding conflicts of interest).

Good corporate governance begins early in the development of the entrepreneurial firm. Paying attention to corporate governance early means establishing the right habits and behaviors, introducing them into the firm, reinforcing them, and then monitoring them. Robust corporate governance can serve an entrepreneurial firm well for years to come.

Below are four key observations related to building an effective corporate governance structure in an entrepreneurial firm:

Separation of management and supervisory functions: Realizing the need to separate managerial and control functions early in the life of the entrepreneurial firm is important.

If the firm is growing rapidly, the entrepreneur should avoid playing the dual role of manager and controller (especially if a larger group of shareholders exists).

Involvement of external individuals in the entrepreneurial venture: Inviting external individuals to participate in the entrepreneurial venture is critical to the success of most ventures. External individuals can assist in spotting unique market opportunities, can affect the strategic direction of the entrepreneurial firm, and provide networking capabilities; they can also help detect problems and errors early on, select appropriate

individuals for the management team, and assure the proper selection of investment projects (and the termination of unprofitable projects). The structure of the board may be formal or informal. Virtually all successful entrepreneurial firms have relied upon informal advisory boards early on in their development. Most invited individuals (whether seasoned executives, experienced local managers, bankers, or other entrepreneurs) will be thrilled to provide advice to young, promising ventures. The approach used to solicit external contributors reinforces the proper corporate governance habits needed to ensure the independence of the board, as well as its quality.

Employment of the “right” people: Hiring the “right” people may at first seem unrelated to corporate governance. However, the sooner the founding entrepreneur finds the right talent, the sooner he/she can contemplate extending ownership opportunities to talented managers. Such opportunities are typically the best way to align the goals of owners and managers, and can go a long way towards alleviating agency problems.

Confirming independence of the financial review process: Performing financial audits of the entrepreneurial firm early on in its development is paramount; the audit not only confirms the quality of the firm’s financial statements, but also illuminates problem areas where shortcomings exist and improvements can be made (for example, financial audits can raise potential liabilities which, if not addressed early, can continue into the future). Financial audits are also important to the process of raising external financing. External financiers are comforted when an entrepreneurial firm takes the initiative to conduct a financial audit and confirm its financials as true. Raising venture capital financing or going public becomes virtually impossible unless financial audits are undertaken. While financial audits can be costly, entrepreneurial firms can take advantage of freelance accountants willing to take on auditing projects for a fraction of the cost charged by accounting firms. Later on, as the entrepreneurial firm’s finances permit, more reputable accounting firms can be contracted.

Entrepreneurial firms and social responsibility

The concept of social responsibility has received an increasing amount of coverage in academic literature over the past two decades. Firms, both private and public, frequently and publicly disclose their “social citizenship” in local newspapers, national magazines, shareholder memoranda, annual reports, and special bulletins (please note that in some legal jurisdictions, public disclosure of corporate social responsibility is mandatory for public firms). The central theme behind the concept is that private firms have a responsibility to society – a duty to improve and promote “social betterment.” In “giving back” to society and doing “the right thing,” firms aim to balance actions that directly benefit shareholders with those that benefit other stakeholders (i.e., customers, employees, suppliers) and non-stakeholders (i.e., the disadvantaged, the poor, the sick, the environment, local communities, the arts). The concept of social responsibility is also connected with ethics, as unethical behavior and social responsibility are incongruent.

Social responsibility can involve a wide plethora of actions: making charitable donations to non-profit organizations (in the areas of education, health, environment, the arts, and so on), dedicating human resources on company time, protecting the environment (minimization of adverse effects on the environment, such as pollution, global warming, deforestation), or enhancing the quality of life for employees. Such socially responsible behaviors can create benefits for the firm. For example, socially responsible firms are better able to attract and retain stronger and higher-quality candidates compared with firms that do not engage in such

behavior. Such employees can be a source of competitive advantage in the marketplace as they have the capacity to affect virtually every single aspect of the business, from product innovation to the overall business model. Better identification with one's place of employment often results in lower staff turnover, lower training costs, and higher productivity for the firm. These benefits are consistent with the principle that the firm's commercial success often reflects the way its employees feel about their place of employment. Second, socially responsible firms tend to have better reputations in the marketplace. A strong reputation is a definite competitive advantage as this can mean high customer loyalty, the ability to charge a premium price, and "more productive" marketing campaigns. Most importantly, socially responsible firms often avoid damaging their reputations because they are less negatively affected by activist groups, negative media and publicity, and product and service boycotts. Third, as is the case with corporate governance, there is significant evidence to suggest that positive "social citizenship" is an important predictor of strong financial performance.

Social responsibility paradigms

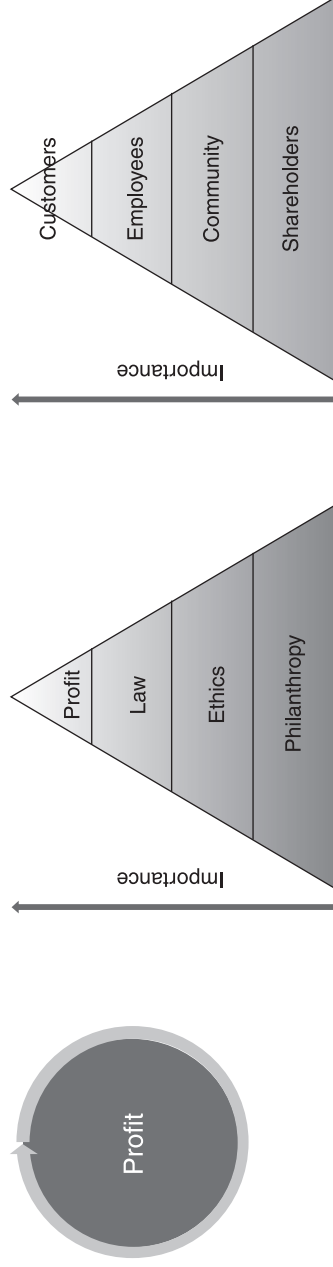
The concept of social responsibility has evolved over time; as research into this area has expanded, new paradigms have emerged. We will here discuss three strategies derived from the evolution of social responsibility: Friedman's traditional view of the firm, Carroll's multidimensional approach, and Collin's "holistic" concept. We discuss these orientations in relation to the firm's overall goal of maximizing shareholders' wealth. In this respect, we regard social responsibility as an important component for value enhancement – socially responsible actions and the goodwill generated from socially responsible activities can lead to long-term increases in the firm's revenues, profits, cash flows, and, ultimately, value. Therefore, social responsibility and value maximization are not mutually exclusive concepts, but, rather, goals that can be accomplished at the same time. In short, these are not one-or-the-other propositions, they are one-AND-the-other approaches.

We now discuss the three major paradigms of social responsibility (see Figure 12.3 for an overview of these approaches).

Friedman's traditional view of the firm

Milton Friedman, an economist and Nobel laureate in economics (1976), argued that spending the firm's resources (or shareholders' resources) on social responsibility is extravagant and uneconomical as this ultimately increases business costs and reduces profits. For Friedman, reducing pollution, providing employees with extra benefits (i.e., health plans, retirement programs, or special leaves), improving employee work conditions, allowing time off for community project work, engaging in business philanthropy, or contributing to the local community in any manner are unnecessary, inefficient, and wasteful acts; these activities, Friedman argues, direct shareholders' profits to broadly defined social causes. While Friedman argues that shareholders can direct their profits into other causes if they choose to do so, the firm is not an appropriate vehicle for redirecting profit – such actions effectively constitute the pilfering of shareholders. In short, maximizing profit is the only goal and social responsibility of the firm.

The basic question that should drive the firm's behavior is: "Can I make profit from this activity?" The core of Friedman's argument is that the private firm incurring these unnecessary expenses is less efficient; social responsibility makes firms less economic. His view is grounded in the *laissez-faire* approach to conducting business, where private firms operate



Founder	Milton Friedman (1963)	Archie Carroll (1991)	Jim Collins (2001)
Model	Singular (left graph)	Multidimensional (middle graph)	Stakeholder-driven (right graph)
Advantages	Simple goal defines the firm Clear objective	Highlights multidimensionality and the complexity of social responsibility Provides a hierarchy for decision making Long-term orientation	"Holistic" concept of the firm Captures key stakeholders of the firm Ranks stakeholders according to importance Focuses on harmony among stakeholders Long-term orientation {-} business continuity and viability
Disadvantages	Net profit is a means, not an end Stakeholders are ignored Value of cash flow is diminished May promote short-term orientation Too simplistic view of the firm	Various responsibilities may not likely be achieved simultaneously Firm may not be an appropriate vehicle to achieve social obligations	Various responsibilities may not likely be achieved simultaneously Stakeholders' interests may conflict

Figure 12.3 The three major paradigms of social responsibility

with minimal government regulations and interference, the “invisible hand” of the market corrects any market inefficiencies or imperfections, and the competitive economy is quick to determine price.

The advantage of this approach is that the firm has a single purpose: profit maximization. Private firms, their employees, customers, and other stakeholders have an easily identified and clearly defined objective under this approach. The disadvantages of this approach, however, are many. First, profits may be a means to an end, but are not always the end unto itself – the firm may aim to accomplish larger goals over time not limited solely to pursuing profit. Second, Friedman’s approach does not consider any of the stakeholders with which the firm must maintain good relationships in order to survive and flourish. Firms do not operate in isolation; they require the co-operation and collaboration of key business partners and stakeholders including customers, employees, suppliers, partners, creditors, distributors, and financiers. Such a single-minded pursuit of profit may present a too simplistic view of the firm and its goals to other stakeholders. Third, Friedman’s focus on maximizing net profit does not necessarily translate into value creation. In Chapter 8, we determined that a firm’s value is predominantly determined by its cash flows. While profitability (especially at the EBIT or earnings before interest, taxes, depreciation, and amortization [EBITDA] level) can be useful for determining value, the discounted cash flow method is the primary determinant of the firm’s value. As previously observed in other chapters, there are many entrepreneurial firms that have not been able to generate profits, but have consistently grown their value by increasing their revenue, market share, and effectively managing cash. Last, creating “excessive” profits for shareholders to the detriment of other stakeholders (especially customers and employees) may not only be unprofitable in the long run, but could ultimately destroy the main intention of value creation in the firm.

It is important to note that Friedman’s singular definition of social responsibility is not presently the paradigm of choice for many business practitioners, senior executives, CEOs, and entrepreneurial firms. Evidence suggests that an increasing number of firms aim to pursue multiple goals and seek to provide good returns to their shareholders, pay attention to their stakeholders, and achieve an effective balance of societal contributions. It is not surprising that private and public firms are placing a higher priority on social responsibility given the benefits outlined as follows.

Carroll’s multidimensional approach to social responsibility

Archie Carroll, a management and organizational behavior academic, developed his approach to social responsibility in the late 1970s. The starting point for Carroll’s pyramid was similar to Friedman’s approach: economic efficiency. While Friedman argued that social responsibility made firms inefficient, Carroll argues that a lack of social responsibility will have the same effect – if a firm lacks social responsibility, then government interference and regulation will increase, thereby decreasing the firm’s economic efficiency. Carroll developed his approach to social responsibility around the notions of multidimensionality and priority, proposing that a firm has four basic social responsibilities: profit, law, ethics, and philanthropy. According to Carroll, the most important aspect of the firm is to be profitable; this is the foundation upon which the firm’s other activities can be built. Increasing profits can mean streamlining or restructuring business processes, engaging in innovation and intellectual property development, increasing the number of product and service propositions, and so on. This profit orientation also ensures a return on investment to shareholders. According to Carroll’s definition, social responsibility also involves introducing products

and services which can be construed as being useful to society in the marketplace. The second most important consideration under Carroll's model is managing and operating the firm in accordance with laws and regulations defined by the government. In simple terms, firms should obey laws and "play by the rules." Carroll notes that firms that consistently violate laws and regulations are unlikely to become profitable, and that a strong legal orientation in the marketplace helps to protect customers. Furthermore, firms should follow generally accepted social norms, standards, and beliefs and should act in an ethical manner in accordance with what society places value and importance on; this may involve being environmentally friendly (i.e., managing waste, recycling, etc.), providing truthful advertising, or taking care of employees (i.e., providing minimum wage, increased safety, health plans). The last component of Carroll's hierarchical pyramid involves the philanthropic activities of the firm (this component was initially defined as the firm's "discretionary" responsibility); these activities relate to the voluntary contributions of the firm to society. Examples of philanthropic activities include promoting social welfare and goodwill, encouraging recycling, supporting disadvantaged people, endorsing sensible use of alcohol, and advocating worthwhile social causes.

Carroll's approach has numerous advantages. First, Carroll highlights that the concept of social responsibility is multidimensional and complex. He moves beyond Friedman's singular concept of profit maximization and focuses on the additional components of social responsibility; this extension is important because Carroll's notion of multidimensional social responsibility has been gaining acceptance among academics and business practitioners. Second, Carroll is one of the first academics to have established a hierarchical approach to social responsibility. Carroll's model provides an order of priority for addressing social responsibilities; while he starts with economic considerations (similar to Friedman), he eventually examines the other potential goals of the firm. One weakness of Carroll's model is that it gives the impression that social responsibilities should be addressed "in sequence" (for example, obeying the law comes after profit maximization). In reality, some goals need to be achieved simultaneously and not in a mutually exclusive or sequential manner.

Collins' pyramid of social responsibility

Jim Collins, a management academic and renowned consultant, defines social responsibility in terms of the firm's accountability to its key constituents, namely its customers, employees, community, and shareholders. Stakeholders are perceived as interactive organisms rather than basic elements of a cost curve. Collins also places the key components of his construct in order of priority: customers à employees à community à shareholders.

The most important components of this approach (sitting atop Collins' social responsibility pyramid) are the firm's customers, the recipients of the firm's products and services whose active "participation" in the marketplace drives the firm's success. The second most important components are the employees. These stakeholders are an integral part of the organizational fabric of the firm. As observed in Chapter 3, the firm's employees can be innovators, enhancers, contributors, and, most importantly, value creators. Many business practitioners observe that the most important part of the firm's balance sheet "walks into to work at 9 am." Collins argues that employees need to be allowed to exercise their creativity, should be encouraged to experiment, and must contribute socially. The next most important component of the model is the community. Collins observes that firms do not work in isolation; they are a part of the social fabric of the community. Entrepreneurs commence their operations in certain geographic areas. The reasons for starting out in a specific location may vary: convenience, simplicity, geographic

proximity (i.e., raw materials, skilled labor), familiarity, etc. Finally, there are shareholders. Collins argues that while shareholders are important for the firm's success (firms need their external financiers to be compensated by sufficient returns), their needs should not compromise the other components of the social responsibility framework. For incurring the risk of investing in the business venture, shareholders should be compensated with a "fair return." The question then becomes what is fair or acceptable? No precise answer is provided by Collins, but we can conjecture that a "fair return" can be "discovered" in relation to a certain reference point and that an appropriate premium can be added. If we assume that the average long-term return from the stock market is to be around 10 percent, then investors should be compensated with a premium return for participating in a risky entrepreneurial venture (see our discussion on this topic in Chapter 8). In order to meet Collins' objective of providing a fair and acceptable return, an additional premium of 5–10 percent should be added for a total return of around 15–25 percent; this is more or less in line with the return expectations held by venture capitalists. The best way to define an "acceptable" or "fair" return is to say that it is the maximum return possible that can be achieved by the firm without unduly compromising any other components of Collins' pyramid. Collins' approach also stresses the interactive nature of the four components. The firm needs to pay attention to the delicate and active interaction that occurs between all stakeholders. Collins warns that upsetting this subtle balance can negatively impact the firm's desired success.

This stakeholder-oriented model of social responsibility has many advantages. Most importantly, all of the major components of the business (i.e., its stakeholders) are represented. Collins' approach recognizes that an elaborate network of relationships can, under the right circumstances, create a nourishing environment for business success. Customers are the building blocks of the firm and they receive appropriate recognition by Collins as critical "donors" who ultimately determine the success of the business. Trustworthy relationships based on strong stakeholder co-operation and reciprocity allow firms to achieve their financial and value maximization goals. In recognizing other components of the business as crucial, Collins effectively moves away from the profit orientation of other models; profit maximization is only a "background" component of social responsibility. The vast majority of entrepreneurs found their firms because they want to address a specific problem or need in the marketplace, make an incremental improvement to a solution already available in the marketplace, or establish a new market or market segment. Simply put, most entrepreneurs have a mission that goes beyond maximizing their profits. As previously noted, entrepreneurs do not start a business "counting" value; rather, they wish to be "fairly" compensated for their business performance (note that subsequent shareholders or investors may have more specific numeric expectations and objectives for increasing the value of the firm, and subsequent investors typically have a stronger orientation towards profit and value creation). Furthermore, Collins provides an order of priority for operating a successful business in the long term. In addition to offering a hierarchy, Collins' model also accentuates the need for stakeholder harmony and co-operation. In terms of disadvantages, most are similar to those observed in Carroll's approach. As was the case with Carroll's model, various social responsibility goals need to be achieved simultaneously. Another weakness of the approach is that shareholders' interests can be difficult to reconcile along the pyramid suggested by Collins: employees expect good wages, job security, a retirement plan, and fair treatment; shareholders and potential investors expect attractive returns; communities expect job creation, philanthropy, and ethical behavior; and customers expect good quality products and services at reasonable prices.

Is there a right approach to social responsibility for entrepreneurial firms?

The three approaches to social responsibility described offer unique ways of creating value in an entrepreneurial setting. The choice of which approach or orientation the firm chooses to pursue can and most likely will determine the subsequent strategy and even the ultimate success of the entrepreneurial business. The business venture is likely to change depending on what model of social responsibility the entrepreneur chooses.

Selecting an appropriate social responsibility construct is a matter of personal choice and preference. The choice often reflects the entrepreneur's personal beliefs, culture, religion, education, life experiences, and other factors. Some entrepreneurs prefer to operate in the mode of "targeting" customers and employees as their primary constituents; these entrepreneurs are rarely motivated by profit or by how much their business is worth from day-to-day and are instead long-term value builders who get satisfaction from knowing that their customers are being treated fairly, that their community (and society) benefits from their presence, and that their employees find the business to be a nourishing, fulfilling, and inspiring place of employment. These entrepreneurs go the extra mile to do "the right thing" and often wish to continue to operate in a specific industry because it represents the environment in which their personal and business aspirations can be fulfilled. Moreover, they fully identify with the industry they are in and may be well recognized in it at the local, regional, national, or international level.

On the other hand, there are many equally successful entrepreneurs who are relentless in their pursuit of profit. Seeking profit is in the DNA of such entrepreneurs and they are "wired" to achieve this goal. These entrepreneurs are less concerned about what industry they are in and what products and services they sell. Their profit orientation serves as the propeller to find attractive opportunities in the marketplace and their businesses are likely to be diverse, expanding into many unrelated areas. Profit-oriented entrepreneurs are typically cost conscious and look for opportunities to reduce costs by streamlining their operations, identifying cheaper inputs, hiring lower cost labor, or outsourcing their operations to lower cost destinations.

It is important to note that entrepreneurs who "pre-select" a specific orientation towards social responsibility at the beginning of their entrepreneurial career can evolve their views later in the development of the firm ("doing the right thing" can often be situational and context-driven). An orientation towards social responsibility is not static. Social responsibility can adapt to reflect the nature of entrepreneurship, which includes being open-minded, constructive, pragmatic, and learning-oriented.

Questions to consider

1. Define corporate governance. Does this definition change as the entrepreneurial firm matures?
2. What are the key components of corporate governance? Discuss how these components differ in private and public firms.
3. What is social responsibility? What are the three most common approaches to social responsibility?
4. Find a local entrepreneurial business and describe its approach to social responsibility.
5. Differentiate between profit maximization and value maximization.

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Part V

Value realization

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13 Realizing value from entrepreneurial firms

Chapter objectives

After reading this chapter, you should be able to:

- describe the most common methods of value realization for entrepreneurial firms;
- outline the key steps in a trade sale and an initial public offering;
- discuss the involvement of entrepreneurs in firms acquired by strategic investors;
- overview tax consequences related to the disposal of shares and assets.

Introduction

Value realization is the natural next step for an entrepreneurial firm that has done the “right” things throughout its development. The “right” approach always begins with identifying unmet demand, solving the “real” problems of customers (rather than removing small irritants), correcting market imperfections where existing competitors are unable to meet customer expectations, and developing new market segments. Business opportunities in the marketplace are either temporary (i.e., a window of opportunity which lasts for a short period of time) or permanent (i.e., a market niche which is presumed to exist indefinitely). Many entrepreneurial firms operate in sectors of the economy that are different from what Wall Street defines as attractive. Although a small group of entrepreneurial firms owe their market success to a superb idea, the vast majority succeed because they have extraordinarily executed an ordinary idea. Entrepreneurs often stumble across potential opportunities unexpectedly while developing their firms by skillfully observing the marketplace in which they are operating. The initial business ideas or products of many successful entrepreneurial firms have in many cases failed; in fact, an initial product or service failure is often regarded as a predictor of long-term entrepreneurial success. Resilience, persistence, and experimentation are the signatures of successful firms.

The most successful entrepreneurial firms bring the right people to the firm. Successful firms are rarely built around a single visionary leader; instead, most benefit from the combined talents of a dedicated management team. An entrepreneurial firm built on a “genius paradigm” or “solo entrepreneur” structure will rarely achieve its desired long-term success. The most successful firms also develop a lasting and enduring organization around a single unifying idea or concept; they are learning organizations built to embrace change. Successful firms also embrace the concepts of corporate governance and social responsibility (as discussed in Chapter 12), placing a focus on charting and implementing simple but long-lasting organizational structures.

Managing a successful entrepreneurial firm means employing the right financial tools when making decisions. Successful firms rely on strong financial analysis, whether related to internal operations or external opportunities. Such analysis is often designed in a step-wise method, which begins with an assessment of liquidity and leads to an appraisal of growth potential in revenue and profit. Financial decision making also involves implementing investment programs in tangible and intangible assets (i.e., research and development, innovation, invention, and intellectual property).

The ambitious goals of entrepreneurial firms can rarely be achieved without access to capital. External finance allows firms to capture opportunities that are available in the marketplace, hire talented managers, execute acquisitions, and so on. Active participants in external financing include venture capitalists, business angels, and others.

The hallmark of successful entrepreneurial firms is that they are always willing to place “higher bets” on new business concepts and ideas. Successful firms realize that progress involves risk, but also that risk can be mitigated through various means. One way that risk can be moderated is through knowledge: understanding the firm’s markets, competitors, and customers or analyzing the firm’s internal strengths and weaknesses are all ways by which risk can be mitigated. Research involves paying attention to the brutal facts of reality; less successful entrepreneurial firms either do not engage in research or turn a blind eye to the hard facts of the market. No good decision can be made without facts on which to base decision making. Limiting risk also involves making incremental improvements in the correct strategic directions. Risks are often magnified by revolutionary changes and processes, while evolutionary changes can lead to compounding and cumulative effects. Finally, risks are mitigated by having the right people present in the day-to-day operation of the firm.

Value realization and serial entrepreneurship

Value realization in an entrepreneurial firm is not the end of the owner’s entrepreneurial pursuits, but rather the beginning of a new entrepreneurial adventure. For the 20 to 30 percent of entrepreneurs who monetize their investments, their participation in entrepreneurship as a whole is not over; rather, many entrepreneurs customarily direct a portion of their realized proceeds into another entrepreneurial venture – the exit in fact creates an opportunity for entrepreneurial engagement and entry. Such activity is termed “entrepreneurial perpetuation.” Through the continual re-use of cashed-out proceeds, entrepreneurs become repeat or serial entrepreneurs working on their own account and in a sequential or parallel manner. Over time, the entrepreneur may become an investor in another entrepreneur’s business venture (i.e., a business angel) or eventually build a portfolio of ventures (i.e., a portfolio entrepreneur). Serial entrepreneurs are typically more cognizant when detecting, realizing, capturing, and navigating new business opportunities. Unsurprisingly, they also demonstrate higher business survival rates compared with first-time or novice entrepreneurs.

Perpetual entrepreneurship is important to nurturing a local culture of entrepreneurship. When “perpetual entrepreneurs” re-engage into other ventures and extend their experience, knowledge, capital, business contacts, and networks to other entrepreneurial ventures, they create a compound effect in business formation. Simply put, these entrepreneurs perpetuate entrepreneurial activity.

In this chapter, we focus on the main methods of value realization. In the next chapter, we consider a case in which the entrepreneur does not sell and instead transitions his or her entrepreneurial venture to a new generation of family members.

Critical considerations in value realization

Value realization is defined as divestment or harvest of an entire entrepreneurial firm or part of it following the entrepreneur's decision to totally or partially exit from the business venture. Typically, this process involves monetizing investments made from entrepreneurial innovation, creativity, and delivery, and relinquishing control of or transferring ownership of the business to others. It is important to note that we consider value realizations, divestments, harvests, or exits as positive events in the life cycle of an entrepreneurial venture; situations in which significant value can be captured from the business are the main focus of this chapter. That said, entrepreneurial development does not always result in a happy ending for all involved; entrepreneurial ventures also "exit" the marketplace because of failures, closures, terminations, or shut-downs. These scenarios are considered in this chapter, but we define them as compromised divestment routes in which limited or no value is actually captured.

Value realization is the point in the life of the entrepreneurial firm where the entrepreneur decides to convert his holding into cash. The discovery of value in an entrepreneurial firm can be both exciting and nerve-wracking for the entrepreneur: business valuation and the actual price placed on the entrepreneurial firm by a willing buyer validate the actions the entrepreneur has taken in the past.

There are critical considerations to be made if the dynamics of the value realization process are to be understood. Often, such considerations reflect the internal desires of the entrepreneurial firm and the founding entrepreneur, shareholders' financial objectives, management team's aspirations, entrepreneur's personal circumstances, and financial considerations. In most cases, the value realization process is driven by the external conditions and circumstances described next.

Passive or active orientation toward value realization

The general orientation exhibited by an entrepreneur toward value realization can be either passive or active.

If the entrepreneur subscribes to the passive approach, then he or she continues to develop the entrepreneurial firm along its normal growth trajectory and does not exhibit an intention to sell the business. If the entrepreneurial firm is successful (as defined by market share, profitability, robust revenue growth, strong customer loyalty, and so on), its success serves as a magnet to generate interest from various market actors and animators.

A passive orientation toward value realization can also be interrupted by actors in the marketplace such as consultants, intermediaries, and advisors; these market participants can effectively organize, navigate, and expedite the value realization process and often approach successful entrepreneurial firms to provide them with consulting services. The initial "advice" offered by these consultants typically leans toward a "find-capital" authorization, but often converts into a "sell" mandate (of course, this occurs only if consultants successfully persuade the entrepreneur to pursue such a route). Consultants and advisors also approach entrepreneurial firms from a different angle, in which they are under contract with strategic investors and are mandated to find, negotiate, and execute suitable acquisitions.

It is worthwhile to note that entrepreneurs who do not exhibit any orientation toward business disposal are typically content to grow their revenue at a nominal single-digit growth rate and generate stable profits and cash flows. The business orientation of such entrepreneurs leans more towards stability, safety, and protection; they avoid expansions and pay off debt

as quickly as possible. Entrepreneurs who show an orientation toward stability also often believe that the best way to protect value is through real estate. Consequently, these entrepreneurs purchase land, build rental properties, invest in summer cottages, or buy homes in different destinations. Entrepreneurs who are willing to take some incremental business risks often engage into ventures that do not require expert operating skills; they are attracted to franchising opportunities or operate business ventures with proven track records in their immediate geographic area (i.e., fast food restaurants, pharmacies, retail outlets, movie theatres, and so on). The entrepreneurial venture is used by entrepreneurs as a means of supporting their lifestyle, financing their hobbies or sports, or fulfilling the educational needs of their siblings or children.

Successful entrepreneurial firms are also often approached by underwriters. The business of an underwriter is to take promising and successful private firms public (underwriting is a lucrative business). Underwriters regularly scan the market to identify attractive candidates for an initial public offering (IPO).

The founding entrepreneur can assume a priori that the business is built for sale. An entrepreneur can also exhibit more propensity for value realization as the entrepreneurial venture is developed. A desire to achieve value realization can relate to various business factors (i.e., the entrepreneur is looking for capital to start other ventures, to engage in other business activities, to seek financial exposure to other, more attractive markets, or to reduce financial liabilities in other parts of the business portfolio) or personal circumstances (i.e., retirement planning, sickness, interests and hobbies, and so on). “Serial entrepreneurs” who are in the business of building businesses and selling them often show a strong orientation toward disposing of the firm. In the course of their professional lives, serial entrepreneurs are able to develop and dispose of approximately eight to ten businesses that they develop and fund from inception.

Financial motivation of shareholders

The composition of shareholders can often predetermine the value realization of an entrepreneurial firm. For example, the participation of institutional investors such as venture capitalists in the firm means that achieving an exit is a continuous priority for the firm until the full exit of these investors is achieved. The participation of venture capitalists not only stresses value realization, but also often predetermines the mode of realization. Venture capitalists prefer to exit through a trade sale since this exit method assures sound price, secures instant liquidity (i.e., venture capitalists receive payment upon the conclusion of the business, subject to a small retainer), and completes the business relationship. Venture capitalists are also content to pursue an IPO or a sale to other financial institutions. Venture capitalists typically generate poor returns or total write-offs through less-preferred exit modes such as buybacks, mergers, management buyouts (MBOs) or buy-ins, liquidations, or the voluntary winding down of the venture.

Other types of financial investors may have different orientations toward value realization. While business angels may be completely satisfied with realizing value from a single liquidity event, they may be equally content to receive “a rent” on their capital, the time committed to developing the entrepreneurial venture, and their network of contacts. Such a payment may come in the form of dividends, management fees (business angels can charge expenses to the entrepreneurial firm in exchange for their participation in the venture), or other financial arrangements.

Aspirations of management

Although decisions made by management are not typically viewed as the most important drivers of value realization, management's co-operation (or lack thereof) can influence the harvesting process. The viewpoints of the managers typically reflect the aspirations of the entire entrepreneurial venture – but they can also reflect the managers' own self-interest, including a desire for high pay or bonus structures, securing operational independence, or propelling their own professional careers through certain business actions. On the other hand, managers' actions can align well in the value realization process if they already have ownership of or stock options in the venture.

There are two primary considerations to be made with respect to the managers' stance on value realization. The first is that management can influence the timing of value realization. Managers can provide valuable insight to shareholders for the optimal timing of disposal. If managers perceive that there is potential for the business to grow its revenue and increase its profits, then they may persuade the founding entrepreneur and other shareholders to delay their value realization activities until a desired point in time. Managers may also argue that if the entrepreneur postpones his or her exit for a specific period of time and dedicates this time to growing the business further, the entrepreneurial firm will be worth that much more when the exit is achieved. Second, management can impact the financial performance of the entrepreneurial firm in the short term prior to value realization. The management team can effectively "pump up" the short-term financial results of the entrepreneurial firm (i.e., profits, profitability, and cash flow – the fundamental determinants of business valuation) by selling on credit, extending off-balance sheet liabilities (which are not visible in the balance sheet or other financial statements), or temporarily reducing expenses.

Managers can also influence value realization in a negative way. By engaging in self-dealing actions, managers can effectively postpone or even derail the value realization process. Such actions typically result from a lack of co-operation with other stakeholders, poor disclosure, and non-compliance with information requests. Negative behavioral patterns are commonly shown by disinterested or self-motivated managers and may not be immediately apparent to the founding entrepreneur or other shareholders.

Personal circumstances

The personal circumstances of the entrepreneur can become an important determinant of the value realization process and its timing. For example, if the entrepreneur wishes to use the realization proceeds from one firm to subsidize another venture, then this "capital switching" may be directed toward a newly contemplated start-up or a firm already in operation. Capital redirection commonly occurs in circumstances where the entrepreneur is looking to transition from one industry to another. Such behavior becomes especially pronounced if these new prospects are deemed to be more attractive than the current firm and are expected to bring a significant financial windfall. Realized proceeds can also be used to support working capital needs. Moreover, perpetual entrepreneurs are often opportunistic investors and tend to own a portfolio of firms in related or unrelated industries and market segments; because of this, cross-subsidization of portfolio firms can be quite common.

Of course, a wide range of personal reasons may cause an entrepreneur to pursue value realization: the entrepreneur may lose interest in the venture, lack the personal stamina or health to effectively continue with the venture, choose to pursue personal hobbies or interests outside of the venture, or decide to retire. Interpersonal conflicts between

business partners who have different expectations and aspirations for the firm may also impact the realization process.

Financial underperformance and distress

Negative financial conditions in firms can place undue stress on entrepreneurs, both personally and professionally. Financial underperformance and cash flow distress typically result from inadequate sales, inappropriate cost control, poor cash flow management, and so on. When the entrepreneur's personal financial resources are limited, the financial burden to sustain the firm's operations during times of poor cash flow may be extreme. If the entrepreneurial firm shows promise, but the entrepreneur does not have the personal finances to fully guide its development, then the decision to sell becomes one of few viable options. Even if the entrepreneur has financial resources, the anticipated financial burden may be disproportionate to the amount of financial resources the entrepreneur is willing to dedicate to the development of the venture. In such circumstances, a timely disposal of the business may reduce the entrepreneur's financial exposure.

Some evidence suggests that financial burden is not reason enough for an intergenerational family firm to seek harvesting. Since these owners show a strong emotional attachment to the firm, exhibit a sense of stewardship toward the founder's business, and need to carry on their family values (which are often reflected in the family business), they often act to prevent disposal of the entrepreneurial venture in a timely manner.

Preparing for value realization

Timing is everything in the disposal of an entrepreneurial firm. Exit opportunities are cyclical and sporadic – if an entrepreneur misses a window of opportunity to exit when willing buyers are on the hunt, the next set of opportunities may not arise for several years. At the commencement of a business cycle, strategic investors look for opportunities for business expansion. Investors may be eager to “make up” the underperformance from the economic downturn and often wish to assume a high growth trajectory. At this point in the process, investors are willing to acquire in a timely manner and place premium valuations on acquisitions (valuations for firms fall significantly at the bottom of the economic cycle). Strategic investors either purchase successful start-ups (almost instantly after their establishment) or wait some time to see the results of their rollout. Generally, innovative firms and fast-growing ventures are of greatest appeal to strategic investors because these firms allow them to out-compete other market players; strategic investors often count on buying “novelty” and breakthrough innovations that provide them with capabilities that they would be unlikely to develop on their own. Start-ups can benefit from a short acquisition timeline (within 18 months from inception), especially if these firms own unique and proprietary technologies or innovative products, have access to a strong and rapidly growing customer base, and offer new market opportunities (which are of strategic importance to buyers). Young entrepreneurial firms are especially attractive to strategic investors if their valuations fall between \$20 million and \$30 million; this is often regarded as a small price for acquiring novelty. In public markets, earnings multiples, investor confidence, and demand for new investment opportunities are robust during strong economic times.

The positive conditions for business disposal reverse at the end of a positive business cycle. At this point, strategic investors will instead focus on controlling costs, streamlining operations, limiting capital expenditure, and constraining acquisitions. When public

markets become more volatile, investors grow more cautious and seek “value” investment opportunities (i.e., firms with low valuations).

Preparing entrepreneurial firms for sale

The tactics used to prepare an entrepreneurial firm for sale may differ depending on the mode of planned value realization. We now discuss some of the most common “grooming” activities that are of benefit to entrepreneurial firms regardless of the mode of value realization.

Multiple specific steps can be taken to prepare for value realization. First, the entrepreneur should assess the firm’s asset base and decide which assets are critical to the successful disposal of the business. Non-productive assets (such as vehicles, land, non-productive equipment, and buildings) can be sold or transferred out of the entrepreneurial firm because buyers generally do not wish to buy idle or non-productive assets. Buyers also prefer flexibility in decision making as they may want to downsize or expand operations, relocate the firm, and even shut it down (assuming the bulk of the production by their other facilities). Second, since buyers (especially strategic investors) often wish to install their own management team post-acquisition, the entrepreneur may wish to limit expenditures made on office space, overhead, and other items. The entrepreneur should reconsider entering any long-term contractual arrangements such as equipment purchases, property leases, and employment contracts with substantial severance pay.

Developing a business plan for the entrepreneurial firm is critical because it anticipates the future activity of the firm. The business plan typically includes a description of the entrepreneurial firm’s strategic direction, industry analysis, marketing initiatives, and financial performance. The firm may also prepare an information memorandum which focuses more on the actual disposal of the business (this is intended for buyers). Before sending a complete information memorandum to a potential buyer, the entrepreneurial firm may prepare a shorter descriptive document (often called a “teaser”) that highlights the key operations and financial parameters of the firm.

Last of all, many entrepreneurs operate their ventures with an orientation towards “limiting taxes.” Entrepreneurs do this by charging extra operating costs (including personal expenditures), maintaining family members on payroll, or not recording revenue; the process effectively hides earnings for the purposes of tax disclosure. While this syndrome of minimizing pre-tax profit can work for years and be legally and financially appropriate, it creates significant (and often insurmountable) problems at the time of value realization. If the financial statements do not show the true financial standing of the entrepreneurial firm, then they may need to be “normalized” to reflect the actual cost structure of the business before they can be shown to potential buyers. Such a scenario is not only embarrassing for the entrepreneur, but can also derail the prospect of realizing value from the entrepreneurial firm. Buyers (whether strategic buyers, financial investors, or public markets) are very cautious when it comes to “massaging” financial statements and business affairs; they often see these behavioral patterns as indicators of other potential problems in the venture.

Value maximization modes

There are multiple modes of exit available to an entrepreneur. Figure 13.1 presents a perceptual map of the most common modes of value realization available to the entrepreneurial firm. Two criteria selected in charting value realization options relate to

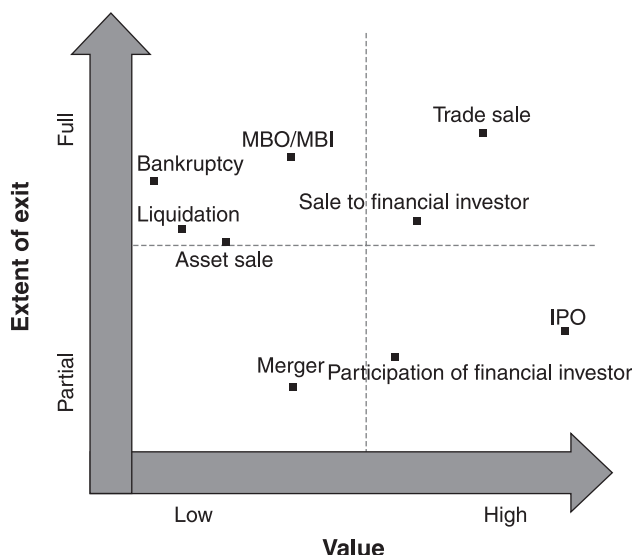


Figure 13.1 A perceptual map of value realization alternatives for entrepreneurial firms

[MBO: management buyout; MBI: management buy-in; IPO: initial public offering.]

business valuation (high or low) and the degree of completion of realization (i.e., partial or complete).

When the entrepreneur has made the decision to monetize his or her holding, value maximization becomes an important consideration. Evidence suggests that IPOs yield the highest amount of value; in comparison, strategic investors tend to assign lower value to acquisitions. This phenomenon may be based on three considerations. The first relates to how strategic investors use the discounted cash flow valuation method to value acquisitions (public markets rely on P/E, EV/EBITDA [earnings before interest, taxes, depreciation, and amortization], EBIT, or EBITDA multiples). The valuations performed by strategic investors are often lower compared with those arrived at by public markets. Second, strategic investors generally pay less for the acquisition if they have already participated in a specific industry (related industry acquisitions are common for strategic investors). In such cases, the investors may only be willing to assign value to a specific part of the business (i.e., manufacturing, management, customers, access to raw materials, and so on). Strategic investors may not be willing to pay a “full price” for the entrepreneurial firm if they do not have any exposure to a desired industry or geographic destination; in other words, an acquisition is their first point of entry into the industry or a geographic region. Third, although strategic investors perceive that they can generate significant operational synergies with acquisitions, they often prefer to retain the resulting “valuation synergy premium” for themselves rather than share it with the sellers by effectively paying a premium price for the business at the outset.

There are two possible orientations with respect to the degree of value realization. Realization routes allow for a complete value realization: the entire entrepreneurial firm is sold and all holdings are converted into cash. An example of a full realization is disposal to a strategic or financial investor. Full realization may also be achieved by allowing the entrepreneurial firm to undergo a management buyout or buy-in. Examples of severely compromised value realization modes are liquidation or winding down of the business. The

second orientation toward value realization is a partial realization. In this case, the shareholders may only be allowed to dispose of a portion of their holding. The best examples of partial realization schemes include IPOs and mergers.

The advantages and disadvantages for the major exit modes are presented in Table 13.1.

Timing of value realization: trade sale versus IPO

The timing of the execution of a sale varies between different exit modes (this is captured in Figure 13.2). The most common modes of value realization are a trade sale (an example of a complete exit) and an initial public offering (a partial exit). The time needed to complete the value realization process depends on a collaborative effort between the entrepreneurial firm and the other party. On the entrepreneur's side, the key to timely value realization is preparation. In planning for a trade sale, the entrepreneur must prepare an information memorandum, respond quickly to questions, and, finally, experience a readiness to complete the deal. In organizing for an IPO, the entrepreneur must work with the underwriter to prepare and deliver all documentation required for developing a registration statement (which includes a prospectus), engage in internal grooming activities, complete the registration process, and execute the road show.

Preparation is also required on the part of investors. In terms of a trade sale, the progression of the deal depends on the strategic importance of the acquisition, the strategic investor's internal approval processes, and the human resources dedicated to investigate the business. In terms of an initial public offering, the progression of the IPO depends on the underwriter's practical experience in navigating the IPO process, its ability to develop an effective syndicate, its expertise in a specific industry or market sector, its track record and reputation, and its mode of engaging the entrepreneurial firm.

Figure 13.2 suggests that an initial public offering usually takes longer to complete than a trade sale. On average, a trade sale may take between six and nine months to execute while an initial public offering takes about a year. The lengthier route for the IPO is the result of two key points. For one, the IPO process is more intricate and has a larger number of steps compared with a trade sale. Even though the IPO process is more scripted and presumably easier to follow, each step is more complex and requires more time. Second, the preparatory period for the IPO tends to be longer. Entrepreneurial firms need to take many preparatory steps before the process can continue (i.e., appointing the right people to the board of directors, preparing financial audits, cleaning up any legal matters, and so on). A trade sale can be executed with limited information provided by the entrepreneurial firm, especially if the strategic investor has in-depth knowledge of the marketplace and its key competitors (including the entrepreneurial firm).

Trade sale process

As noted in Figure 13.2, a trade sale normally involves six steps. The first stage involves an initial inquiry to gauge the willingness of the entrepreneur to dispose of the firm (step 1). A face-to-face meeting typically occurs between the strategic investor and the entrepreneur, followed by a field visit to view the firm's operations. At this point, the entrepreneur often discloses limited information about the entrepreneurial venture, although strategic investors would already have their own market intelligence data (market share data, brand awareness, financials, and so on). If the initial meeting goes well and the entrepreneur is willing to move forward, the strategic investor signs a confidentiality agreement (step 2). Negotiating a

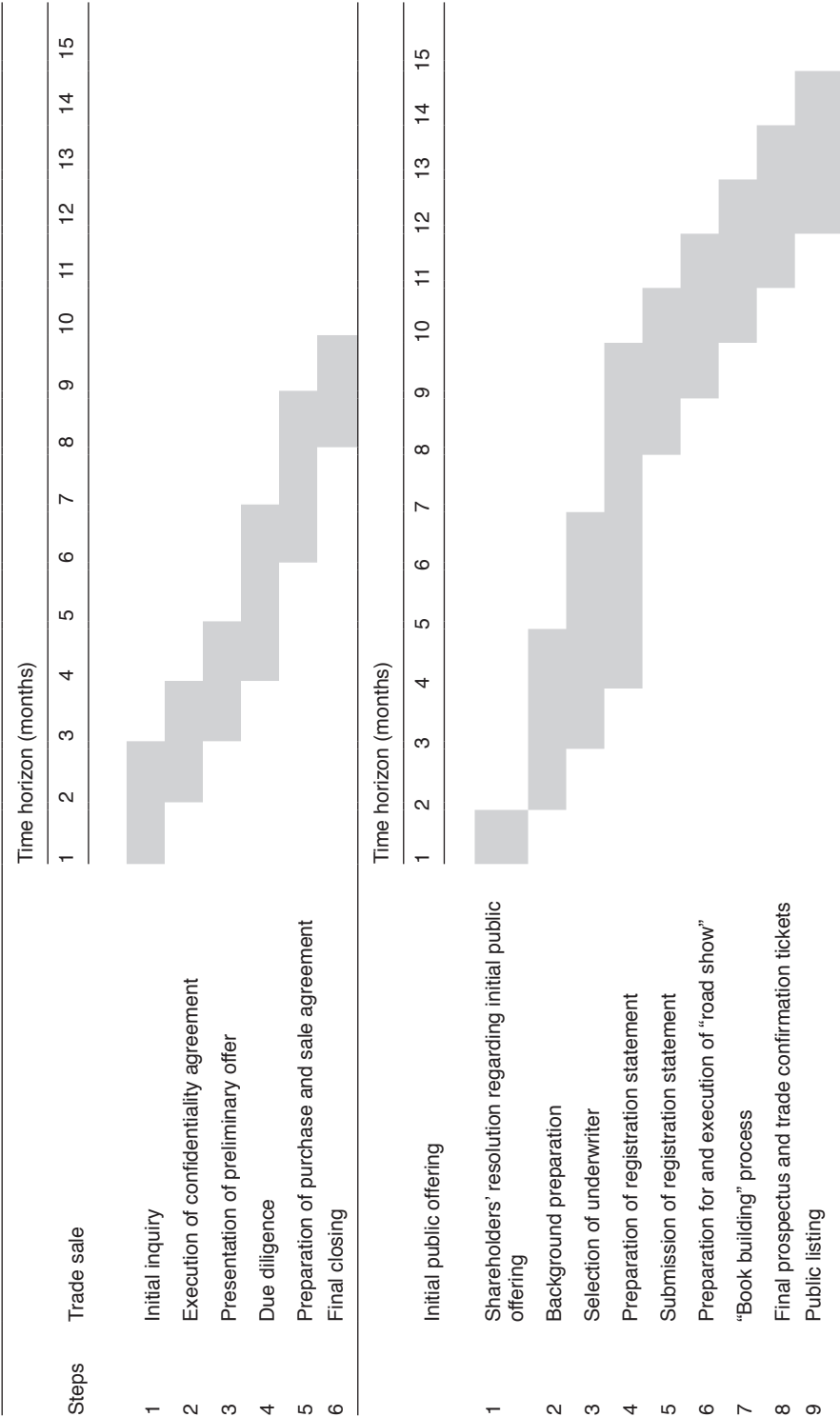


Figure 13.2 Estimated time horizons for trade sales and initial public offerings

confidentiality agreement can be a lengthy process because strategic investors do not typically wish to be bound by “tight” agreements that extend over long periods of time (as they often approach other firms operating in the marketplace if discussions fail). On the other hand, the entrepreneur needs to feel comfortable that the disclosed information and financial statements will not be used for other purposes if the deal falls apart.

The next step (step 3) in the process is for the strategic investor to prepare a preliminary offer to the entrepreneur. This offer typically comes in the form of a term sheet, heads of terms, or a letter of intent. The term sheet is a “milestone document” which outlines the major components of the transaction, including the price, the method of price settlement, the deal structure, transition issues, the entrepreneur’s involvement in the venture post-acquisition, and so on. The term sheet is a non-legal or non-binding document, so it serves as the basis on which the two parties proceed with the transaction on a “good faith” basis. The terms included in the initial offer are preliminary and subject to change upon formal verification of the entrepreneurial firm’s assets. The due diligence process (step 4) requires full disclosure of the firm’s operational information (i.e., strategic plans, technology and intellectual property, research and development, innovations and inventions, client information and contacts, distribution agreements, employee data and records, etc.) and financial information (i.e., financial statements, managerial accounts, off-balance sheet liabilities, and taxes). During the due diligence process, strategic investors may rely on their own resources to conduct operational, legal, and financial reviews of the business, or employ external consultants.

Information gathered as part of the due diligence process is later used to develop a final “purchase and sale agreement,” which is a lengthy and legally binding document prepared by the purchaser’s lawyers (step 5). The terms of this agreement may vary from those set out in the preliminary offer (especially with respect to business valuation), as the due diligence process normally uncovers at least a few surprises. The most common challenges to this process involve poor quality or unreliable financial information, non-compliance with tax regulations, transfer pricing, poor documentation of contracts with various stakeholders, informal arrangements with stakeholders, and related party transactions. If due diligence uncovers significant discrepancies between the actual information and the information that was initially disclosed, the final terms of the deal may be amended or outright renegotiated (if the discoveries made during due diligence are significant and material, the transaction may be cancelled). Executing the agreement is the final step in the trade sale process (step 6). The transfer of ownership occurs only after all of the “conditions precedent to closing” have been fulfilled; these conditions are normally included in the agreement and may relate to obtaining appropriate permits, registering changes to the firm’s constitutional documents, disposing of specific assets, transferring the entrepreneurial firm to another form of legal ownership, and so on.

The IPO process

The achievement of an IPO generally follows similar procedures in different jurisdictions around the world. Nine basic steps are typically required for a firm to go public. The IPO process begins with the passing of a shareholders’ resolution indicating the desire to go public (step 1). The shareholders’ resolution authorizes the management team to formally begin preparations for the IPO process. Following the resolution, formal preparation for the IPO begins (step 2). This process includes cleaning up any outstanding financial and legal matters, performing financial audits, appointing the right people to the board of directors

(to support a public firm), instituting any corporate governance procedures in preparation for a public listing, and strengthening the management team (if necessary). In addition, a qualified and reputable accounting firm is employed to prepare monthly and quarterly financial statements post-IPO (accountants are also brought in to complete the firm's audit). Lawyers are invited to address issues such as litigation, royalties, contracts, loans, ownership issues, and stock option programs. In addition, any necessary adjustments to the entrepreneurial firm's constitutional documentation are made.

The next critical action (step 3) involves choosing the underwriter (we will discuss the role of underwriters further in this chapter). Once selected, the underwriter is responsible for doing due diligence: an in-depth analysis of the entrepreneurial firm. The due diligence process is a rigorous one because it is tied to the actual creation of the prospectus, a legal document submitted to the securities commission alongside the registration statement. Due diligence includes working through multiple "checkpoints" such as interviews with management, major customers, industry specialists, and competitors. A professional analyst from the underwriting team is usually involved in this process.

The due diligence process is normally conducted with a view towards preparing the registration statement (step 4). The registration statement aims to accurately disclose the financial state of the firm and includes a prospectus (a document presented to the public marketing the issue). Drafting the registration statement is a vigorous process that can involve up to 20 people from both the underwriter's side and the issuer's side. The statement itself not only presents the entrepreneurial firm in the most positive light possible from a marketing perspective, but also discloses any potential investment risks tied to buying shares. During the extremely detailed process of drafting the statement, the entire IPO team reviews the document line-by-line and discusses the merits of the language used to describe the IPO candidate. Developing a prospectus is one of the most critical components of the registration statement creation process. Once the prospectus is written on the basis of external and internal analysis, it is typeset and submitted to the entrepreneurial firm's board of directors for approval. When it has been approved, management and the underwriter sign the preliminary prospectus.

Once the registration statement is submitted to the securities commission (step 5), the entire IPO team enters into a "quiet period." The issuer must restrict any information disclosure to the general public while waiting for the securities commission to return its comments. During this period, however, certain activities continue. For example, prior to filing the registration statement, the underwriter sets the initial price range and the number of shares sold in the IPO (the price per share range is typically set within a small range of two or three dollars). Also during the "waiting period," the IPO team normally prepares and rehearses for a "road show" (step 6), a nation-wide marketing tour where management presents its story to institutional investors (i.e., mutual funds, fund managers, institutional investors). At each stop, the entrepreneurial firm has about 30 to 40 minutes to make a presentation to interested investors and persuade them of the attractiveness of the entrepreneurial firm and the underlying issue. During the road show, representatives of the various institutional investors indicate their interest in purchasing the shares of the IPO candidate to the underwriter's institutional sales team, who enter their findings into a ledger called "the book" (the "book building" process constitutes step 7). In ideal circumstances, the underwriter aims to have the book oversubscribed (i.e., more shares being requested than offered); this assures the underwriter that there is interest in the offering and that there will be a secondary market in which the shares will continue to trade.

Once the securities commission has sent its comments and the necessary amendments have been made in the prospectus, the underwriter and the issuer finalize the number of shares being sold and set the final price. The underwriter effectively takes all of the information learned during the due diligence process and balances it with information learned from its interactions with interested investors to determine the price at which the offering can come to market and trade successfully (without a decline) in the secondary market (the idea here is for the stock to trade higher than the opening price). When the securities commission has declared that the registration statement is “effective,” the number of offered shares and the price are published in a final prospectus, which is then sent to institutional investors with trade confirmation tickets (step 8). Within a few days of the deal, the shares of the entrepreneurial firm are posted on the exchange (step 9).

Complete value realizations

Trade sale to a strategic investor

A trade sale involves the disposal of shares in the entrepreneurial firm to strategic investors. We define strategic investors (different from financial investors) as operating corporations engaged in similar or related industries to the entrepreneurial firm. Strategic investors normally possess large revenues and are often multinational in their operating scope; they also have strong financial capabilities, take a long-term investment orientation, and are capable of adding significant value to acquired firms. Strategic investors may be interested in acquiring the entire firm, a majority stake in the firm, or select parts of the firm that fit within their existing operations, structures, or strategies.

Strategic investors acquire entrepreneurial firms for different reasons than financial investors (i.e., public markets, venture capitalists, or financial institutions). The most common reasons cited by strategic investors for purchasing entrepreneurial firms include: achieving operational efficiencies and economies of scale; increasing market presence and power; increasing exposure to fast-growing segments of the industry or certain geographic regions; access to a talented pool of managers or a more competitively priced labor force; and affecting revenue growth faster than would otherwise be possible. Strategic investors are often quite effective at improving the operating performance of a firm; they have superior access to innovative technologies and R&D capabilities, better internal management systems, possess international experience, have cheaper access to capital, and can tap into a broad network of industry contacts.

Strategic investors often pursue investment opportunities by investigating various investment alternatives; this may include estimating the cost of building an operation from the ground up, establishing joint ventures or partnerships, or seeking appropriate acquisition targets. As a first point when evaluating these alternatives, strategic investors consider the cost of building green-field operations. Of course, if it is less expensive to acquire than to build, investors look for appropriate acquisition targets. When considering acquisitions, strategic investors look for potential long-term value from the acquisition (i.e., a time horizon equal to 15–20 years) and for a strategic fit within their existing portfolio of products, services, and firms.

Successful entrepreneurial firms are often approached by strategic investors who operate in the same industry. Such strategic investors often encounter these entrepreneurial firms by competing against them in the marketplace. Successful entrepreneurial firms are often stubborn with respect to defending or growing their market position. The first assault on an

entrepreneurial firm is increasing output and lowering the firm's price to diminish its chances of long-term survival. Such a move often places financing pressure on the entrepreneurial firm, which is endowed with limited financial resources or is highly leveraged (strategic investors are well aware that the entrepreneurial firm's chances of finding new financing diminish as financial underperformance continues in the long term or if key financial and operational targets are missed). Leveraged entrepreneurial firms are especially vulnerable to adverse actions from competition. Of course, a larger predator may be able to survive losses for a longer period of time – this is typically referred to as financial predation. If certain predetermined actions are well executed over a reasonable period of time, then strategic investors can successfully force an entrepreneurial firm out of business. If such predatory tactics are not successful, strategic investors often attempt to replicate the entrepreneurial firm's market success. This replication strategy often fails as the replicators lack the original firm's know-how, managerial talent, entrepreneurial skills, etc. If the entrepreneurial firm continues to perform well in spite of determined action from a strategic investor, the strategic investor will often become annoyed and further motivated to acquire the competitor. Strategic investors often aim to reintegrate and absorb the acquired entrepreneurial firm into their internal structures (such attempts are often less successful than anticipated).

Other strategic investors take a different approach; these investors appreciate the entrepreneurial firm's success, realize the difficulty in replicating its business model, and make a direct approach to purchase the entrepreneurial firm on the assumption of allowing it maximum operating autonomy. Subsequently, these investors allow the entrepreneurial firm to grow along its natural path of development.

Some strategic investors are not active participants in the industry in which the entrepreneurial firm operates. Typically, the motivation for the acquisition is different for these strategic investors; they may wish to acquire the entrepreneurial firm as a first point of entry into the industry, to expand their product or service offerings, or to leverage parts of the firm's existing business infrastructure (i.e., the firm's distribution system). These strategic buyers identify potential acquisitions by performing an environmental scan, by using the firm's products or services, or by employing external consultants to identify attractive acquisition targets.

The best valuations are often achieved when strategic investors are involved in competitive bidding for an entrepreneurial firm. Strategic investors are traditionally much more motivated when they are seeking entry into a new market, if competing firms are actively pursuing similar acquisition opportunities, or if the existing local entrepreneurial firms are especially difficult to compete against. Many strategic investors prefer to acquire entrepreneurial firms when they are profitable, have a strong appetite for growth, and are able to access cheaper external financing. Such conditions typically exist for entrepreneurial firms during periods of strong economic growth and prosperity; during an economic downturn, strategic investors tend to look inward and focus on optimizing their costs or restructuring.

Advantages and disadvantages of trade sales

Trade sales offer multiple advantages to entrepreneurs. One of the most pronounced advantages is their relative simplicity: the entrepreneurial firm typically deals with one buyer who is experienced at conducting due diligence, negotiating the financial and non-financial aspects of the transaction, and executing the deal. Dealings with a strategic investor are normally less expensive for an entrepreneurial firm; still, the firm typically needs to retain a business advisor, a consultant, and a lawyer (these costs are higher in public listings). The

sale to strategic investors “locks-in” the price of the business without any risk of price deterioration (as is the case in a public listing). Strategic investors present a full consideration of the business, and the final cheque (which may be reduced by about 10 percent) is normally released within 18 months of the transaction provided no significant liabilities crystallize (this is normally referred to as an escrow arrangement). Co-operation with strategic investors often allows an entrepreneurial firm to grow faster because the firm gains access to the significant resource base of a larger corporation.

Engagement with strategic investors also has some drawbacks. As previously noted, strategic investors do not typically pay a “premium” on acquisitions. Business valuation can be 25 to 35 percent lower than the valuation achieved by going public. Furthermore, the acquisition process can result in significant confidentiality problems for the entrepreneur. During the due diligence process, strategic investors require access to the firm’s proprietary information about its technology, strategic plans, clients, historical financials and financial forecasts, contractual arrangements with various stakeholders, and so on. It is quite common for strategic investors to conduct a thorough due diligence of the entrepreneurial firm, offer a “low-ball” price for the business (arguing that they can easily develop and offer a competing product or service in the marketplace in a short period of time if the price is not accepted), and commence development of competing products and services. In addition, executing any transaction (whether a sale, merger, acquisition, or public listing) requires a significant time commitment on the part of the management team and shareholders; this is the primary reason for a firm to employ external advisors. During active interactions with the strategic investor, management’s attention is often diverted away from operating challenges and toward information preparation and disclosure. Information requests often involve preparing timely financial reports, casting and recasting financial information in various formats, and participating in meetings. Another complication may come from the management team, whose employment security is often uncertain post-acquisition; in short, there may be internal resistance to a trade sale. Members of the management team often realize that a change to the shareholding structure is likely to result in a change to the top layer of the management team. Strategic investors often bring their own management into the firm immediately after the acquisition to effect any changes, to better co-ordinate operations among the various business units, and to instill their own business practices and culture. Finally, strategic investors are likely to request warranties and representations about the state of the entrepreneurial firm; shareholders, management, and the firm’s directors are generally reluctant to provide these.

Engagement with strategic investors may also result in certain disadvantages that accrue to the entrepreneurial firm’s stakeholders and within the local community in which the business operates. In a nutshell, acquisitions may result in long-term negative consequences to the firm’s local community. Evidence suggests that post-acquisition, strategic investors do not exhibit a tendency to nurture previous relationships in the local community. The acquired entrepreneurial firm becomes a part of a significantly larger organization with its own way of doing things, while the acquirer has its own suppliers and distribution structure, methods of communicating with its clients, and orientation towards social responsibility. In addition, the entrepreneurial firm is stripped of any support functions deemed unnecessary by the strategic investor (i.e., marketing, human resources, and accounting); moving forward, these functions are typically performed by the strategic investor’s corporate structure. Consequently, senior management jobs may be moved to the strategic investor’s headquarters, which may be located far from the entrepreneurial firm’s base of operations; as a result, there may be a loss of high paying managerial jobs in the community.

Entrepreneur involvement post-acquisition

During the process of acquiring the entrepreneurial firm, strategic investors negotiate the level of involvement that the founding entrepreneur will have in the venture moving forward. There are numerous arrangements that can be arrived at, although how involved the entrepreneur will be post-acquisition depends on whether or not the entrepreneur and the other shareholders are bought out entirely or retain a portion of their holding in the venture. Assuming that the entire shareholding is sold, the founding entrepreneur may sever his or her involvement with the firm immediately after concluding the transaction with the strategic investor. The entrepreneur's ownership, management, and operational ties are effectively severed with the conclusion of the transaction; this occurs if the business is wholly owned by the strategic investor (more tapered transition arrangements are possible when the entrepreneur's holdings are cashed out). Of course, if ties with the entrepreneur are severed, the strategic investor assumes that the absence of the entrepreneur is unlikely to negatively affect the business.

Strategic investors may also stretch the departure of the founding entrepreneur from the business over time (this structure is quite common in situations where the strategic investor buys out the entire business, or when the entrepreneur retains a small stake in the firm). The entrepreneur may initially be moved to assume a chairmanship role in the venture (if the entrepreneur already holds this position, it will be retained). Such an arrangement can work to influence the entrepreneurial firm's stakeholders by signaling to them that the business is expected to continue its traditional course of operations after the acquisition (even if the continuation of current practices may or may not be true in reality). If the entrepreneur is retained, he or she can also be given time and resources to work on "pet projects" and maintain some operating autonomy in a narrow area of activity. If the founding entrepreneurs come from science or engineering backgrounds, they may also wish to pursue their research passions. Many entrepreneurs are strong with respect to designing and marketing products, and so their involvement can also be extended in this capacity. Alternatively, the entrepreneur can work on business development (i.e., generating new clients), public relations and communication, corporate social responsibility, and on. The entrepreneur is sometimes also invited to join the strategic investor in an advisory capacity (without a formal role in the structure of operations). No matter what the nature of the involvement is, the strategic investor contemplates and calculates to receive tangible benefits from such involvement. While there are numerous benefits to retaining the entrepreneur when acquiring the firm, strategic investors may find the entrepreneur's involvement frustrating, unsatisfying, or culturally incompatible.

In a case where the founding entrepreneur retains a small portion of the business (normally less than 5 percent), the strategic investor protects itself by having the rights to acquire any outstanding shares. This is typically done through a call option arrangement, which allows an individual the right to buy shares. The founding entrepreneur receives symmetric rights – namely, that a put option can be exercised. A put option grants an individual the right to sell, or forces the counterparty to buy. These option arrangements are often based on formulas; the remaining shares are valued reflecting a specific multiple of EBIT, EBITDA, net profit, or revenue. For example, the final consideration for the outstanding shares may be calculated on the basis of multiplying EBITDA (with multiplier factors between five to seven times) by the level of ownership percentage.

In less common circumstances, the strategic investor may retain the founding entrepreneur to continue with the acquisition for the foreseeable future. Strategic investors use this

approach effectively in cases of “strategic roll-ups,” where multiple small businesses specializing in discrete activities are acquired to offer customers a wide variety of choice (such an approach is used well in internet-based ventures). In this scenario, the strategic investor makes a business judgment that the founding entrepreneur is the best-choice manager and his or her active involvement is critical to the long-term success and prosperity of the entrepreneurial firm. On the other hand, the entrepreneur may conclude that selling out and staying involved in the venture may be the only way to elevate the business to another level (the entrepreneurial firm may lack a fundamental component to its business such as technological expertise, marketing pizzazz, or a distribution structure). If the two sides of the transaction come to realize they have a symbiotic and mutual need for each other, then a long-term, win-win outcome can result for the strategic investor, the entrepreneur, and the entrepreneurial firm’s stakeholders (including the local community). To this point, some evidence suggests that some entrepreneurial firms (especially in the area of technology) may experience greater growth trajectories post-acquisition compared with non-acquired firms; contrary evidence suggests that acquisitions can prove damaging for the long-term prospects of an entrepreneurial firm.

Using an external advisor

Entrepreneurs must ultimately decide whether to navigate the value realization process by themselves or to hire external advisors. This decision depends on the mode of realization. If the decision is made to go public, the process becomes easy for the entrepreneur as underwriters or investment bankers will effectively manage the entire process from beginning to end. If the entrepreneur decides to seek a trade sale, then he or she will likely benefit from external assistance (this is especially true for first-time entrepreneurs). Professional advice is commonly sought in the areas of accounting, legal processes, wealth management, and taxation.

Most entrepreneurs decide to hire a lead advisor or consultant to navigate their interactions with the strategic investor; this lead consultant oversees the entire process for the entrepreneur. Lead advisors act more or less like general contractors, as they rely on multiple trades to deliver a final product (transaction “subcontractors” include accountants, lawyers, IT specialists, and others). The lead advisor is responsible for interacting with the strategic advisor, preparing a business valuation, negotiating the preliminary offer, overlooking the details of the final purchase and sale agreement, and closing the deal. The lead advisor also continues to serve as an advisor to the entrepreneur after the transaction is completed, particularly if the entrepreneur will still be involved in the business. Most lead advisors have participated in at least two transactions and come from accounting, legal, and consulting backgrounds.

The lead advisor helps not only to navigate the process, but also to educate the entrepreneur. Purchase and sale agreements often include numerous and complex clauses, procedures, restrictions, and mechanisms that can be quite confusing to entrepreneurs. Some of these clauses may appear quite draconian, but rarely affect the entrepreneur in practice. Other clauses are relatively straightforward and so there is limited point in arguing against their inclusion in the contract.

Sale to or participation of a financial investor

Financial investors such as private equity firms may view an entrepreneurial firm as an interesting investment target if the business has a solid product or service offering, superior

market presence (or a chance to achieve this in the future), a growing customer base, robust revenue growth, and profitability. If the entrepreneurial firm is perceived as attractive, financial investors have two basic choices: participate as an equity investor, where a small or more meaningful share of the entrepreneurial firm is taken in exchange for its capital (a capital increase is the most common mode of participation taken by venture capitalists), or cash out a portion of the entrepreneur's ownership holding (venture capitalists generally try to avoid cash-out deals and prefer to have the entrepreneur fully vested in the venture until the exit point). A cash-out liquidity event crystallizes the value of the entrepreneurial firm and allows for value capture by the entrepreneur. Of course, co-operation between the entrepreneur and the venture capital firm can result in a significant increase to the value of the underlying firm and allow for full liquidity of the venture capitalists' shares.

While venture capital firms traditionally take a minority stake in entrepreneurial firms, they can also purchase entire businesses outright; this often involves engaging in a leveraged buyout, where an acquisition is financed by a combination of equity (which comes from the venture capital firm) and debt (which comes from banks or other financial institutions). Leveraged buyouts are proposed by venture capitalists if they see a significant upside potential (unrealized until now) in growing the entrepreneurial venture in a different manner or if they believe they can capture value through "financial engineering" (relying on significant debt to purchase the firm and subsequently relying on the firm's cash flow to pay off the debt).

Other financial institutions (such as banks, mutual funds, fund managers, etc.) may be interested in more mature entrepreneurial firms, which are generally considered to be more stable and "lower risk" operations. The firms targeted in this mode tend to generate repeatable cash flows, can pay regular dividends (the institutional investor effectively buys a stream of cash flows), and demonstrate moderate growth potential. Such characteristics tend to make this kind of entrepreneurial firm less attractive to strategic investors.

Compromised modes of full realization

An entrepreneur can still experience value realization even under less than optimal business conditions. In suboptimal situations, the entrepreneur will surely not realize full value of the firm. The main reasons for compromised value realization relate to financial underperformance, poor timing of the disposal, and a lack of co-operation from other shareholders (extracting value from an entrepreneurial firm in which conflicts exist is extremely difficult). Three compromised realization scenarios involve management buyouts and buy-ins, asset sales, and liquidations. Of course, an entrepreneurial firm in severe financial distress can also undergo bankruptcy. Bankruptcy is not viewed as a value realization method; the aim of bankruptcy is to address the firm's financial difficulties and distress, to allow for financial restructuring and reorganization, and to reignite the firm's operating state. Of course, if the entrepreneurial firm successfully emerges from bankruptcy proceedings, it is offered an extension on its "business life" and the chance to create value in the future. In short, bankruptcy creates an opportunity for a "business do-over" from which more successful realization prospects can emerge.

Management buyout or buy-in

A complete disposal of the entrepreneurial firm may result from a management buyout (MBO) or buy-in. An MBO represents a purchase of the entrepreneurial firm by its

management team from the founding entrepreneur. These transactions commonly occur under less favorable business conditions for the entrepreneur: financial underperformance, liquidity problems, or the significant loss of a market position may all be factors in the transaction. Of course, MBOs can also occur if the entrepreneur simply wishes to sell the firm in the normal course of business (in this scenario, management usually pays less for the business). In circumstances of underperformance, management buys the business on a turnaround or restructuring basis and then determines how value can be generated from the firm later. Management buyouts may also occur in situations where significant differences exist between the founding entrepreneur and management about the strategic and the operational direction of the firm. If management believes that the founding entrepreneur's or shareholders' decisions have negatively impacted the business's prospects in the past, then they may believe that they can help the business achieve greater success through better decision making.

As noted, the price considerations in MBO transactions are often lower than those expected by the founding entrepreneur. Managers normally do not have significant financial resources and in order to execute an MBO transaction, they must rely on their own financing supplemented with other forms of financing (i.e., banks, venture capitalists, other financial institutions). If the financial performance of the entrepreneurial firm is especially problematic, then external financing options become more limited; hence, the low business valuation placed on the business. Selling the entrepreneurial firm to the management team may also be the only real value realization opportunity available to the founding entrepreneur. In the absence of other credible value realization routes, management simply bids a low price to acquire the firm. In the case of a turnaround or restructuring of the business, management will want to avoid overpaying for the business upfront if there are difficult decisions to be made in the future. Management often operates in line with the principle "well bought is half-sold" – even if their intention is to hold on to the business for the foreseeable future.

Management buy-ins, on the other hand, involve situations where a group of unrelated individuals or related managers from another business seek to acquire the entrepreneurial venture.

Asset sale

In some cases, potential buyers are interested in purchasing all or select assets of the firm (including client lists); this mode of ownership transfer is known as an "asset sale." In an asset sale, the liabilities of the entrepreneurial venture remain with the entrepreneur, who is responsible for settling them; their settlement effectively closes business operations and the entrepreneur proceeds to legally wind down operations and delist from the firm's register. Asset sales typically occur for two reasons. The first relates to the fact that most buyers wish to distance themselves from any potential liabilities associated with the business. This often occurs when the buyer does not wish to commit any financial resources for due diligence, anticipates that liabilities such as taxes, lawsuits, or claims are likely to crystallize, does not have time to engage in a proper investigation of the firm, or wants to distance itself from the firm's previous image (while still appreciating the market potential of the firm moving forward). The second reason for pursuing an asset sale is financial in nature: acquired assets increase the depreciation expense for the acquirer, thereby reducing the amount of taxable income.

Liquidation

If the founding entrepreneur exhausts all opportunities for value realization, liquidation may represent the only option to extract value from the entrepreneurial firm. Liquidation is the process of winding up or dissolving the entrepreneurial firm and redistributing its liquidated assets to shareholders. Liquidation can be voluntary (where the shareholders pass an appropriate resolution) or compulsory (where creditors file appropriate papers in court). The essence of the liquidation process is to sell the entrepreneurial firm's assets and settle all outstanding liabilities. The remaining cash is then distributed to shareholders in proportion to their level of ownership in the firm.

Liquidation is a step-by-step process. Initially, a professional liquidator is appointed by the court to represent the interests of shareholders and creditors; this occurs after an appropriate shareholders' resolution has been passed. The appointed liquidator collects the assets of the firm (including outstanding accounts receivable, unpaid or uncalled capital, etc.), develops a list of the firm's liabilities, sells the assets, and settles all outstanding liabilities in accordance with a schedule of priority. The order of settlement priorities is as follows: secured creditors (i.e., claimants of the firm's assets, such as banks), liquidation costs, unpaid salaries and wages, unsecured creditors (i.e., vendors), interest on debt, debt owed to shareholders, and shareholders. As the next step, the liquidator allocates any remaining funds to all shareholders in order of priority (preferred shareholders, followed by common shareholders). Finally, the entrepreneurial firm is formally dissolved and delisted from the appropriate register.

Partial value realization

Initial public offering (IPO)

A public listing involves the sale of the entrepreneurial firm's shares to the public, followed by a listing of the firm's shares on the stock exchange. Compared with a trade sale or asset sale, a public listing may offer different liquidity conditions for the founding entrepreneur (e.g., the ability to dispose of an appropriate amount of shares); the underwriters usually determine these conditions prior to public listing. In some circumstances, entrepreneurs are able to offer a significant or smaller amount of their shares for sale. In most cases, however, the entrepreneur is not allowed to dispose of any shares as a part of the initial public listing; instead, shares may be sold in the resulting aftermarket. The process can also become complicated due to complex "insider trading" regulations.

In the course of selling securities in public markets, the entrepreneurial firm (the issuer) relies upon the services provided by a professional advisor to navigate the public listing. As previously noted, these advisors are known as underwriters or investment dealers. Underwriters serve as the middlemen between the buyers and sellers of the securities and specialize in the sale of new and existing securities. The underwriter is a leader of the entire IPO process; its roles include leading due diligence (during which the underwriter confirms the underlying strength of the entrepreneurial firm) and directing the registration statement (wherein the underwriter presents the entrepreneurial firm from the perspectives of marketing and full disclosure). Underwriters are also responsible for preparing and executing the road show and for the ultimate pricing of an IPO. They also provide specific advice to the firm related to the security type being issued, the key terms of the issue, and business valuation.

Underwriters participate in the primary market as principals when they take on the task of underwriting new issues by purchasing securities on their “own book” and assuming the risk of reselling them to institutional and individual investors later on. This process is normally referred to as a “bought deal.” In a bought deal, the underwriters provide a valuable service to the issuer, and the issuer receives a cheque and can spend the proceeds of the sale on a purpose for which new capital is being intended. The biggest benefit of a bought deal is that the underwriter guarantees a successful placement of shares. The underwriter owns the securities until they are sold, which may take days or weeks.

The underwriter is compensated by a price spread (the securities are effectively purchased from the issuer at a discount). Underwriters may underwrite the new issue on a “best effort basis” where they receive compensation in the form of a commission, but the issuer assumes the full risk of successfully placing the new issue. This arrangement is more common for smaller, less known, and more speculative entrepreneurial ventures.

Underwriters often protect themselves by forming an underwriting syndicate. This allows them to diversify the risk and enhance the marketability of the issue. One underwriter often serves as the lead underwriter overseeing the entire underwriting syndicate.

Where to list?

Most securities jurisdictions operate two markets: the “main market” (usually reserved for the largest, most dominant, and most recognized firms in the country) and the “junior market” (for smaller firms or those that do not meet the requirements for the senior floor). The differences in listing on these markets relate to meeting certain conditions for the aggregate value of the offer, the net book value of the firm, the sales and profitability level of the business, and the ownership structure of the firm. Some benefits of listing on the main floor include more visibility, increased analyst coverage, more liquidity, and the ease of issuing new shares.

In today’s era of financial globalization, entrepreneurial firms may consider different geographic destinations for their IPOs. While IPOs generally tend to be underpriced, local or regional financial markets may present better opportunities for the firm if it can rely on strong brand awareness and recognition and in-depth coverage from local analysts (which works to improve the overall liquidity of the issue). Cross-listing the offering on various exchanges is also possible; such movement can secure price stability, exposure to a wider range of institutional investors (and more access to capital in the future), and increased liquidity.

Advantages and disadvantages of IPO

A public listing provides numerous benefits to an entrepreneurial firm. The most obvious benefit is the ability to raise new capital for expansion projects, working capital, acquisitions, promotional campaigns, new product launches, and the employment of additional senior management (many of these projects would not be possible without this additional financing). The entrepreneurial firm is also able to increase its equity base. An increased equity base allows the firm to raise debt financing. Entrepreneurial firms are often financed in steps, where a round of financing is followed by debt or additional debt necessitates the need for equity financing; this provides further expansion potential for the entrepreneurial business. If used well, the combination of debt/equity financing can elevate the entrepreneurial firm to another level in terms of revenue, market share, and profitability. Going public also enhances

the public image of the entrepreneurial firm. The prestige of being a public firm may result in more visibility, credibility, legitimacy, widespread recognition, ability to promote the firm, and new business contacts. Last, public firms are able to secure higher valuations than in a trade sale (institutional investors may be willing to pay higher prices for the more risky cash flows often inherent in entrepreneurial firms).

The entrepreneur can also benefit personally from going public. The IPO process and listing on the exchange crystallizes the valuation of the entrepreneurial firm; public listing allows for the discovery and confirmation of the underlying value of the business at any point in time. Furthermore, the entrepreneur is able to monetize his or her shares on a timely basis; a similar benefit also accrues to other shareholders, for whom obtaining liquidity may be an important consideration. While the disposal of a significant portion of the founder's shares may not be looked upon favorably by the market, the disposal of a certain proportion of shares is not viewed to be as problematic. In this respect, the IPO represents a partial exit for the entrepreneur. A "lock up" occurs when entrepreneurs are required by the underwriter to not dispose of their shares for a certain period of time. The lock-up period can extend up to 18 months after the IPO.

Public listings also have their disadvantages. For one, there is always the potential for a rapid deterioration in share price, especially in entrepreneurial firms that fail to deliver their expected financial results, lower or miss their dividends, are sued or are facing litigation, or if changes to the senior management team have occurred. Furthermore, the entire industry in which the entrepreneurial firm participates may decline; public firms are more disproportionately affected by industry declines than private firms in the sector. Other reasons for deterioration of value may be unrelated to the firm's performance and industry participation; these include external economic shocks (including a weak general economy), poor growth dynamics in the industry, a national or international financial crisis, or unfavorable movements in exchange and interest rates.

Listed shares may also lose liquidity if a reasonable aftermarket is not developed. This occurs if the entrepreneurial firm is listed on an illiquid stock exchange (often junior exchanges suffer from a lack of liquidity) and the shares receive little or no coverage from analysts (investors will not know much about the firm, its financial performance, or its future prospects). This may effectively lead to a situation where the market places a value on the entrepreneurial firm as recorded in the last executed trade (i.e., the last price printed in the financial papers, which serves as a "theoretical" price for the business); no shares can change hands at this price.

Another disadvantage is that the IPO process and listing maintenance can be expensive. When preparing for an IPO, the underwriter charges a fixed monthly fee for its ongoing services (normally ranging between \$10,000 and \$30,000, and equal to \$120,000 to \$360,000 for the duration of the underwriting contract). At the end of the process, the underwriter is normally compensated with a success fee equal to between 2 and 4 percent of the value of the placed shares (this compensation is paid ahead of the firm receiving any proceeds from the issue). There are also other, additional, costs that must be incurred related to other external advisors, printing prospectuses, public announcements, listing fees, and so on. In addition, after the IPO, the entrepreneurial firm has to conduct quarterly audits (each costing between \$20,000 and \$50,000), hire additional legal staff to adhere to securities regulations (hiring incremental personnel to fulfill these functions may cost between \$80,000 and \$300,000 per annum), employ staff in a public relations department (\$80,000 to \$150,000 per annum), and produce annual and interim reports (up to \$50,000 per annum).

There is also evidence to suggest that the pursuit of an IPO can have a negative effect on innovation. IPOs often involve the departure of the founding entrepreneur from the day-to-day activities of the firm (although the entrepreneur may move to a chairman's role or continue in an advisory capacity). The entrepreneur's initial passion for innovation and invention may not continue to remain a priority after his or her departure. The reduced focus on innovation also relates to managerial behavior; innovation requires experimentation and experimentation may pose a significant career risk for the managers of public firms. In public firms, managers are provided with incentives to engage in shorter-term, less risky projects. Managers are typically required to report on the status of such projects to the public and they often prefer activities that offer steady progress rather than those that may lead to breakthrough technologies. Such tactics may lead to the entrepreneurial firm underperforming in the public market, as the innovation and calculated risk taking that were responsible for the success of the firm prior to going public are now gone. The pressure to generate short-term profit may also push more time-consuming innovation projects to the "back burner."

Selecting the underwriter for the entrepreneurial firm

The ideal underwriter for an entrepreneurial firm has a strong knowledge of the industry in which the IPO candidate operates, an appreciation of the challenges faced by entrepreneurial firms (i.e., transition issues), a good distribution and selling structure (in terms of access to institutional and individual investors), and a successful track record of placing new issues (where they trade up in the aftermarket). Typically, the entrepreneurial firm invites three underwriter candidates to pitch their services. The selection process is especially challenging to the underwriter. The key challenge in the initial presentation always revolves around business valuation. Of course, if the valuation placed on the business is high, the shareholders of the entrepreneurial firm suffer less dilution (the higher the valuation, the lower the dilution); note that business valuation is often the most common selection criteria for entrepreneurial firms. At the same time, if the underwriter places excessive valuation on the entrepreneurial firm, it may win the contract but have a more difficult time selling the firm to the public (earning a lower profit from the overall transaction).

Once selected, the underwriter (as well as the issuer) faces another challenge when the final price of the issue is set. The underwriter will often suggest dropping the price per share for the issue (resulting in a lower valuation of the entrepreneurial firm and more dilution to its shareholders); this often reflects concern over the potential success of the IPO process (the investors may be willing to place orders for shares, but at a lower price; this occurs if the "book building" process is challenging to the underwriter). In this moment, the entrepreneurial firm must decide whether to continue with the listing at the present moment or delay it and hope for a more successful and less dilutive offering in the future; this is a difficult judgment call to make, both for the entrepreneurial firm and the underwriter.

The entrepreneur, post-IPO: disappointments and challenges

Many entrepreneurs dream of taking their business public because this event represents a significant milestone in the development of the entrepreneurial firm. However, after the initial honeymoon period fades away, entrepreneurs may find themselves aggravated, annoyed, and frustrated; they may even regret going public. Some of the irritants and disappointments faced by entrepreneurs after achieving an IPO are discussed next. Please note that while these challenges may relate to any officers of a public firm, they are typically

more pronounced for entrepreneurs (professional managers with corporate backgrounds may be more exposed to these circumstances and tend to experience less frustration, disappointment, and surprise).

Entrepreneurs are often traumatized by the extent of the regulations, laws, guidelines, by-laws, and directives in public markets; they feel that their behaviors are often constrained and that they are unequipped to navigate the complex legal processes. Entrepreneurs often view the regulations associated with public firms as non-productive, counterintuitive, and illogical. For many entrepreneurs, in order to survive and flourish in the early days of their entrepreneurial venture, they had to run their business in a cash conscious and frugal manner; in public firms, they must burn “expensive” capital just to meet the regulatory requirements of the public market. Entrepreneurs, while recognizing the need for an annual checkup of the financial affairs of the business, feel that four audits in one fiscal year is excessive. Although entrepreneurs must ultimately adhere to these regulations and ultimately view them (and their associated expenses) as part of the process of running a public business, they generally do not view incurring expenses related to meeting regulatory regimes as a value added business activity.

When successful entrepreneurial firms go public, the act of going public can actually work to the firm’s competitive disadvantage. The hallmark of many entrepreneurial firms is that they are skillful and creative when identifying market opportunities; they can build a successful business on this basis. Entrepreneurial firms are often able to exploit market niches that have been dismissed or totally ignored by larger competitors in the industry (competitors often reject these opportunities as being too small, unattractive, or unprofitable). When the entrepreneurial firm goes public, a detailed prospectus is produced that describes the market opportunities (i.e., market size, growth rates, and future prospects) and the business’s profitability and customers. This information sheds light on exciting market opportunities and effectively “awakens” other market participants; armed with this detailed information, competitors become more deliberate in targeting the entrepreneurial firm’s market segment. The firm does not need to disclose sensitive information for this to happen; the mere disclosure of the firm’s cash position can inform its competitors about how much “fuel” the firm has. From this point on, the life of the founding entrepreneur can become more difficult; making these initial disclosures may grow into resentment over being publicly held.

Another area of dissatisfaction relates to the structure of the board of directors and their involvement in the firm. An entrepreneur leading a public firm normally composes the board according to various parameters, and selection of board members occurs according to scripted procedures. Broadly speaking, the board is expected to be most useful to the listed firm while protecting the interests of its shareholders. Many entrepreneurs complain that sizeable institutional investors often “insist” upon representation on the board, even though their pre-selected board members may take a limited interest in the venture (i.e., they rarely participate in board meetings, stay away from committee assignments, or are not available for consultations with the entrepreneur). While some entrepreneurs actually prefer non-active, “rubber stamp” board members (as this may extend the manner in which the entrepreneur operated the venture in the past), many more entrepreneurs rely upon the value added activities of the board.

In high profile cases of entrepreneurial firms going public, other challenges may emerge. In high visibility IPOs, many entrepreneurs find the intensity of their involvement in public relations excessive; interaction with the public can represent a significant change in an entrepreneur’s daily business routine. Being a publicly listed firm involves constant

communication with potential investors, existing shareholders, analysts, and the media, and founding entrepreneurs are often called upon to participate in these interactions. Corporate decisions are often scrutinized and questioned more than the entrepreneur has experienced in the past; the founding entrepreneur is often at the center of most inquiries and may view them as a personal attack (entrepreneurs do not have to answer as many of these types of questions when the entrepreneurial firm is privately held). Unless the entrepreneur likes being in the public light, or has the ambition and drive to be in the public domain, he or she may find these kinds of interactions to be a distraction to day-to-day business considerations. An entrepreneur's personal life may also be scrutinized; entrepreneurs are often not prepared for such intimate personal public disclosure. In a nutshell, whether public scrutiny is directed towards their business activities or their personal lives, entrepreneurs complain that interactions with the public keep them from running their firms effectively.

This discussion would not be complete without touching on the sensitive topic of tax liabilities. When options are exercised (shares are formally transferred to and acquired by managers, and the entrepreneur may be a manager), personal tax liabilities crystallize. In such cases, a recipient of shares sells a portion of exercised shares to cover the tax liability (he or she may not wish to do this, but is effectively forced to by tax regulations if no personal financial resources are available). As per insider trading regulations, such a disposal must be disclosed publicly (usually within five days of the disposal) and the senior management team may be questioned about their loyalty towards the business. The optics of most share disposals are not viewed favorably by the public; the exercise of stock options, while a positive event for senior managers, can create negative connotations because of the tax liabilities involved.

Mergers

A merger with another firm (whether a young firm or a more mature business) represents another method of partial value realization; the exception, of course, is when the entrepreneurial firm merges with a public firm and converts its shares into a share of the listed firm (here, a full realization may be possible). A merger typically provides an opportunity for a potential increase in the firm's future value, but a liquidity event is delayed until further into the future.

The most significant advantage of a merger is that when two or more private firms merge, they are able to achieve scale, which is important for strategic investors and public markets. There are also a number of disadvantages. First, the role of the entrepreneur often diminishes as a result of a merger; the entrepreneur may effectively lose control of the venture. Depending on the size and profitability of the merging firms, one firm may effectively assume full control over the other venture. Second, mergers create a fertile ground for personal conflicts among the owners and managers of the merging entities. Entrepreneurial firms often operate under different organizational and cultural styles; they also differ with respect to risk tolerance, cost management, corporate governance, and social responsibility. Third, mergers rarely deliver the synergetic benefits anticipated early on in the process. While incremental revenues can be more confidently anticipated (even though some cannibalization of revenue may occur), significant increases in profits and profitability are difficult to predict. Although merging entrepreneurial firms do not require multiple marketing, accounting, procurement, and human resource departments, the specificity of each entrepreneurial firm is often such that these cost reductions cannot be realized quickly (if at all). Fourth, the merger process requires the merging entrepreneurial firms to disclose

sensitive information to one another. This becomes a significant concern if the two entrepreneurial firms do not end up merging or if the merger breaks up shortly after the event (which is a relatively common occurrence in mergers).

Value realization and taxes

At the moment of value realization, the entrepreneur is required to settle tax liabilities because disposal of any capital assets crystallizes capital gains (and subsequently, capital gains tax). Capital gains are defined as the profit made when an asset price (i.e., shares, fixed assets, intangible assets, etc.) is higher than the price paid. It is worthwhile to note that a capital gain not only occurs in the disposal of capital assets, but also in cases of ownership transfer (including gifts and transfer to trusts), exchange of one capital asset for another, share redemptions or cancellations, amalgamations, or mergers. As different procedures, mechanisms, and rates apply with respect to taxes in various legal jurisdictions, here we will highlight the general mechanics of calculating tax obligations. Crystallization of tax liabilities at the time of disposal tends to create anxiety and frustration on the part of the entrepreneur, who after building the entrepreneurial firm with limited capital and plenty of “sweat equity” has to make a sizeable payment to local tax authorities. We consider two scenarios: one related to the disposal of shares, and the other related to the disposal of fixed assets. While situations of course vary from case to case, the reality is that selling assets may generate a larger tax bill than the share disposal. On the other hand, asset sales may generate a tax deferral advantage (tax-free proceeds from disposal of assets can “sit” on the corporation’s books and may be drawn down at an appropriate point in time – for example, when the entrepreneur wishes to crystallize a capital loss on other investment activities in order to offset gains against losses).

Although taxes (whether in the form of corporate tax, value added tax, etc.) are an inevitable aspect of business conduct, with proper planning and preparation, the entrepreneur can achieve significant tax optimization. Various techniques such as tax deferral, tax reserves, dividends, or adjustment to the paid-up capital cost base are available, but they are complex, intricate, and require professional tax advice. Tax optimization also often requires the co-operation of the buyer, which is not always easy to secure as the buyer often pursues its own tax optimization strategy.

Disposition of shares

When entrepreneurs dispose of the shares in their entrepreneurial firm to a strategic buyer, a financial investor, management, or the public, they need to settle their tax obligation as capital gains crystallize. As previously noted, the entrepreneur is charged on any capital gains realized on the disposal of capital assets (whether shares, fixed assets, or tangible assets). In the case of share disposition, taxes are normally paid on the difference between the disposal price and the adjusted cost base (ACB) of the shares (i.e., a paid-up capital). In the event that the entrepreneur has acquired the firm, the appropriate cost base is the amount the entrepreneur paid for the shares. The capital gains tax rate then applies. Please note that the term “capital gains tax” does not mean the applicable tax rate, but rather a proportion of the proceeds from disposal to which relevant personal taxes are applied when the firm is sold. If the entrepreneur crystallizes losses on other business activity in a specific year (or is carrying losses forward from previous years), these can be used to reduce the amount of capital gains.

Let's provide an example of how these calculations work in practice. An entrepreneur, Mark Johnston (who started a business distributing various brands of orthopedic shoes for children between the ages of five and ten), invests \$10,000 of his own money into an entrepreneurial venture. Johnston creates a corporation with paid-up capital equal to \$10,000 (this is the cost base of shares in our example) and is the sole owner of the business. Over the years, the entrepreneur grows the business to about \$15 million in sales and \$500,000 in EBITDA. Let's further suppose that the entrepreneur disposes of his entire stake in the business for \$5,000,000 (this implies a business valuation of ten times EBITDA and 30 percent of revenue). Because Johnston's business was set up as a small business, he qualifies for a capital gains exemption (various legal jurisdictions offer capital gains exemptions to provide incentives for small business formation). The key conditions for granting the exemption typically relate to a minimum holding period of shares, a "locality" test (i.e., a minimum percentage of local assets, local ownership, and so on), and a confirmation of business activity (i.e., the business was active for a minimum period of time). Such benefits are often treated as lifetime capital gains exemptions.

In order to calculate the amount of capital gains, Johnston's initial cost of shares is deducted from the deal settlement price. In our example, capital gains are equal to \$4,990,000 (\$5,000,000 minus \$10,000). As Johnston's business qualifies under the capital gains exemption rules in his country, he is able to deduct \$750,000 (i.e., capital gains exemption) from his capital gains to arrive at the adjusted capital gains total; this amount, after exemptions, is equal to \$4,240,000 (\$4,990,000 minus \$750,000). The capital gains rules now apply. In this case, the capital gains total is subjected to a 50 percent capital gains rate; this means that 50 percent of the adjusted capital gains is subject to taxation and 50 percent is effectively tax-free. Since the benefit of the disposal accrues to Johnston (as he is the sole owner of the entrepreneurial firm), he is expected to pay personal tax on the disposal of the shares. Johnston is now expected to pay tax on \$2,120,000 of personal income. If we assume that Johnston falls into the highest personal tax bracket (50 percent), he needs to pay \$1,060,000 in taxes at the point of value realization on a sale of the business worth \$5 million. The effective tax rate on disposal is equal to 22.2 percent.

Various legal jurisdictions offer different capital gains taxes and levels are subject to change. Table 13.2 provides calculations using Johnston's transaction as an example, but under different tax rates (the case discussed in detail above is noted as scenario B). Capital gains tax rates normally vary between 25 and 75 percent and they have a significant influence on the final value of the tax bill at the time of value realization.

Disposition of assets

When assets such as raw materials are sold, the firm calculates the difference between the disposal price and its cost; this is a gain on disposal. The determined amount of gain is added to a pre-tax income and is taxed at the entrepreneurial firm's applicable tax rate.

Disposal of fixed assets can be a complex process as a result of depreciation. The key question to consider is where the selling price is at in relation to the net book value of the asset. Let's consider four scenarios. First, the asset may be disposed of for less than its acquisition cost, but for more than its net book value. In such a case, the difference between the proceeds from the disposal and the asset's net book value are included in the income statement as a gain on disposal. Let's assume that a fixed asset was purchased for \$100,000 and we determine its anticipated useful life to be equal to five years. This means that the asset is depreciated at 20 percent per annum. We also apply a straight-line method

Table 13.2 Capital gains tax calculations under different capital gains rates (in dollars where appropriate)

	<i>Scenarios</i>		
	<i>A</i>	<i>B</i>	<i>C</i>
Disposal value	5,000,000	5,000,000	5,000,000
Less: Adjusted cost base	10,000	10,000	10,000
Capital gains	4,990,000	4,990,000	4,990,000
Less: Capital gains exemption	750,000	750,000	750,000
Adjusted capital gains	4,240,000	4,240,000	4,240,000
Capital gains rate	25%	50%	75%
Taxable income	1,060,000	2,120,000	3,180,000
Personal tax rate	50%	50%	50%
Personal tax	530,000	1,060,000	1,590,000
Effective tax rate	10.6%	22.2%	31.8%

(see detailed calculation in Table 13.3). Let's further suppose that we sell the asset at the end of the third year for \$50,000. The difference between the gross value of the asset and the accumulated depreciation is equal to \$40,000 (\$100,000 minus \$60,000); this amount represents the asset's net book value. The difference between the disposal value and the asset's net book value is equal to \$10,000 (\$50,000 minus \$40,000); this amount represents a gain on disposal and is added to the taxable income for the year.

In the second disposition scenario, the asset may be sold for more than its acquisition cost. The procedure for calculating a net book value is the same as in the previous example. The amount by which the proceeds from the sale exceed the net book value is added to the entrepreneurial firm's income. From the asset disposal value (we assume this to be equal to \$100,000) we deduct the asset's net book value and crystallize the gain on disposal at \$60,000 (\$100,000 minus \$40,000). In the third case, the asset may be sold for the amount equal to its net book value. In this case, the disposal of the asset has no effect on the entrepreneurial firm's income statement; no income from capital gains is added. Last, the asset may be sold for less than its net book value. The amount by which the net book value exceeds the proceeds of disposition is treated as a loss on disposal and is deducted from income for financial reporting purposes.

Table 13.3 Calculation of an asset's net book value (in dollars)

	<i>Year 1</i>	<i>Year 2</i>	<i>Year 3</i>
Disposal value	100,000	100,000	100,000
Depreciation expense	20,000	20,000	20,000
Accumulated depreciation	20,000	40,000	60,000
Net book value	80,000	60,000	40,000
Disposal value			50,000
Gain on disposal			10,000

It is worthwhile reiterating that in some legal jurisdictions, there may be distinctions between how depreciation expense is calculated for financial and tax reporting. Under most generally accepted accounting principles or international accounting standards, entrepreneurial firms enjoy some freedom with respect to determining the amount of depreciation expense so long as the standard accounting principles are applied consistently over the years and relate to the asset's useful life. However, in legal jurisdictions that fall under the rules of an applicable income tax act, an entrepreneurial firm is often not permitted to use the depreciation expense calculated for the purposes of developing the income statement for the purposes of tax reporting. Some regulations also allow firms to claim another deduction or allowance, often called a "capital cost allowance," to calculate taxable income regardless of the method chosen by the entrepreneurial firm for its financial reporting. Consequently, the amount of taxes calculated in the firm's financial reporting and taxation reporting may differ.

Questions to consider

1. Define value realization and outline why realization is important for the entrepreneurial firm, the entrepreneur, and the community.
2. Discuss the major modes of value realization in terms of full and partial harvesting. What are the key advantages and disadvantages of each method?
3. Why does a trade sale take longer to execute than an initial public offering?
4. How can an entrepreneurial firm prepare more effectively for the value realization process?
5. Discuss the impact a strategic investor's acquisition of the entrepreneurial firm has on the life of the entrepreneur. How can a strategic investor structure a relationship with the entrepreneur to make full use of the entrepreneur's talents, skills, and capabilities?

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14 Entrepreneurial succession, perpetuation, and philanthropy

Chapter objectives

After reading this chapter, you should be able to:

- define entrepreneurial succession and describe its major components;
- identify key challenges in entrepreneurial succession in family and non-family entrepreneurial firms;
- understand the model of entrepreneurial perpetuation;
- define entrepreneurial philanthropy and depict its major systematic steps.

The focus of this chapter is entrepreneurial succession, perpetuation, and philanthropy. We focus on the issue of succession because properly executed entrepreneurial succession can greatly affect the value of the entrepreneurial venture. Conversely, a poorly executed transition is likely to translate into a lack of success, underperformance or outright business failure. There is another important reason for considering succession, especially in the context of entrepreneurial firms – evidence confirms that about 50 percent of owners of family-based entrepreneurial firms are expected to transfer their ventures to the next generation in the next 5 to 10 years (in an additional 25 percent of these firms, further succession is expected in the next 10 to 15 years). The value of these successions is estimated to equal \$20 trillion. Another important reason to concentrate on entrepreneurial succession is that research evidence suggests that in the majority of cases, the founder is not likely to find a suitable successor from within the family structure; therefore, an understanding of entrepreneurial transitions is critical. Entrepreneurial succession is important from the perspective of entrepreneurial firms, the local community, and the national economy.

The two other main themes of this chapter (perpetuation and philanthropy) are inherently connected to entrepreneurial succession; proper succession can convert into entrepreneurial perpetuation and philanthropy. Therefore, in the second part of the chapter, we focus on entrepreneurial perpetuation, which occurs when entrepreneurs channel a portion of their available capital toward new venture creation. This capital can come from entrepreneurial divestment or profits generated by an existing successful venture or a portfolio of firms. Entrepreneurial perpetuation is possible because of this infusion of accumulated experience into new ventures. We also focus on serial entrepreneurs, entrepreneurial business perpetuators who derive profits from being involved in multiple ventures (only about 10 percent of the wealthiest entrepreneurs derive their fortunes from a single venture). We also consider this topic in the closing chapter as entrepreneurial perpetuation requires strong financial acumen and decision making, superb strategic analysis and planning,

entrepreneurial flair, and value creation orientation – the same skills necessary for systematic philanthropic activities.

Last, the chapter concentrates on entrepreneurial philanthropy, which is developing not only into a major focus for many top entrepreneurs, but is also a contagion phenomenon for smaller business operators.

Entrepreneurial succession

Divestment is defined as the disposal or harvest of an entire entrepreneurial firm. As we noted in the previous chapter, divestment is the natural next step for an entrepreneurial firm that has embraced the principles of value creation. Divestment represents an orchestrated way of cashing out an entrepreneurial investment and “sweat equity”; it is the monetization of value by virtue of a trade sale, an initial public offering (IPO), or other means. While for some entrepreneurs achieving divestment may represent the ultimate climax of entrepreneurial activity, for others transitioning the business to the next generation may be regarded as the most important part of the entrepreneurial journey (for these entrepreneurs, divestment may not be a preferred route). These entrepreneurs wish to engage in a process which we describe as entrepreneurial succession.

Entrepreneurial succession can be broadly defined as a comprehensive, strategic, and orchestrated roadmap or plan for the founding entrepreneur, his or her family, and potential successors in the event of the founder’s normal course of disengagement or in extraordinary circumstances such as the founder’s disability, incapacity, retirement, or death. It is a process of preparation for an orderly handing over of the knowledge, management, ownership, authority, and responsibility needed to run the familial entrepreneurial venture. In short, it is a form of organizational change. Succession is a simultaneous act of entrepreneurial exit (i.e., the founder removes him/herself from the ownership and decision-making structure of the entrepreneurial organization) and entry (i.e., a successor, whether coming from a family or outside of the family, enters the entrepreneurial milieu). Entrepreneurial succession may be the most important test of entrepreneurial skill the founder encounters.

There are many benefits to creating an entrepreneurial succession plan, especially for family-controlled firms. First, the mere consideration of entrepreneurial succession helps to determine whether it is a viable scenario. Second, an agreed upon succession plan is likely to reduce ambiguity, uncertainty, and risk surrounding the entrepreneurial venture. A good plan ultimately avoids the unnecessary involvement of lawyers (and high legal fees) in settling family misunderstandings, disputes, and grudges. The succession plan, which is articulated and “publicly” presented, is especially important to key employees, who exhibit a higher than normal propensity to depart from family-controlled firms amid succession turbulences. Third, a good succession plan provides motivation for family members preparing to take over the family business – successors may obtain considerable formal business education and obtain increasingly higher exposure to the family business. Fourth, a succession plan can become an impetus for professionalizing the entrepreneurial business and upgrading archaic management systems and structures to modern and innovative management methods and technologies. Fifth, succession plans open better channels of communication among family members by becoming the platform where personal issues (i.e., retirement, death, disability, sickness, and so on) and business concerns (i.e., ownership, compensation, dividends, rights, and so on) are contemplated, deliberated, and agreed upon. Last, a succession plan may enhance the value of the entrepreneurial firm (poorly executed succession almost certainly destroys value).

While the passing of the entrepreneurial baton is inevitable, the departure of the founding entrepreneur from the business is likely to have negative consequences on the business (again, this aspect is especially pronounced in family-run firms). Poor entrepreneurial succession can result in financial underperformance, a disrupted flow of operational activities, problematic decision making (such as indecisiveness and over-eagerness), employee insecurity and turnover, departure of management, and so on. In general, entrepreneurial succession has the potential to create an internal organizational environment of risk, vulnerability, and conflict. Succession is a form of organizational change and it can create stresses in the entrepreneurial firm's structure. In fact, evidence suggests that the departure of the founding entrepreneur can contribute to an entrepreneurial firm's mortality.

Successions in entrepreneurial firms and multinational corporations

It is worth noting that succession is perceived to be more complex in entrepreneurial firms than in corporations (we define corporations as business organizations which are infinitely larger than entrepreneurial firms in terms of revenue, profitability, cash flow, and employment; they are often multinational and multidivisional). Some differences also exist between successions in family and non-family entrepreneurial firms. See Table 14.1 for a detailed comparison of entrepreneurial firms and corporations from the perspective of succession.

In a corporate setting, there is usually a well-developed management team across all functional areas of the business. Functional managers have many years of professional experience and have been exposed to various internal and external economic conditions throughout their professional careers (i.e., turnarounds, restructurings, various economic cycles, business closures, and liquidations); they have also been exposed to different industries and have assumed multiple roles (i.e., employees, managers, directors, department heads, and so on). In comparison, the talent pool in entrepreneurial firms is generally shallower; this is especially true for family entrepreneurial firms, which tend to rely on family members to fill important posts in the organization. Moreover, many entrepreneurial firms tend to be centered on the founder, who may or may not have the foresight to develop a more complete management team. Many entrepreneurial firms rely on a business model based on a "solo genius" entrepreneur. When the founding entrepreneur finally realizes the benefits of professionalizing the entrepreneurial venture, it may be quite late in the entrepreneurial firm's

Table 14.1 A comparative analysis between corporate and entrepreneurial succession

<i>Business characteristics</i>	<i>Larger corporate structures</i>	<i>Entrepreneurial firms</i>	
		<i>Non-family-based</i>	<i>Family-controlled</i>
Leadership	CEO + team	Entrepreneur	Entrepreneur + family
Availability of team	Yes	Maybe	Less
Succession process	Well understood and established	Weak	Non-existent (and poorly understood)
Availability of suitable successors	Many	Some	Few
Corporate governance	Well established, adhered to, and respected	Moderate, but acceptable	Weak
Ownership	Widely held	Founder-based	Closely held

development process. There are at least two problems with professionalizing the entrepreneurial firm. First, many entrepreneurs have difficulty endowing professional managers with decision-making powers. This is often related to trust (this dilemma is especially pronounced in family firms). Second, some entrepreneurs find it difficult to accept that professional managers may require a higher salary than the entrepreneur is prepared to pay (market salaries for functional area managers often range between \$100,000 and \$150,000).

The succession process in the corporate environment is generally well understood. Corporate managers view succession as part of the natural evolution of corporate life. Managers are normally familiar with the succession process and have likely seen it unveiled at multiple levels of the corporation. Most managers understand that succession involves multiple steps and that the successor is likely to need additional formal or informal training, must complete numerous assignments before assuming his or her desired post, and that he or she needs to compete with other capable managers for the job. Typically, corporate managers have already been involved in succession planning or have gone through actual successions themselves (whether they have been successful in bidding for their superior's post or not). Some corporate managers obtain exposure to participating in successions at the highest level of the organization; they have been "groomed" to assume the top or one of the top positions in the organization. Moreover, succession is one of the key issues considered by the board of directors and is "constantly" on their agenda. Conversely, in the entrepreneurial ecosystem, the succession process is poorly understood. Entrepreneurial succession most commonly arises when specific technical aspects of taxation and estate planning emerge. Entrepreneurs rarely understand the multidimensional and complex nature of succession planning. For many entrepreneurs, succession is postponed or entirely neglected because it is likely to involve difficult family issues that have to be resolved. Of course, many entrepreneurial firms do not have formal boards of directors or informal advisory boards; hence, limited discussion occurs around the issue.

As we noted earlier, the existence of a larger talent pool in corporate structures makes the succession process much easier in comparison to entrepreneurial firms. Corporations normally have multiple managers with different skill sets, professional experience, and educational backgrounds who may potentially take over the superior's job in a short time frame. Most corporations also have sufficient depth in the managerial pool to successfully replace the CEO position. While from time to time corporations choose to appoint an external CEO, they often conduct a thorough review of their executive pool before turning to an external candidate search (as we noted earlier, internal successors are generally more successful than external appointments). In comparison, entrepreneurial firms may be forced to choose a successor from a suboptimal talent pool, especially if the founder has not been particularly active in professionalizing the management team over the years (in such a scenario, an external candidate may be required). Evidence suggests that the availability of suitable successor candidates in family firms is problematic.

Corporate governance functions are often interconnected with the firm's ownership structure. Larger corporations normally have multiple shareholders such as private investors, institutional investors, endowments, foundations, and so on; these are often sensitive to the instillation of appropriate corporate governance structures and systems in the corporation. Of course, public corporations are subjected to the most strict corporate governance regulations. As we noted in Chapter 12, there are multiple areas in which corporate governance can fail within entrepreneurial firms. The four broad categories of corporate governance where significant issues tend to arise include conflicts of interest, the board of directors, information disclosure, and ownership and rights.

The components of entrepreneurial succession

Entrepreneurial succession is often perceived as a “Three-Circles-Model” that comprises ownership, family, and management. However, the Three-Circles-Model only provides a partial depiction of entrepreneurial succession; we offer to expand this construct by adding three additional layers of complexity: governance, leadership, and emotion. All of these components (ownership, family, management, governance, leadership, and emotional successions) can be viewed as distinct problem ecosystems. Of course, a non-family entrepreneurial succession is likely to be less complex given the lack of direct involvement by the family in the business (some family-related issues, however, do not entirely disappear in non-family firms). Please note that in the six component framework of entrepreneurial succession, we separate management and leadership functions. Such a distinction stems from the fact that many entrepreneurs choose to actively work in the entrepreneurial business in a day-to-day functional capacity while maintaining a decision-making and leadership role in the business; this dual role is perhaps the most classic owner-manager structure. Sometimes, the two roles are interwoven and the entrepreneur migrates between one function and another.

We will next discuss each of the specific components of entrepreneurial succession.

Ownership succession

This refers to the methods and means of transferring the legal title in the entrepreneurial firm (or, simply put, the movement of shares). The basic question in ownership succession is: Who will own the shares? Who has the power in the organization? An ownership stake may be sold or transferred to family members, deposited in trust, or sold to interested buyers (i.e., business angels, individual investors, business partners, employees and managers, strategic investors, public markets, and so on). At the core of ownership succession is taxation planning and optimization. However, ownership is not only an equity-based orientation; it is also psychological and emotional (this is discussed more in the next section).

Emotional succession

The act of passing the family baton often represents an emotional rollercoaster for the founder; a range of emotions are felt, such as attachment, guilt, euphoria, freedom, and happiness. In short, succession is emotionally charged and exposes the founder emotionally. Engaging in entrepreneurial succession has overwhelming emotional and psychological implications for the founder. This is for a variety of reasons. First, letting go (or achieving a “clean break” from the business) can be difficult, especially if the entrepreneurial firm is successful and the self-esteem of the founder is wrapped up in the business (business ownership can be an important source of self-esteem and self-worth) – the entrepreneurial venture effectively becomes an augmentation of the entrepreneur’s self, recognition, and identification. Second, through their entrepreneurial ventures, many founders articulate what is important and meaningful to them. Their identification with the business is so strong that many entrepreneurs refer to their firms as their “baby” – the business often represents the largest asset an individual owns. The more successful the business (which often brings with it prestige, status, adoration, admiration, respect, social stature, and recognition), the more challenging the task is of allowing someone else to lead the business and take over the winnings. After all, the entrepreneurial firm often carries the founder’s name, personal

identity, and values. Hesitancy towards and resistance to succession can derail the succession transition. Third, the founder has to balance personal desires and needs with those of the business and the family; satisfying everyone is a difficult job. Fourth, many entrepreneurs are often surprised to discover that their children do not want to continue with the family business. Parent–child relations can become strained well before considerations for business succession begin, and negative emotions from early childhood may make it impossible for a son or daughter to consider working with the parent/founding entrepreneur in the family business. Parents are often control-oriented and this kind of relationship with their children tends to continue in the business setting; when teenage children have fought against their parents' rules for years, they do not typically wish to extend such battles into their adulthood. Last, money and the emotions surrounding succession can run deep and silent for years.

Governance succession

Corporate governance refers to the nature of interconnection between management, shareholders, and the board of directors; it is the manner (i.e., systems, processes, and procedures) by which entrepreneurial firms are run, directed, and controlled. Corporate governance typically involves four main components: information disclosure, conflict of interest, the board of directors (and informal advisory boards), and ownership and rights. Governance is an important component of value creation. About a third of all entrepreneurial firms do not maintain any board of directors or advisory boards. As noted in Chapter 12, corporate governance challenges in entrepreneurial firms are not static, but dynamic; they evolve as the entrepreneurial firm maneuvers through various developmental phases. Over time, these challenges may ease or worsen. The normal course in the evolution of corporate governance is that entrepreneurial firms are likely to experience significant corporate governance challenges early in their development. These disputes are addressed as entrepreneurial firms undergo maturation, as external financing is obtained, as professional managers join the firm, or as the function of the board of directors is brought in line with its desired purpose.

Leadership succession

Leaders in entrepreneurial firms can have an extraordinary influence on the fortunes of the business. Strong leadership can ensure continued business survival (especially in the early stages of development), strong expansion, and continued future success. This, in turn, can translate into significant revenue growth, sustained profitability, high business valuation, and successful divestment. Above all, the founder's leadership means being at the center of the decision-making structure in the entrepreneurial firm. Leadership succession is perhaps most important to the venture because choosing the right leader is likely to influence the entrepreneurial firm's performance and value in the long term.

Family succession

The family system is made up of parents, siblings, spouses, children, nieces, nephews, and more distant family relationships. Family succession is one of the most complex matters to address in entrepreneurial succession, especially when familial influences penetrate deeply into the management, ownership, and leadership fabrics of the family-controlled firm (please note that all components of our model are heavily influenced by the family component of

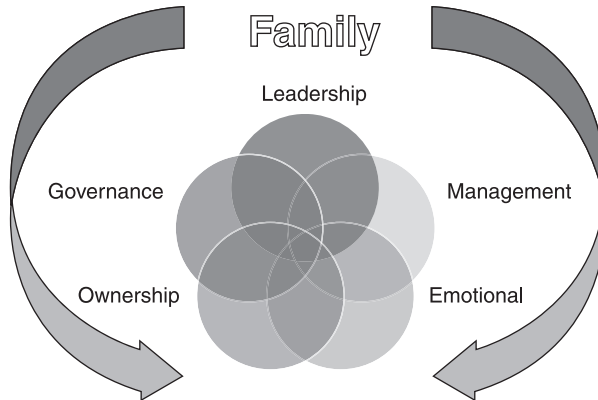


Figure 14.1 Types of entrepreneurial succession in an entrepreneurial firm

entrepreneurial succession; this is represented by a ribbon in Figure 14.1). Family-controlled firms can be affected by sibling rivalry, fiscal irresponsibility (mixing business and family affairs), unfair promotional practices (promoting family members), conflicts of interest, nepotism, and so on.

Management succession

Most firms are organized around functional areas (i.e., accounting, human resources, marketing, finance, operations, and so on). Founders, in addition to providing general leadership and decision-making functions in the business, may also oversee specific functional areas of the entrepreneurial firm. This dual role is common in many entrepreneurial firms. In family firms, functional areas are often occupied by family members who may or may not continue with the operation after the founder departs; sometimes the decision about whether or not to stay relates to the nature of the ownership transfer (whether shares are transferred to friends and family or to outside investors). While the family may be content with family members continuing in a management capacity, external investors (or even family members who are not involved in day-to-day operations) may see this as excessive nepotism and instigate the professionalization of the business beyond just family members.

The sequence of successions

Successions in the six components do not occur simultaneously, nor do they occur in pre-orchestrated or predetermined steps; instead, they may overlap or be sequential. Successions can take a short interval of time to emerge or a long period to resolve. They are business-oriented, family-driven, and situation-specific. Figure 14.2 outlines some general trends and likely patterns of development.

There are three triggers for succession discussions. The first trigger is usually the maturation of the founder; the succession issue emerges because the ageing founder may wish to take some time off from work, put in fewer hours in the business, devote time to a hobby, or other reasons. Succession, of course, can also be instigated by the founder's disability, sickness, incapacity, or death. Another succession trigger is the need to professionalize the entrepreneurial firm; in this scenario, professional managers are employed

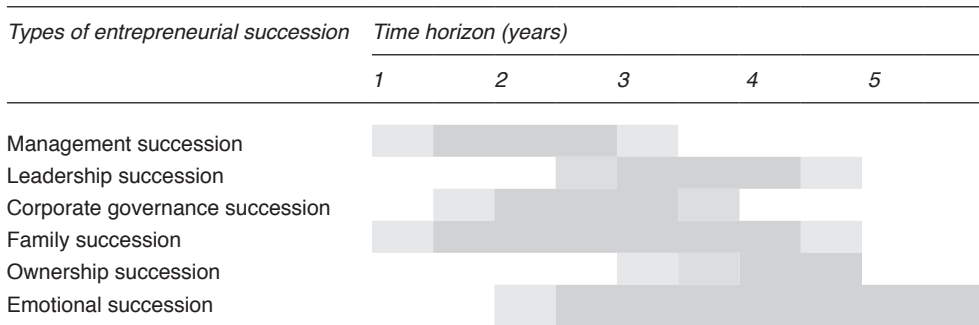


Figure 14.2 The likely sequence of entrepreneurial successions

and slowly take over the day-to-day responsibilities previously performed by the founder. The third trigger of succession discussions involves children or other family members (who may also be co-owners of the venture) becoming more involved in the business and seeking additional responsibilities and decision-making authority; they are ready and willing to take over the business. It is important to note that the founders are unlikely to raise the issue of succession so long as they believe they are still in their prime.

While over time the founder will reluctantly allow professional managers or family members to take over some of the functional areas of the business (and to make some routine business decisions such as procurement, interactions with clients, and new business generation), the founder is usually not ready to stand back and relinquish power over key strategic decisions (such as geographic expansions, new product development, mergers and acquisitions, new partnerships, or additional debt raising). Even if the founder names and appoints a successor, the actual act of passing on the “leadership wand” is typically met with the founder’s deeply ingrained internal resistance. Letting go of decision-making power and the leadership role in the entrepreneurial venture can take a long time for the founder to accept and internalize.

Change in the management structure often causes the founder to reach for external assistance. Such external aid normally comes in the form of involving business people known to the founder to assist in organizational change and professionalization; hence, a formal advisory function in the entrepreneurial business is founded. If the entrepreneurial firm already has a board of directors (which has mostly likely been composed of the founder’s friends, family members, sports buddies, and so on), the founder is likely to look to change its composition. When changing the structure of the board of directors, the founder often looks for external advisors. Over time, informal advisory boards or a formal board of directors become composed of individuals who are not considered a part of the founder’s intimate circle of “friends and family”; they are independent, unrelated to the founder, more objective, and more critical. Often, founders actually enjoy their interactions with this external board, as the tough questions raised by the board can elevate the business to another level of development. Such interactions can prove invaluable to the founding entrepreneur at both the strategic and operational levels; the founder may wonder why he or she did not construct a proper board earlier.

Appointment of a new board or renewal of an existing one are among the most critical catalysts for change in corporate governance practices (of course, corporate governance changes can be instigated by the founder without any cue from the board, but this rarely

happens). Once an appropriate board has been installed, the board is likely to illuminate some of the problems related to corporate governance within the entrepreneurial firm (these may include conflicts of interest, related party transactions, financial disclosure, inappropriate mixtures of personal and business matters, and so on). All issues are then systematically addressed by the founder. Corporate governance changes begin on at least three critical fronts. First, modifications are made to information disclosure (financial and non-financial alike). At the outset of the entrepreneurial venture, the founder practices holding information “close to his chest.” Financial information is closely guarded and even the most senior non-family managers (and some family members) are not aware of the financial standing of the firm. This non-inclusive orientation begins to change when the external board has freer access to financial and non-financial information. When it becomes comfortable for the founder to share information around the board of directors’ table, it begins to feel more natural to share it elsewhere (i.e., with management, employees, family members, and the public). Moreover, disclosing information often triggers the process of gathering, organizing, and analyzing information in a systematic manner – this, in turn, creates the cornerstone for more robust decision making inside of the entrepreneurial firm (higher-quality decisions are made on the basis of higher-quality inputs). There is also a push for increasing the reliability and accuracy of information, especially relating to financial disclosure (for example, through financial audits). Second, the board of directors is normally quick to point out multiple areas of conflict of interest (especially in cases where family and interpersonal relationships exist). Such areas may include self-dealing, using business property for personal use, extending false employment, employing unqualified family members, cross-subsidizing businesses, and so on. This area of corporate governance normally requires the most profound changes. Third, the founder may review the ownership structure of the firm and become more mindful of the power of ownership as an incentive mechanism to align interest between the founder and the firm’s employees, managers, and family members. If the entrepreneurial firm is closely held by the founder, the founder may look to extend ownership rights to key employees. The most common model is when employees become “interim” shareholders of the firm because they are expected to sell shares (or surround them for redemption by the firm for cash) upon completing their employment tenure with the venture (upon a pre-agreed exit mechanism). This also increases the founder’s sensitivity to minority shareholders’ rights. If the ownership structure is widely spread across partners and family members (especially if these stakeholders are difficult to manage), the founder may attempt to consolidate his or her holdings through a buyout to make strategic decision making more convenient.

Ownership succession and emotional closure are the last two successions the founder is likely to deal with. While the ownership issue can be resolved more expeditiously in the event of the founder’s death, in the normal course of entrepreneurial development the founder is likely to hold on to decision-making and ownership rights for as long as possible (the exceptions are serial entrepreneurs, who regularly establish entrepreneurial ventures, create value, and divest); this is typically driven by the founder’s need for control. A change in ownership or the actual sale of the business can take some time. A low offer to buy creates reluctance to divest and anxiety about the immediate future. Divestment anxiety is further aggravated if the founder does not have any successors (be they family or otherwise) who could conceivably lead the business until new and improved purchase offers emerge.

The last resolution to the succession process is emotional. Emotional anxiety begins to elevate at the moment when founders begin to distance themselves from day-to-day operations, allow other individuals to make key business decisions, and consciously

contemplate their mortality. The actual sale of the business rarely brings closure to the founder's emotional rollercoaster. For some time into the future, the founder is likely to second guess on a variety of issues: whether he or she sold the business at the right time, whether it was sold at the optimal price, whether he or she should have appointed another person as a successor, and so on. Unfortunately, these issues are rarely resolved and settled by the founder in a timely manner.

Succession in non-family-based entrepreneurial firms

As noted earlier in the chapter, we make a distinction between non-family and family-controlled entrepreneurial firms. In this chapter, due to their complexity, our focus is predominantly on family-based firms. Family firms are entities where family and business interests may diverge, successor rivalries emerge, unique familial values exist, intergenerational issues may surface, inter-family disputes and feuds may erupt, and estate and inheritance issues (including taxation) may derail the best of transition plans and intentions. In this section, however, we briefly focus on non-family firms and some of the unique challenges they face.

Non-family entrepreneurial firms generally deal with a less complex succession environment. More importantly, the founder does not have to consider complex family issues such as family staff (employees and managers), family successors, and family stakeholders. Of course, family becomes an important consideration when the founder of the non-family entrepreneurial firm contemplates a change in ownership; the founder must deliberate and decide upon who will receive ownership of the business. Although the absence of the familial component removes a significant burden and anxiety, the founder must still deal with the other remaining components of succession: leadership, management, ownership, governance, and emotional successions.

If since the inception of the entrepreneurial firm the founder has believed in the principles of building a sound management team, he or she will have likely built a professional management team over the years. The founder will also have invested in employee and management training, promoted managers from within the entrepreneurial firm (and allowed them to assume more decision-making responsibilities), provided multiple incentives through reward systems (including bonus structures and ownership schemes), and built and developed appropriate organizational infrastructures and systems. In short, the founder will have laid the required building blocks for management and leadership succession in the future. It is important to note that through management development, the founder can effectively address two major components of succession, namely leadership and management. If, on the other hand, the founder neglects the development of the management function, leadership and management successions may become difficult to contemplate and almost impossible to implement.

Again, the development of succession in the area of corporate governance depends on the orientation assumed by the founder. If the founder has focused on the principles of corporate governance as described in Chapter 12, he or she will have prepared his entrepreneurial firm for gathering market intelligence in a systematic manner, for developing internal systems of financial reporting, for dealing with conflicts of interest when they emerge (or before they crystallize), for addressing performance enhancement, and for focusing on value creation. The founder would also have appointed a board of directors comprising external members and perhaps established an informal advisory group for less formal considerations.

The emotional succession in family- and non-family-controlled entrepreneurial firms is likely to be the same for all entrepreneurs with respect to the intensity, diversity, and multiplicity of the emotions experienced; hence, no specific discussion here.

A distinguishing feature of non-family entrepreneurial firms is ownership succession. As mentioned earlier, if the founder has focused on the development of the management team, the ownership change can effectively occur much later in comparison to the leadership and management successions (the founder can step outside of the entrepreneurial firm). When the founder releases leadership and management controls, he or she can assume a backbench position in the entrepreneurial venture and become a silent “observer” of the business rather than a direct participant in it (i.e., the entrepreneur becomes chairman of the board of directors). The entrepreneurial firm can operate in this manner for some time when leadership and management successions are in progress or have been completed, but the ownership succession must still be resolved. Such a construct can be effective if the founder inserts an appropriate incentive and monitoring structure within the entrepreneurial firm.

In non-family entrepreneurial firms, we presume that the founder does not have children or that the founder’s children are not interested in the entrepreneurial business. The founder may also not have any family members interested in business ownership or perhaps prefers a non-family ownership structure for the venture. The founder may be the sole owner of the business or have business partners, who may be active in the business alongside the founder or non-active and willing to purchase the founder’s equity stake at an appropriate moment.

If the founder has other business partners, ownership succession may be discussed at the point in which the constitutional documents of the firm (i.e., articles of association, deeds, trust agreements, and so on) are drafted or when the shareholders’ agreement is struck. If succession considerations are discussed early with the founder’s business partners, the group can anticipate a change in ownership in the form of a pre-orchestrated purchase and sale agreement wherein price considerations and sale mechanisms are pre-agreed upon. The most common arrangement in most shareholders’ agreements is that other business partners have a right-of-first-refusal on shares being offered for sale by the founder. Partners may also enjoy a put-and-call arrangement. A call option gives an individual the right to buy, while a put option gives an individual the right to sell (in other words, the other party is required to buy the shares if the put option is exercised). Business partners may also agree upon a mechanism by which to value the entrepreneurial firm (for example, the firm may be valued on the basis of a calculation involving historic earnings before interest, taxes, depreciation, and amortization [EBITDA] numbers) – such a mechanism can become part of the put-and-call arrangement or a separate agreement.

If the founder has no business partners, then the most common method of succession is to establish a legal trust which then assumes ownership of the business; this provides decision-making powers to a trusted person (i.e., a lawyer, accountant, or trusted colleague) who will then deal with ownership concerns and tax and estate issues. A trust mechanism can be put in place for the purposes of the founder’s incapacity, disability, or death, but also for other circumstances. The trust agreement may require the trustee to sell or liquidate the business upon a condition precedent, which triggers a liquidity event or other actions. In some cases, the founder anticipates that a portion of his or her ownership stake is transferred to employees while the family retains a portion of the business.

Of course, the most common closure of the ownership issue involves the sale of the entrepreneurial firm. We discussed this option in more detail in Chapter 13.

Succession in family-controlled entrepreneurial firms

Until this chapter, we have not specifically focused on familial entrepreneurial capitalism. We define family-controlled firms as business entities where more than one family member is either working at or holds ownership in the firm. On a macro scale, family-controlled entrepreneurial firms are critical to many economies around the world. Family-held firms are estimated to account for approximately 50–60 percent of the gross domestic product and 60–80 percent of employment around the globe.

It is important to highlight upfront that the rate of successful entrepreneurial successions in family-controlled firms is poor compared with what one may generally expect. It is estimated that only around 30 percent of family-controlled entrepreneurial firms survive the transition to the next generation. Approximately 10 percent of family-held firms make it to the third generation and less than 5 percent to the fourth generation. Such a low success rate is captured by colloquial business proverbs such as “rich father, noble son, and poor grandson” or “shirtsleeves to shirtsleeves in three generations.”

Before we consider specific issues related to intergenerational succession, let’s review the overall challenges and complexities faced by family-controlled entrepreneurial firms. First, in many family firms, family members have typically been appointed to management positions. While not a fatal flaw on its own, nepotistic employment practices can exacerbate the competitive disadvantages of family ventures in the marketplace over the long term. Such practices may also crowd-out non-family managers who may be more qualified or better suited for senior management positions (these individuals are often passed over for promotion). Many firms prefer to employ family members ahead of higher qualified non-family candidates (“bloodline” and birthright ahead of others’ competency, merit, and other skills). Family firms are especially sensitive to trust and agency issues (hiring outside managers creates agency issues). There is often a distrust of outsiders within these firms that has been “cultivated” over the years. Moreover, family employees and managers are often better compensated than other employees in the firm, often above comparable market salaries. Many family members may even receive compensation without actually working for the family firm. Second, corporate governance is often poorly instilled within the fabric of family-controlled entrepreneurial firms. Family welfare often blurs with business interests; this creates a business environment ripe for conflicts of interest, related party transactions, personal benefits, and so on. Family-based firms rarely depend on external advisory functions, and the formal board of directors is often made up of family members. Third, family-controlled firms generally struggle with access to finance (i.e., equity and debt); consequently, they tend to rely on their own financial resources ahead of external capital. External funders are sensitive to the complexities of family-controlled firms (i.e., compromised corporate governance, weaker financial disclosure, etc.). Last, family-held firms may suffer from significant interpersonal conflicts (this is discussed further later).

Family-controlled firms also see many benefits. Members of family firms tend to exhibit a high degree of loyalty and trust to each other and to the business. Family members can be more passionate, enthusiastic, and committed to the venture than non-family operators, and may perceive their family-held firm as a means of creating a durable legacy, of communicating personal values, of generating money, and of establishing training and employment opportunities for a younger generation. Family firms also rely on more informal internal organizational structures, creating a work environment that is more personable, friendly, and co-operative. “No-blame” policies are often adopted as a means of organizational learning. Employees in family-controlled firms are often cared for and treated as extended family; this

treatment often translates into a loyal and committed labor force. Families also tend to be more patient business operators and investors; hence, their business objectives may be more balanced as the operational and financial performance of the business are less affected by short-term financial goals and aspirations. Long-term objectives to the benefit of the entire family tend to be more important to these firms (of course, this depends on the actual mode of involvement of family members in the venture – we discuss this problem in more detail later in the chapter). Last of all, family-controlled firms are more involved in their communities and participate in a greater amount of philanthropic activities.

So, what are the key problems with intergenerational transfers? The most common problem occurs when the founder's children (who are often considered to be the most natural successors) are not interested in the family entrepreneurial venture (only about 60 percent of children wish to continue operating a family business, with less than half estimated to be in a position to do so). Simply put, the children's professional interests and passions do not lie with the family business. This represents a dual problem. For the founding entrepreneur, who often wishes for the business to continue as a family operation with vigorous family involvement (a majority of founders express a desire for continual family ownership), it can be difficult to acknowledge that the business is not of interest to his or her children (it is not uncommon for parents to create incentives for children to consider working in family-held firms). The founder's children may also anticipate problems interacting with the parent as a business owner or see a difficult road ahead to effectively transition to the helm of the family firm. A lack of interest can also develop after the children are "sent" to a business school to obtain formal business education with the intention of continuing the family firm. For the founder's children, it can be difficult to admit that they are not interested in the business, or simply do not want to succeed the parent in the venture. The extension of this argument is that if the offspring's interest in the business is low, they are often interested in cashing out from the business as quickly as possible. Of course, even if children were interested in the business, they may not be suitable candidates for the job; they may be incompetent, unprepared, or lack business judgment. Furthermore, intergenerational transfers are often compromised by a lack of formal planning. Succession plans are often non-existent in family-run firms (about 50 percent of family-controlled firms do not have any succession plans). If entrepreneurs actually plan for succession, they tend to focus on "technical" aspects of intergenerational transitions such as tax optimization, estate planning, family trusts, buy-sell agreements, and so on – limited attention is paid to the other components of succession planning. Evidence suggests that a lack of succession planning in a family-run firm often reflects poor communication in the family. Finally, inter-family rivalries may develop over ownership, management, leadership, and decision making.

Effective entrepreneurial succession

Although there are no foolproof strategies to set up effective succession for a family business, there are certain things that entrepreneurial families can do to perpetuate their ventures. First, the family firm needs to be built on sound business fundamentals. Before a successful transition can be contemplated, the business itself has to be successful. This means that the entrepreneurial venture must be built on the principles discussed in Chapter 3; priority should be given to management, margins, the business model, and so on.

Second, family-controlled entrepreneurial firms need to align the interests and obtain the buy-in of key family members and non-family stakeholders; any entrepreneurial perpetuation needs to create a win-win situation for everyone. Key issues for families include determining

the significance of continuous family involvement, the financial needs of retiring family members, and the business goals of the next generation. This requires constructive compromise because “what’s good for the family may not be good for the business.” Aligning interests also means extending ownership to loyal and committed non-family management and staff through an employee stock option program (ESOP).

Third, the best succession plans (including transition plans) are written and documented. Explicit decision-making processes are established wherein successors are clearly identified and given the blessing of the founder (well before the departure of the founding entrepreneur) while family members are provided with specific tasks. The act of passing the leadership baton must be actual rather than symbolic. It is important to note that succession plans must also be included in the business plan. Of course, the best plans emerge when they are created early, without pressures to appoint an interim successor and pay tax. Part of succession planning should involve “grooming” by giving the founder’s successor increased challenges, responsibilities, and decision-making powers. Since entrepreneurial succession is unlikely to be a single event in time (succession is generally not clearly delineated by a single event), the selected successor should begin to apprentice in a new role well ahead of the actual departure of the founder; three to five years is often quoted as the most optimal time frame for succession. The ultimate goal is for the successor to assume the founder’s duties singlehandedly, without hand-holding from the founder. It is important for firms to allow the successor to participate in key business decisions over an extended period of time. While the successor may not initially have an active vote in decision making, he or she can participate in the process as “an observer” with a progressively increased voice at the decision-making table. Another effective way to “groom” is to allow the successor to participate in key business meetings with clients, suppliers, employees, managers, financial institutions, government agencies, and other business contacts. This process establishes the credibility of the successor and allows for the internal and external stakeholders of the firm to accept him/her. Another effective grooming strategy is to “rotate” the successor around the venture so that the successor obtains exposure to different functional areas of the business, business units, and geographic locations. Some practitioners also suggest that it is important for the successor to work outside of the family-controlled firm for some time; this can enhance the successor’s range of experience and establish credibility within the family firm. Last, it is important to note that founders with higher education are more likely to engage in formal succession planning.

Fourth, founders must be mindful that family members (and children) do not always make the most optimal successors; they may lack skill, passion, creativity, enthusiasm, business stamina, an educational background, business experience, and so on. Family members should be able to “prove their worth” before advancing in the family business, and should compete with non-family employees for advancement on an equal basis. They should also have “something to lose” rather than only having something to win. Evidence suggests that successors who have spent time within the family-held business and make “emotional” and behavioral investments are more motivated to perform well in family-held firms. Family members who have made a meaningful behavioral investment are known to value the family business higher (compared with others who do not have these “personal sunk costs”) and are less likely to dispose of their shareholding in the business or sell the business outright. Of course, if there is no viable family successor, the founder should opt to reach for managers from outside of the family.

Familial and intergenerational conflicts

Family-controlled firms often become entangled in interpersonal, intergenerational, and value-driven conflicts which can destroy family unity and harmony. The involvement of many individuals and multiple personalities can provide a fertile environment for conflict. Conflicts are often fueled by incompatible expectations, goals, views, values, and objectives. Although conflict is a normal part of any family dynamic, it can result in dysfunctional behavior that may be destructive and debilitating to a family-held venture. If personal conflicts already exist within the family, then family interactions within a family-held business can accentuate these even further. In short, family conflicts can significantly contribute to an entrepreneurial firm's premature mortality.

Conflicts typically arise within family-controlled businesses along two main avenues: the nature of the family member's involvement in the family venture (employment versus no employment) and ownership (an equity stake in the firm versus no ownership stake). Family members often participate in family-held businesses as employees or managers (without holding an ownership stake in the business). As they do not have any direct equity participation in the business (and no resulting financial reward accruing from ownership), they are likely to be most interested in the stability of the business. The primary concern of most family employees is job security, compensation, and career advancement. They also view themselves as the most suitable candidates for advancement or even succession. Evidence suggests that family members generally perceive and experience the highest amount of work-family conflict because they are direct participants in the venture, without any direct reward system or decision-making power. A higher percentage of family members working for the family business often translates into a higher probability of family conflict (physical proximity to and interactions with other family members involved with the business generally contribute to conflicts).

Family members who are employed by the family-controlled business and have an ownership stake in it are likely to perceive their personal and professional situation differently from family members who are simply employed by the business. On the one hand, they have higher sensitivity to business issues affecting the family firm because they have a dual financial interest in the business (employment and ownership). On the other hand, if the family business is performing well and no apparent business risks are on the horizon, family members may be content to participate in the business, collect a salary (perhaps without any need for advancement), and materialize their benefits from ownership (i.e., dividends).

Some family members are not directly involved in the day-to-day operations of the business, but maintain an ownership stake in it. The objectives of these family members tend to be strictly economic and centered on financial returns and value maximization. If the family business pays dividends or other forms of financial compensation, which is commensurate with their expectations and financial needs, then the family members may be content to support the status quo. However, if no regular benefits of direct ownership accrue, they may become impatient and press for divestment of the business or for buyout of their shares. The most common area of conflict for these family members arises because of a common business trade-off between dividends and investment; if the firm invests more, less cash is available for dividends. Their direct antagonists become family members who do not have an equity stake in the business, but would like to see capital invested in the firm.

Another distinct group of family members are those with no direct employment or ownership stake in the family-held business. These individuals often act as family stabilizers who are primarily concerned with family harmony, unity, and fairness. These family

Table 14.2 The role of family members in the family business and their ownership position

Stakeholders	Ownership	
	Yes	No
Manager/employee (non-family members)	Business growth Career advancement Compensation Dividends	Job security Career advancement Compensation Business perpetuation Successful succession
Manager/employee (family members)	Business growth Career advancement Compensation Dividends Financial returns	Transfer of ownership and management Career advancement Compensation
Independent owners (non-family and non-operational)	Financial returns Value maximization Professionalization of operations Ongoing benefits (i.e., fees, dividends, etc.)	N/A
Family members with no direct operational involvement	Financial returns Dividends Value maximization Being bought out	Family harmony and unity Fairness

members are often consulted when family conflicts erupt because they are considered to be more objective (not having any decision-making power in the business). Their typical mode of operation is moral persuasion.

Table 14.2 provides an analysis of the various concerns expressed by family members in different professional and personal situations.

Parental relationships can also yield challenging interpersonal dynamics and conflicts. Parents have a profound impact on their children, helping to shape their value system, personality, behavior, goals, and aspirations. During their development process, children simultaneously identify with their parents and wish to assert their independence and individual traits. Parent–child relationships are often binary; children either adore their parents or strongly rebel against them. Of course, parents often exhibit a tendency to shape their children in their own image. By the time the child reaches their early twenties, the parent–child relationship has often stabilized and matured. But the early parent–child interaction dynamics are already pre-programmed into the child’s behavior and strong associations (positive or negative) exist. Of course, being involved in a family business complicates parent–child interactions and, ultimately, the development of children. Children of busy entrepreneurs constantly struggle for their parent’s attention in competition with the business. They also interact with potentially powerful “ego structures” and may have problems establishing and asserting their own independence. This can make children conservative, submissive, timid, and unsure.

Table 14.3 provides an overview of some of the most common parent–child relationships seen in family-controlled entrepreneurial firms. None of these relationships are particularly effective in entrepreneurial successions. Perhaps the most devastating is the “iron-fist parent → submissive child” succession construct. In this case, a heavy-handed parent, whose

Table 14.3 Founder/child characteristics as a predictor of intergenerational succession failure

	<i>Succession complications</i>	<i>Probability of succession failure</i>
Iron-fist parent → submissive child	Inability to transition power and leadership to successor Successor may never be good enough Limited delegation Founder unable to “groom” successor Founder frequently undermines successor Employees are loyal to the founder, not successor Successor has limited power to exercise own initiatives	High
Status-quo parent → progressive child	Conservative business practices implemented by the founder prevail While enjoying some independence, successor is strongly monitored and second-guessed Successor is “mandated” to maintain operational and financial status quo Successor’s education and ambitions for change become a source of intergenerational conflict	Medium
Conservative founder → rebellious child	Successor aims to reject achievements of founder Successor pushes to implement multiple changes Radical business approach creates employee turnover Customer alienation emerges	High
Successful founder → egotistic child	Successor wishes to leave own legacy and mark on the business Predominant focus is on revenue growth (rather than improving efficiency) Successor aims to achieve objectives through deal making Firm’s financial resources are aggressively used	High

Note:

Developed on the basis of Davis, S. M. (1968) “Entrepreneurial succession”, *Administrative Science Quarterly* 13: 402–16

judgment is never questioned, is effectively incapable of preparing anyone for entrepreneurial succession. The autocratic founder is unable to transmit power and leadership to the successor and the successor is not invited to participate in decision making (dissatisfaction with the level of responsibility and decision-making power is a common source of complaint for successors and can lead to their eventual and complete withdrawal from the role). Moreover, through tyrant-like behavior towards family members, the parent totally disables the successor; the founder is unable to endow the child with decision-making powers, business judgment, know-how, and so on. Minimal trust in the successor, power inequality, and day-to-day family conflicts (which often erupt around the tyrant founder) contribute to a growing resistance between the successor and the founder.

Another succession style, “status-quo parent → progressive child,” is also problematic. Here, there may be limited trust and mutual respect between generations. The parent, not trusting the progressive child, is always likely to look from behind the child’s shoulder; the founder always wants to be consulted on major (and often minor) decisions to make sure that business judgment is exercised consistently with established and “proven” practices. The successor may be groomed for the leadership role in the entrepreneurial firm, “de-groomed” by a suspicious parent, and totally immobilized in the organizational structure. The two generations commonly have problems communicating and any interaction is often characterized by disapproval, criticism, second-guessing, and conflict. The desired withdrawal of the parent does not come quickly and naturally and the successor is unable to assume the desired responsibility. In the best of cases, the parent begins to take time off or works less hours, thereby blurring their responsibility and indirectly facilitating the leadership transition. An expedited transition occurs as a result of the parent’s sickness, disability, retirement, or death.

Another common succession scenario is “conservative founder → rebellious child.” In this case, successors may look to more or less reject all business achievements of their predecessor and try to reform the business. Changes are made for the sake of changes and the contrarian moves are viewed as an act of rebellion rather than deliberate business decisions based on sound research and business fundamentals. The sheer multitude and velocity of the changes can undermine the fundamentals of the entrepreneurial business to the point where the business begins to underperform (initially in terms of profitability, and then revenue). Changes viewed as irrational begin to alienate stakeholders; meanwhile, employees leave, key clients are lost, new business is difficult to acquire, and financiers become unwilling to assist.

Another frequent succession construct related to the “conservative founder → rebellious child” scenario is “successful founder → egotistical child.” In this case, the child assumes a successful and thriving entrepreneurial business, but wishes to take the business to another level at any cost. The objective of the child is to leave a personal legacy, to compete against the parent, and to leave their own mark on the business. Since operational efficiencies are generally difficult to attain, the legacy-driven child typically looks to make an imprint on the family firm by growing revenue. The successor child engages in business deals that allow him or her to increase the entrepreneurial firm’s revenue in the most expedient manner; in effect, the successor becomes a “business deal junkie.” Competing businesses are acquired in the local area, related businesses are acquired in geographically distant destinations, and various suppliers or distributors are absorbed. Strong financial resources within the firm (i.e., cash balances) and strong internally generated cash flows can fuel the successor’s deal orientation for some time. The awakening normally comes during an economic downturn, when multiple units of the business begin to underperform. At this point, the entrepreneurial firm becomes a “spaghetti” enterprise composed of a wide range of businesses that are likely to be totally disconnected from each other. The acquired businesses are often so far removed from the original business core (which was successful in the past) that there may no longer be a single unifying idea to the entrepreneurial business – its composition simply no longer makes sense. Over time, the entrepreneurial enterprise begins to underperform and a change of command is sought to shed unnecessary and undesired “business skin” in an attempt to bring the business back in line with its past successful values. Unfortunately, many entrepreneurial firms run out of time and financial resources before the business can be rescued.

It is important to place these behavioral patterns in the context of the external environment of the marketplace (i.e., competitive dynamics, the nature of the market, the market growth rate, the consumer demands, and so on) and the internal strengths of the entrepreneurial firm. For example, the conservative succession construct (i.e., status-quo parent à progressive child) may be ineffective in a rapidly changing environment, but could prove effective in a scenario where the market is changing slowly (the constant struggles between status quo and progression may result in slow changes permitted by the founder). In this case, the conservative parent pulls towards the status quo while the child pushes for change. What emerges may be a healthy mix of protecting the core business while allowing the child to experiment on the periphery over a longer period of time. This succession construct may also work in instances where limited renewal, innovation, or experimentation are required. Over time, the innovative child may receive increased opportunities to introduce new products and services.

To sell or not to sell a family-controlled entrepreneurial firm

As we noted earlier, evidence suggests that the majority of family-held entrepreneurial firms are unlikely to find a suitable successor. This may inevitably force the founder of the family firm to question whether or not to sell the business. The decision to sell requires careful consideration; hence, our reiteration of the topic in this chapter (please note that we discussed divestment in detail in Chapter 13). Evidence suggests that only about 20 percent of family-held firms will undergo succession while about 80 percent of firms will be sold.

Since the founders of most family-controlled firms consider their children to be their potential successors, it is important to consider two key questions: are the children (or the family) interested in the business? Are they qualified to run the family firm (or run it as well as an outside manager)? If the answer to the first question is no, then the founder should sell the business outright. A family business can be sold to family members, business partners, employees (through a single sale or extended ownership plans), managers, or independent buyers (successful family firms can be attractive targets for private equity firms, business angels, and strategic investors). It is important to note that more mature entrepreneurial firms tend to have more divestment options. If the founder's children are educated, qualified, and capable, the business can perhaps continue to successfully operate as a family-held firm. If there is no qualified successor, the founding entrepreneur may consider employing an outside manager to run the business. Such an external manager can be employed on a permanent basis or as an interim successor until a successor from within the family is ready to assume responsibility for the business. However, appointing an external manager to lead the family business (a scenario in which family members view themselves as capable deputies) is likely to create and inspire resistance on the part of the founder's children (and even employees and managers). Hiring an external leader to run the family firm is likely to necessitate the establishment of appropriate control and monitoring structures to oversee the outside manager; the founder will also want to be involved in the most important decision making. Consequently, hiring a non-family manager to run the business can ultimately hurt the founding entrepreneur and create significant interpersonal and familial stress. The ultimate decision in this case may also be to sell the business. Ultimately, it may be better for the founder to provide his children (or other family members) with capital to pursue their own careers and business dreams rather than have them operate a family business which may quickly become unprofitable.

There are other alternatives to selling the business outright. The founder can potentially split the business if the family-controlled venture operates across distinct business areas, and then sell the pieces off to suitable family members. This would allow for separation of businesses which in the past have operated under “one roof” to avoid duplication of activities (i.e., accounting, marketing, human resources, and so on). The separation of the business by establishing necessary functional areas may, in turn, make separate business units unviable, unprofitable, and unattractive. In a sale to family members, interpersonal conflicts may emerge around the following questions: Which business goes to whom? Which one is more profitable? Who should pay who to compensate for a potentially less profitable firm? A complex business situation may emerge.

The founder can also divest the entire family business to an outside investor as discussed in Chapter 13. A sale of the entire business may occur with the participation of family members. Evidence confirms that about half of all entrepreneurs anticipate that they will sell their entrepreneurial venture at some point in time. A sale may be the most optimal option for the majority of family businesses (especially in view of family business survival statistics).

Another option is to sell the family firm to its managers by way of a management buyout (we discussed buyouts briefly in Chapter 13). A management buyout (MBO) may be defined as a situation wherein an existing management team combines a significant level of debt and small amounts of equity to buy the founder’s equity interest in the entrepreneurial firm. On the other hand, in the case of a management buy-in (MBI), a group of managers from outside of the entrepreneurial firm raise suitable finances (likely relying on significant leverage) to buy the firm from the founder. Both of these management-led transactions may become an important source of renewal for the family firm; they can instill new growth, improve the firm’s operational performance, amplify its profitability, and increase its value. It is important to note that both MBOs and MBIs are highly cyclical as access to debt is generally restricted during economic downturns.

Taxation in entrepreneurial succession

Throughout this book, we have generally opted to avoid discussing issues related to taxation because of the significant taxation differences experienced between various legal jurisdictions. Nevertheless, it is important to highlight some of the general principles which may be common to many jurisdictions.

First, as we noted in Chapter 13, any transfer of property is likely to trigger a capital gains tax (tax authorities normally assume that a transfer is equivalent to disposal). Capital gains represent the profit made when the asset price is higher than the price paid upon disposal. Second, the founder’s death is commonly presumed by the law to be a “deemed disposition” of the business. In other words, tax needs to be settled on the assumed act of wealth transfer at a fair market value of the family-controlled business. This often creates an immediate and real cash impact on the surviving family members, as families are affected with a tax bill (in such a case, the simplest protection is often a life insurance policy). Different legal jurisdictions may provide exceptions to the deemed disposition rule; these exceptions may be available to small business owners, farmers, native peoples, or businesses operating in special sectors of the economy (i.e., film, tourism). Many jurisdictions offer to defer tax with “an estate freeze,” which presents an opportunity to defer taxes by “freezing” the value of an asset for one group of shareholders (such as the founder) while allowing the other group of shareholders (i.e., the successor or other beneficiaries) to profit from an increase in the value

of that asset. This can be accomplished with the use of various legal estate planning techniques such as setting up a trust or assuming a different class of shares in the entrepreneurial firm (i.e., holding preferred shares instead of common shares). Implementing these techniques can be difficult unless there is a thorough understanding of the financial situation of the founder (including any financial aspirations during retirement) and the financial standing of the entrepreneurial firm, as well as the financial means available to settle tax liabilities.

Entrepreneurial perpetuation

Entrepreneurial finance, value creation, and divestment create ample opportunities for future entrepreneurial engagement. Through the continual re-use of cashed-out proceeds by exiting entrepreneurs (or through the use of stock options by employees, which are converted into cash), through the exodus of talented people from successful entrepreneurial firms or corporations, through corporate spin-offs, and through improving access to entrepreneurial finance, individuals become first-time entrepreneurs and existing entrepreneurs become second-time and serial entrepreneurs. Furthermore, over time, entrepreneurs may become investors themselves or build a portfolio of entrepreneurial ventures. These individuals are typically more cognizant about detecting, realizing, capturing, and navigating through new business opportunities. When entrepreneurs re-engage into entrepreneurship through other business ventures (relying on their experience, knowledge, expertise, capital, and business networks), they create a “snowball” effect with respect to business formation and create a culture of entrepreneurship. These continuous activities create wealth and redistribution potential for a larger group of individuals; hence, we term this process “entrepreneurial perpetuation.”

The process of entrepreneurial perpetuation

Figure 14.3 describes the process of entrepreneurial perpetuation. The left part of the graph portrays the individual’s perspective on entrepreneurship. Entrepreneurship is viewed from the perspective of a first-time entrepreneurial entry, a manager or employee working for a firm who contemplates becoming a business owner, or a serial entrepreneur/investor who has sought repeated exposure to entrepreneurial activity. Figure 14.3 outlines three main modes of entry into entrepreneurship from the individual’s perspective, namely starting a new firm, buying an existing operation, or participating in succession (this mode of entrepreneurial entry is most common in family-controlled firms, but is also seen in non-family firms). Of course, a first-time entrepreneur can re-commence their entrepreneurial activities after either business success or business failure. We also consider the nature of entrepreneurial perpetuation. The entrepreneur can continue to be involved in the business and prolong the venture into the future, achieve an exit from the venture, or re-engage in entrepreneurial behavior as a recurring entrepreneur. Of course, for some entrepreneurs, a single good run at entrepreneurship is sufficient. Let’s consider these eventualities (or decision nodes) in more detail.

As noted, individuals participate in entrepreneurial activities from a variety of personal domains and perspectives. Some first-time entrepreneurs become business owners on the basis of an original and innovative idea which they subsequently commercialize. Others may build an entrepreneurial firm around a basic business concept. Some entrepreneurs are self-starters in non-entrepreneurial environments where limited entrepreneurial activity exists,

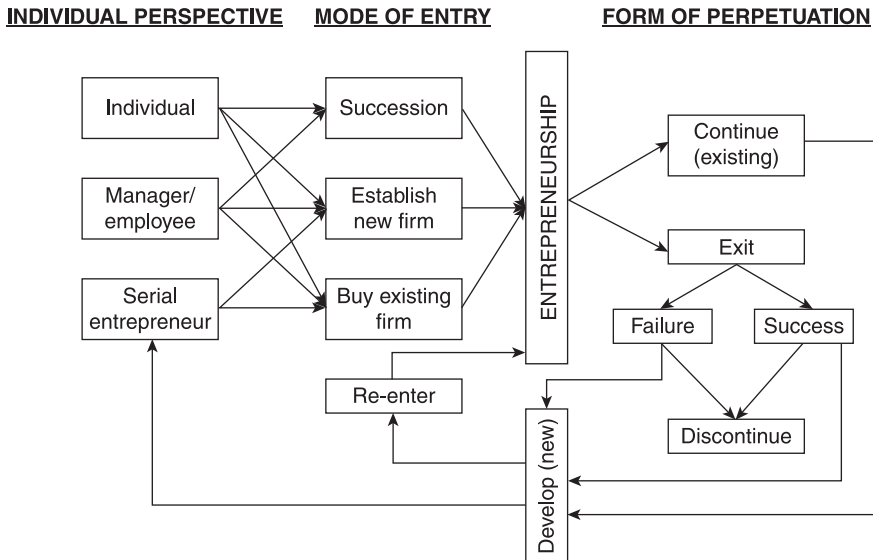


Figure 14.3 The process of entrepreneurial perpetuation

entrepreneurship is not encouraged, and no other successful entrepreneurial firms exist. Other entrepreneurs are more fortunate because they begin their operations in a rich entrepreneurial climate where traditions exist, successes are plentiful, and suitable assistance is available. First-time entrepreneurs generally have three basic modes by which they commence their ventures. The most common mode of entry into entrepreneurship is through new venture formation. Since financial resources are often limited for first-time entrepreneurs, they are less likely to acquire an existing business at the outset (this is especially true for entrepreneurs who have not been able to accumulate any capital in the past). Another route of entrepreneurial entry is through succession if an individual is already part of a family-controlled entrepreneurial firm.

Another group of first-time entrepreneurs may enter entrepreneurship from a different perspective – as managers or employees of larger multinational corporations or smaller ventures. Many of these potential entrepreneurs are well educated, professionally trained, well networked, and experienced. They have also been exposed to the entrepreneurial process, successful entrepreneurs, and external funders (including venture capitalists). Many of these would-be entrepreneurs have significant capital to personally invest or the advanced skills needed to acquire it. Entry avenues into entrepreneurship are similar to first-time (less experienced) entrepreneurs, but the spectrum of entry is more diverse for these individuals; their circumstances may be more unique and/or privileged. Such entrepreneurs may have spent a significant part of their professional careers working at large multinational corporations developing innovative products, solutions, and services and have seen their efforts underfunded, deferred, delayed, or outright stopped. Because large enterprises are highly bureaucratic and may be reluctant to fund breakthrough ideas and entrepreneurial ideas, there is a high commercialization potential for innovative concepts. Additionally, the bureaucratic nature of larger business concerns makes them unable to respond to market requirements in an elastic manner. Disappointment and frustration become the motivation for some employees to commence new entrepreneurial ventures (perhaps alone, but most

likely with other employees). In some cases, these individuals may offer to purchase the actual invention from the corporation they work at (where the invention endows a new venture) or participate in a buyout of the entire department or division from the parent firm (the acquired division can become the basis of new venture perpetuation).

Many would-be entrepreneurs come from slightly different business orientations. As an example, some work for relatively new entrepreneurial ventures that have gone “public.” Many professional managers are unlikely to find their footing working in a public firm, where meeting quarterly financial forecasts becomes a new business focus often at the expense of innovation, invention, freedom, and entrepreneurial spirit. This is not to imply that all publicly traded firms lose these important qualities, but rather to highlight that the addition of public shareholders can be “a game changer” for the nature and mode of operation of the entrepreneurial firm. Discouraged by reporting requirements, an orientation toward short-term financial goals, increased bureaucracy, and restricted research and development budgets, some staff look for suitable avenues to experiment with new products and services. One of the distinctive features of this group of potential entrepreneurs is that they are often wealthier than other comparable groups; some of them have obtained significant capital through stock option programs which can provide more than sufficient means to enter entrepreneurship on one’s own terms. These potential entrepreneurs may also be able to leverage their capital through the involvement of other funders such as venture capitalists. While these entrepreneurs can purchase an existing independent operation as a platform for building their ventures, they are more likely to start new ventures.

Serial entrepreneurs are the most prolific category of entrepreneurial perpetuators (we discuss these entrepreneurs in more detail on the next page). These entrepreneurs pursue entrepreneurial activities through new business formation, purchasing existing operations, buyout situations, and other opportunities. They are less likely to pursue family-held firms.

Once entrepreneurs have participated in entrepreneurial activity, they often come to a point at which they must decide whether or not to continue with the operation or to divest. Entrepreneurs may decide to continue with their existing operations and grow their venture further into the future. This does not preclude the entrepreneur from re-entering entrepreneurship again with another business idea (entrepreneurs commonly use cash from one venture to begin another). They may also decide to divest in a situation where divestment circumstances may be fortuitous (i.e., selling a successful firm at premium price) or less prosperous (i.e., liquidating or bankrupting the firm). Regardless of the success of the existing entrepreneurial venture, the entrepreneur may decide to re-enter the entrepreneurial domain even if he or she was not successful the first time around. If, on the other hand, the entrepreneur secured a profitable divestment, he or she may choose to enter entrepreneurship again endowed with a sense of accomplishment, success, experience, and, most importantly, capital. As we noted in Chapter 13, entrepreneurial activity may not end with the divestment of the entrepreneurial firm – divestment may be just the beginning of a continual, life-long, value-creating entrepreneurial journey. New venture creation can infuse an entrepreneur with new powers, energies, ambitions, and aspirations; this may positively influence the entrepreneur, the community, and the economy. New venture creation also initiates the process of entrepreneurial perpetuation and perhaps entrepreneurial philanthropy. One or multiple entrepreneurial successes are, of course, a breeding ground for serial entrepreneurs, who can later become business angels, professional investors, or venture capitalists. These individuals can finance their entrepreneurial ventures, rely on their existing ventures, approach new business partners or associates, and secure external financing (i.e., private equity, banks, or the public). Of course, a one-time entrepreneur may exit entrepreneurial

activities entirely in order to retire, pursue personal hobbies, or (in rare cases) seek employment.

Serial entrepreneurs

An entrepreneur is broadly defined as a person who generates a business idea, develops the idea into an entrepreneurial venture, and oversees its subsequent development (maintaining the most important role in day-to-day operations and strategic decision making). In Schumpeterian terms, the entrepreneur is a business “revolutionist” who reforms patterns of innovation, production, operation, promotion, and distribution. The entrepreneur is a unique aggregator of resources, capable of assembling them in a new and innovative manner, thereby achieving higher productivity and yield.

First-time entrepreneurs typically have their business ideas simmering in their minds over long periods of time, and have a fundamentally strong belief in the market in which they wish to participate. When the product or service idea has been tested in the marketplace, the entrepreneur is compelled to build a business. However, this can prove difficult without any experience related to operating a firm, recruiting staff, managing a venture, financial decision making, fundraising, and so on.

A serial entrepreneur, on the other hand, is a perpetual generator, starter, grower, nurturer, and owner of entrepreneurial ventures. These entrepreneurs regard entrepreneurship as a profession. At the outset, it may take them longer to generate winning business ideas or propositions, but once they focus on the right product or service, they are often outstanding at business execution. They are driven by uncertainty, unproven concepts, and success; business formation and operation are a lifestyle to them. Their best personal traits include leadership, persuasion, an orientation towards action, and personal accountability. They are acute and repeat seekers of value creation and see themselves as partial problem solvers while exhibiting a high tolerance for risk and failure. They are resilient, smart, and adaptable, and often imagine themselves in business early on in their careers (some start their first small businesses between the ages of 10 and 15). Serial entrepreneurs are critical to the economy, as they are estimated to be responsible for about a third of new business formation. Serial entrepreneurs are also estimated to have three to five times more economic impact than a one-time entrepreneur. In addition, serial entrepreneurship leads to philanthropic activities.

Serial entrepreneurship reveals itself in multiple shapes and formats. Some serial entrepreneurs are excited about the thrill of starting up ventures, but quickly lose interest when day-to-day challenges begin to emerge. Others have more difficulty spawning innovative ideas, but are superb organizational and team builders. Serial entrepreneurs often operate in an industry they know well; their strategic decisions are based on research, networks, and experience. Serial entrepreneurs may be “sequential” (they lead one entrepreneurial venture only after they are done with another) or “parallel” (also called “portfolio entrepreneurs,” who develop and nurture several ventures at the same time; in some cases, parallel entrepreneurs run their portfolio firms in a business structure similar to a business development incubator or accelerator). Table 14.4 presents a brief description of the advantages and disadvantages of sequential and parallel serial entrepreneurship.

It is important to note that there is conflicting evidence about whether serial entrepreneurs perform better than novice entrepreneurs. While conventional wisdom suggests that this should be the case, the reality is often more complex. Some evidence suggests that serial entrepreneurs have a higher probability of business survival compared with novice entrepreneurs; they have experienced both business failure and business success. Given their

Table 14.4 Types of serial entrepreneurs

	<i>Best suited for entrepreneurs who</i>	<i>Advantages</i>	<i>Disadvantages</i>
Parallel	Are creative Have superb skill in timing the launch of new ventures Are less enthusiastic about operating ventures day-to-day Prefer to multitask	Focus on business formation Diversification (hedging and leveraging risk) Potential to acquire know-how across various industries Opportunities for cross-leveraging and fertilization of resources Ability to attract people Enforces management independence and delegation Strong learning experience for entrepreneurs across different firms and industries	Less focus on growth and operations Entrepreneur too thinly spread – all ventures may underperform Multitasking between businesses may not be optimal
Sequential	Are strong business operators and organizational builders Are more analytical Tend to avoid “head-first” approaches to business formation Prefer to do one thing at the time	Strong attention to a single purpose Staying within one industry may reduce operating risks No operational distractions	Lack of diversification Difficult to attract people to a single start-up Less learning opportunity compared to “parallel” entrepreneurs

experience, they are more effective and efficient entrepreneurial builders, have better access to higher-quality networks, and are more likely to secure external funding. They also assimilate information quickly and use it to their advantage. Serial entrepreneurs believe that business experience accrues over time.

Other researchers suggest that “learning by doing” in entrepreneurship does not yield significant incremental benefits; in essence, they argue that previous entrepreneurial experience matters less. Some academic evidence suggests that there are no significant differences between the performance of newborn entrepreneurial firms and serial entrepreneur-led firms. Evidence implies that entrepreneurs do not always learn from their mistakes; if lessons are learned, they may be temporary and quickly forgotten. Learning from mistakes also requires acknowledgment of and introspection into failure, which can be difficult for entrepreneurs. Entrepreneurs also spend little time evaluating their prior entrepreneurial actions and behaviors, exhibit excessive optimism, and tend to attribute failure to others or external circumstances and conditions. Most critically, many serial entrepreneurs (especially those who have failed) make the massive strategic error of changing the market they pursue in a subsequent entrepreneurial venture. This may effectively nullify any lessons they may have learned from the previous venture (please note that those entrepreneurs who stay in the same industry tend to do much better on their second business attempt). Such behavior is especially prevalent for entrepreneurs who blame external circumstances for their failure.

Entrepreneurial philanthropy

Informal discussions among entrepreneurs are beginning to shift in tone and focus. Previously, an entrepreneur would likely ask another, “What have you invested in and how much have you made?” Now, a commonplace question among entrepreneurs is, “How much have you contributed and where?” This is a much welcomed shift in entrepreneurial thinking. Entrepreneurial philanthropy is becoming a major focus of many high net worth entrepreneurs, as well as a contagion phenomenon among smaller business owners. It is estimated that about 90 percent of entrepreneurs donate funds personally or through their entrepreneurial ventures. In addition, about 70 percent of entrepreneurs donate time and encourage their employees to volunteer their expertise (even on company time). The net effect of such contributions is that entrepreneurial firms and their owners are now estimated to supply twice the percentage of their profits to charities in comparison to large multinational corporations.

In Chapter 12, we focused on social responsibility, which was defined as the firm’s general orientation towards “giving back” to society without any *quid pro quo*. As we noted, social responsibility relates to many activities, including making charitable donations to non-profit organizations, dedicating human resources on company time, protecting the environment, or enhancing the quality of life for employees. We extend this discussion by focusing on entrepreneurial philanthropy, which is an important emerging field in strategic entrepreneurial finance.

Webster’s Dictionary defines philanthropy as “goodwill to fellow members of the human race” or “an act or gift done or made for humanitarian purposes.” The Collins English Dictionary describes philanthropy as “the practice of performing charitable and benevolent actions” or, simply, “love of mankind” (the word philanthropy comes from the Greek word “*philanthrōpos*”; *philos* = loving and *anthrōpos* = man). We will discuss entrepreneurial philanthropy in this context.

Though its definition has evolved over the years, entrepreneurial philanthropy is generally defined as the recruitment and deployment of resources to champion innovative and sustainable resolutions to difficult social problems. Entrepreneurial philanthropists aim to mold society to achieve accord, piece, and social stability; they also believe that philanthropy contributes to economic development by elevating individuals from hardship and adversity. Entrepreneurial philanthropists generate innovative ideas and, through entrepreneurial-based actions, convert them into social benefits in order to improve the quality of life for local communities and global societies. Applying entrepreneurial discipline, approaches, methods, innovation, and operational flair is a unique feature of entrepreneurial philanthropy. Entrepreneurial philanthropists look for “high social rates of return.”

The truest (and perhaps most idealistic) entrepreneurial philanthropy is interwoven in the organizational fabric of the entrepreneurial firm; it is not just an outside act of kindness. True philanthropy is consistent – entrepreneurs initially test-drive their philanthropic approaches in their own entrepreneurial firm’s backyard (by treating employees, customers, and other stakeholders “right”) before extending these philanthropic compassions to the broader society in order to address social hardships and inequalities outside of the entrepreneurial firm. True entrepreneurial philanthropy does not discriminate between individuals and groups – it is inclusive. Entrepreneurial philanthropy is predominantly about “others” rather than “self” even though the entrepreneur also accrues multiple benefits as a part of the philanthropic process. Ultimately, the practice of entrepreneurial philanthropy is about empowering others rather than maintaining power for oneself.

The process of entrepreneurial philanthropy

Many entrepreneurs believe that philanthropy is not only about simply writing cheques to worthy social causes, but rather about employing a wide range of entrepreneurial approaches to solving specific social problems. Viable philanthropic business models are created based on strong strategic considerations, business practices, and value creation. Effective philanthropy means developing a philanthropic business enterprise that is sustainable.

Philanthropic activities can come in many shapes and configurations (methodological vs. *ad hoc*, organized vs. sporadic, small vs. monumental, and so on). There are no meaningless philanthropic acts because they can all impact an individual or an entire society in unexpected ways. While repeated philanthropic actions are often believed to make the biggest difference, sporadic *ad hoc* actions can trigger a snowballing effect, which can ultimately lead to sustained efforts and massive philanthropic initiatives. In the remaining part of this chapter, we focus on a more systematic mode of philanthropic activities – a step-by-step process. This orderly mode of involvement in philanthropic activities is perhaps most consistent with entrepreneurial orientation and activities.

Figure 14.4 presents a basic cycle of entrepreneurial philanthropic activities: a five-step process that includes performing due diligence, deciding on the mode of involvement, achieving leverage, deploying resources, and monitoring progress. We represent the process as a circle because many entrepreneurs tend to become “habitual philanthropists” once they realize and observe the potential life-changing impact of their philanthropic activities. Entrepreneurs also appreciate the personal benefits which accrue to them as well (i.e., recognition, prestige, gratitude, reputation, respect, and so on).

As in many other examples, proper entrepreneurial involvement in philanthropic activities normally starts with a thorough understanding of the problem area (step 1); simply put, the entrepreneur must perform due diligence. Whether the entrepreneur focuses on social issues or targets specific beneficiaries, getting a personal picture of the social problem at hand is a natural starting point for the entrepreneur. The more researched, well understood, and studied the social issue is, the higher the probability that the result will have more social impression. Research and background understanding of the key issues are critical because the entrepreneur/philanthropist must create a philanthropic business plan (with goals and

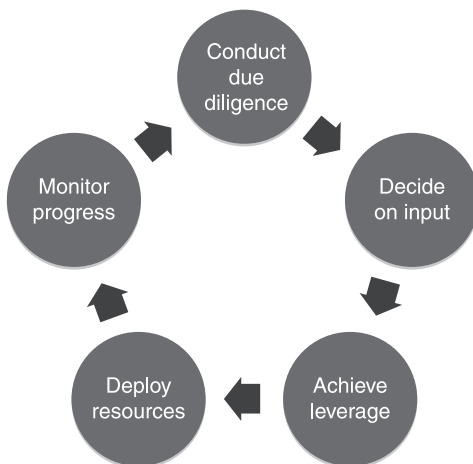


Figure 14.4 The process of entrepreneurial philanthropy

objectives) to deploy resources in the most effective and value creative manner. For many entrepreneurs, the starting point is an issue (or cause) which is personal to them; in many cases, philanthropic activities are directly related to the entrepreneur's childhood experiences. It is important to reiterate that many successful entrepreneurs come from a background of hardship early in life; in many cases, overcoming this adversity has become a major propelling force for the entrepreneur. An entrepreneur may wish to contribute to underprivileged children if the entrepreneur grew up in a less well-off environment, to the healthcare sector because of an adverse impact that sickness had on the entrepreneur or his or her family, to the educational system because the entrepreneur struggled to complete formal education (or always wished to complete it), to the church because the entrepreneur benefited from a specific religious affiliation, to the local food bank because the entrepreneur experienced lack of food growing up, and so on. If there is a profound personal concern about which the entrepreneur is passionate, further investigation of the problem becomes effortless. If entrepreneurs do not have a direct childhood experience to draw upon, they need to educate themselves about social issues. Entrepreneurs are likely to employ due diligence when investigating the philanthropic institutions, charities, and organizations they invest in. They are also likely to scrutinize the managers who run these organizations, as well as their key stakeholders.

The next step (step 2) is for the entrepreneur to decide upon the mode of involvement. This is a multidimensional consideration. First, the entrepreneur needs to decide upon the form of involvement, which could be capital, time, or expertise. While monetary involvement is the most common route, the entrepreneur's skill set with respect to spotting market trends and opportunities, developing creative organizational and business solutions, and building organizations may be more valuable than capital. Some entrepreneurs prefer a quiet and passive form of contribution while others become active and vocal participants. While individuals such as Andrew Carnegie, Andrew Mellon, Bill Gates, John Rockefeller, Henry Wellcome, Warren Buffet, and Conrad Hilton have made massive financial contributions to address global issues (reflecting their ability to generate significant financial fortunes), a local entrepreneur can contribute to resolving local community problems. The timing of the financial contributions also varies. Some entrepreneurs begin to develop an orientation towards philanthropy only after they have amassed a certain level of wealth, while others contribute no matter what their wealth. Second, it is important to decide upon the length of one's philanthropic involvement. Philanthropy can be a life-long orientation, a one-time initiative, or involve sequential participation. Third, the entrepreneur must give consideration to the main theme or themes of involvement. For some entrepreneurs, a single cause will be a driving force behind philanthropic involvement while others will attempt to make a multidirectional impact across several social spectra. Last, it is important to decide whether or not to establish one's own philanthropic activities or contribute to existing ones (i.e., charities). Some entrepreneurs become significant contributors "in the afternoon of their lives" (or after their death, through foundations established in their name), while others make efforts to contribute throughout the entirety of their entrepreneurial careers. Online platforms or "philanthropic investment circles" have also emerged, allowing entrepreneurs (and individuals) to support various philanthropic alternatives with small monetary increments.

The next phase (step 3) for entrepreneurs is to seek and achieve opportunities to leverage available resources such as wealth, contacts and networks, experience, reputation, and public image. This process includes leveraging the entrepreneur's resources within business, politics, public administration, the creative arts, and media. In short, the philanthropist's

available resources are compounded through acquisition, combination, and aggregation. For example, a cornerstone monetary donation from one entrepreneur may encourage other local entrepreneurs to follow suit, while expert contributions from one entrepreneur may lead to network opportunities for others to donate their time and expertise. As previously noted, massive and targeted actions are more likely to make a bigger impact.

The next step (step 4) involves the actual deployment of resources. Philanthropy is action-oriented – this means contributing money, establishing one's own charity or foundation, sitting on the board of directors of the desired organization or institution, and so on. The final action (step 5) involves measuring and monitoring one's progress in philanthropic activities. This action involves going back to the initial philanthropic plan and reevaluating the effectiveness of philanthropic activities. This is perhaps the area where most entrepreneurs are less thorough because measuring success in social involvement is inherently difficult. Nevertheless, establishing key success milestones, parameters, and goals is important because they become the metrics by which progress and any future amendments to philanthropic activities are determined. Most entrepreneurs dislike nothing more than the feeling that they have wasted their time and resources.

Questions to consider

1. Define entrepreneurial succession and differentiate between entrepreneurial succession in family and non-family firms.
2. Describe the major components of entrepreneurial succession. What are the most difficult areas of succession? How do successions overlap over time?
3. Describe the ways in which entrepreneurship is perpetuated. Describe the role of serial entrepreneurs in this process.
4. Define entrepreneurial philanthropy. Why is this topic likely to receive increased attention in the future?
5. Describe the key steps in entrepreneurial philanthropy. Identify a successful local entrepreneur and investigate his or her philanthropic activities. Does the local entrepreneur's process align with the circular model suggested in this chapter? If the entrepreneur's approach has been different from the model described here, analyze the key differences between the model and the entrepreneur's approach.

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