Business Elevators: An innovative Model for accelerating growth of SMEs in Developing Markets

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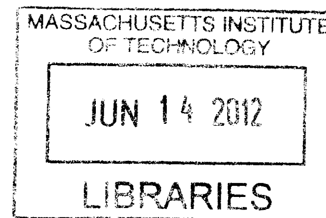

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ABSTRACT

Difficulties in finding adequate sources of financing and lack of managerial capital are two of the most important reasons hindering growth and innovation of SMEs in developing countries. The need for sophisticated financial contracts that allow for separation of ownership and control is today a fundamental element for the existing models that try to address these issues. In this study I investigate alternative mechanisms for effectively achieving the same objectives in markets where the financial infrastructure is less developed and standard common law contracting tools are not available.

This research focuses on three specific topics: liquidity, control rights and asymmetric information. It examines the available literature and the practical experience of investors, entrepreneurs and other agents in a representative market like Colombia, to develop a new framework for analyzing the financing strategy of SMEs and presents an innovative business model for supporting their growth in developing markets based on alternative mechanisms that facilitate the combination of financial and managerial capital to stimulate growth and innovation.

Thesis Supervisor: Antoinette Schoar.

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Tatiana was also part of my research team helping me with the interview transcripts, calling to follow up on the questionnaires with the entrepreneurs and giving me incredible comments and suggestions for this work. Vanessa Mejia, my mother in law volunteered to help with the data collection process too. Thank you very much to both of them for their extraordinary help.

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TABLE OF CONTACTS

ABSTRACT 3
ACKNOWLEDGMENTS 5
TABLE OF CONTACTS 6
CHAPTER 1- INTRODUCTION 8
CHAPTER 2 - RELEVANT LITERATURE REVIEW 12
2.1. Growth and Entrepreneurship in Developing Countries 12
2.2. Venture Capital and Private Equity in Developing Markets 17
2.3. Financial Contracts 19
2.4. Asymmetric Information in Investment 22
2.5. Incubators, Accelerators and similar Models 23
CHAPTER 3 - METHODOLOGY AND DATA COLLECTION 26
3.1. Data Collection 26
3.2. Secondary Data 27
3.3. Primary Data: Structured Questionnaire 27
3.4. Primary Data: Semi-structured interviews 29
3.5. Data analysis 30
3.6. Interviewed SMEs 31
3.7. Interviewed Private Equity Firms 33
CHAPTER 4 - PRESENTATION OF MAIN THEMES 35
4.1. Entrepreneurship and Growth in Colombia 35
4.2. Access to Financial Capital 36
4.3. Entrepreneurship and Human Capital 45
4.4. Private Equity and Venture Capital in Colombia 48
4.5. Main Concepts 55
4.6. Entrepreneurs, Investors and separation of ownership and control 58

4.7. Investment liquidity and the importance of maintaining the option to sell 59
4.8. Asymmetric information and adverse selection 61
4.9. Emerging Themes 63
4.9.1. Entrepreneurs, Company Formation and Preparation 65
4.9.2. Urgency and the business environment 67
4.9.3. Expectations about Investment and Transactions 68
CHAPTER 5 - DISCUSSION 74
5.1. The Framework 75
5.1.1. The Degree of Urgency faced by the Company 75
5.1.2. Investment Readiness 76
5.1.3. The Impact of Urgency and Readiness on the Financing Strategy 76
5.1.4. Self-Financed Growth 78
5.1.5. Tailored financing 79
5.1.6. The Investor's Advantage 79
5.1.7. Pray for the Best 80
5.1.8. Dynamics within the Matrix 80
5.1.9. Implications for Entrepreneurs 83
5.2. The "Business Elevator" Model 83
5.2.1. The Three Gaps 88
5.2.2. The Process 91
5.2.3. The Structure 92
5.2.4 The Key Components of the Service 93
5.2.5. Contracts and the Financial Instruments 94
5.3. Implications for Practitioners, Policy-makers and Future Research 97
CHAPTER 6 - CONCLUSIONS 99
BIBLIOGRAPHY 101

CHAPTER 1- INTRODUCTION

Difficulties in finding adequate sources of financing and lack of managerial capital are two of the most important reasons hindering growth and innovation in SMEs in developing countries. The need for sophisticated financial contracts that allow for separation of ownership and control is today a fundamental element for existing models that try to address these issues. However, these sophisticated contracts are hard to implement in countries with less developed legal systems or where contract enforceability is more difficult.

The academic community, policy makers and practitioners have been interested for a long time in understanding the roots of growth and innovation in SMEs in developing markets and their implications on economic development. Several studies have researched the importance and impact of access to financing. Karlan and Morduch (2010) investigated financing for micro-enterprises, while Beck, Demirguc-Kunt (2006) and The World Bank-IFC World Wide Survey (2001) studied access to capital for small and medium companies. Recent research from Bruhn, Karlan and Schoar (2010) studied the importance of managerial capital on firm growth and on the effectiveness of other factors of production. Lingelbach et al. (2005) emphasize the importance of risk capital for growth-oriented enterprises in developing countries but conclude that the adoption of the American model has not been successful yet in these markets due to limitations in its applicability. Lerner and Schoar (2005) analyzed Private Equity contracts in developing markets and found that there is a difficulty separating control rights from cash flow rights in countries with less developed legal systems and law enforcement complications. According to the authors this inability to separate rights makes Private Equity investors increase their equity stakes, reducing entrepreneurs' incentives to accept offers for capital.

All these studies have been interested in understanding and explaining the current application of financial contracts and their implications on growth but none of them has

suggested alternative approaches to facilitate the combination of financial and managerial capital for SMEs in developing markets.

In this study I investigate alternative mechanisms for effectively achieving the objective of separating control rights from cash flow rights in markets where the financial infrastructure is less developed and standard common law contracting tools are not available. This research focuses on three specific topics: liquidity, control rights and asymmetric information. It analyzes the related available literature and the experiences of investors and entrepreneurs in a representative market like Colombia.

The existing academic literature has studied the theory of financial contracts, the characteristics of these contracts in the Private Equity and Venture Capital industry and their applicability in developing markets. However, none of the studies to my knowledge has focused on understanding this separation of rights from the perspective of the entrepreneur, much less has proposed alternative approaches to facilitate access to financial and managerial capital for the SMEs. This is the contribution of this study.

The Lerner and Schoar (2005) paper leads to the formulation of the following question: What are constraints to writing VC and PE term sheets that if eliminated would allow for the separation of ownership rights and control rights? The answer to this question defines the first hypothesis of this study.

H1. In order for the investors to maintain control in the deal they need a large ownership stake in many countries where it is difficult to separate cash flow and control rights. This usually means that the founders lose control and creates a disincentive for entering into the deal.

Sophisticated PE and VC contracts in developing countries where the capital markets are less developed and the most likely exit strategy is a trade sale require the entrepreneur to forgo the option to decide when and to whom to sell their stake in the company. This leads to the following research question: What are constraints to writing

VC and PE term sheets that if eliminated would allow for the separation of investment liquidity and the entrepreneur's option to sell? The corresponding hypothesis is:

H2. In some cases VC and PE funds might have to drag along the entrepreneurs to complete the sale of an equity stake and achieve liquidity. This can create disincentives up-front for the entrepreneurs if they are concerned about maintaining control over when to sell and the selection of the buyer.

These first two hypotheses, while very important, would become less relevant if there are disincentives for investors to finance SMEs growth initiatives due to lack of trust and differences in information. Lerner (2004) highlights the existence of an adverse selection problem in Private Equity and Venture Capital investing similar to the one illustrated in the seminal "lemons" paper by Akerlof (1970). According to Trester (1998), Private Equity and VC investors face time constraints and asymmetric information in their investment process. He demonstrates that preferred equity dominates in early financing while debt and equity are used in later stages when there is less asymmetric information. Amit, Brander and Zott (1998) conclude that the role of Venture Capital is to reduce the problem of asymmetric information. In this thesis I investigate the importance of asymmetric information for SME investment in developing markets by trying to answer the following research question: What are constraints to the investment process of VCs and PE funds that if eliminated would allow for a reduction of the effects of asymmetric information on the deal? This question prompts the third hypothesis:

H3. The difference in information between SMEs' owners and investors in a difficult investment environment where investors are developing specific skills affects the price and conditions of transactions implying that the VC alternative is not very attractive for founders of good companies.

Confirming or rejecting these three hypotheses is central to understanding the effects of liquidity, control rights and asymmetric information and for the application of sophisticated financial contracts in SMEs financing in developing countries.

Understanding these effects from the perspective of both investors and entrepreneurs will shed some light for practitioners and academics on how to develop alternative approaches that facilitate access to financial and managerial capital for SMEs.

CHAPTER 2 - RELEVANT LITERATURE REVIEW

In this section I review the theory and empirical research in the field of entrepreneurial growth, entrepreneurial finance and financial contracting that is most relevant to the research questions of this paper. To make the process simpler and to facilitate understanding of the large academic literature available on these subjects, I have separated the studies in five different groups. First I describe the academic articles related to entrepreneurship and growth in developing countries. Then I present the most important literature regarding the Private Equity and Venture Capital industry, with emphasis in the particular work related to the industry in developing markets. In the third group I illustrate the most representative articles in the large academic work on financial contract theory and its implication in Venture Capital and Private Equity. The fourth set is comprised of articles related to asymmetric information and investment in SMEs and to finish this review I provide a summary of the most relevant work related to other business models of entrepreneurial support like incubators and business accelerators.

2.1. Growth and Entrepreneurship in Developing Countries

Difficulties in finding adequate sources of financing and lack of managerial capital are the two most important reasons found in the academic literature as impediments for SMEs growth and innovation in developing countries. Bruhn, Karlan and Schoar (2010) affirm that managerial capital is the key form of capital missing in developing countries and in growth and development research. They argue that if one includes managerial capital as part of the intercept shifter in endogenous growth models, the production function would suggest that high levels of other inputs do not lead to high levels of output, unless managerial capital is sufficiently high. They say however, that there is little empirical work to understand the characteristics of this managerial capital or to determine its impact on productivity. According to the authors managerial capital appears to be acquirable by experience and training or through outside consulting inputs. Another interesting suggestion they make is that managerial capital could help companies with limited access to financial capital, as it improves their capacity to signal a lender about their own credit worthiness.

In a randomized control trial in Mexico Bruhn, Karlan and Schoar (2010) find that consulting services had a significant positive effect on firm's productivity. This effect is estimated to be much larger than the effect of improved access to financial capital for SMEs found in the available literature. Empirical evidence on the impact of access to managerial capital on productivity, the precise channel of interaction of the former with other factors of production and the best mechanisms for training still require further research.

Karlan and Morduch (2010) provide a review of empirical studies that have estimated the impact of access to finance for micro-enterprises. They present insights coming from the psychology of financial decision-making of small firms and from the theory of behavioral economics. According to these studies evidence demonstrates that the design of financial products and the way in which those are presented matter. They mention that the biggest hurdle research has had in estimating the impact of access to financial capital by small firms is separating the pure effect on return from capital from the conditions correlated to having capital, like better access to other resources as labor and markets.

Bloom et al. (2011) evaluate the impact of differences in management in performance. They provided free consulting on modern management practices to large Indian textile firms and found that these practices raise productivity and quality, increase decentralization of decision making and delegation and increase use of information systems. They suggest that firms do not apply modern managerial practices due to informational barriers.

Beck, Demirguc-Kunt (2006) and Schiffer and Weder (2001) research the effect of financial capital constraints on SMEs. The former study presents evidence that financial capital constraints affect more growth in small firms, while they affect all firms in reaching their optimal size. The authors present evidence that difficulties of new firm entry due to the business environment (cost of registering a firm, property right protection and access to finance) affect productivity and growth. This may provide an

explanation as to why the presence of a large number of SMEs is unlikely to be associated with faster growth. The authors cite various studies that suggest that the business environment for entrepreneurship is also affected by the perception of corruption, crime and political instability. According to these studies size, age and the ownership structure of the firm are the most reliable predictors of their financing difficulties. They also show that the effect of growth obstacles on firm growth is smaller in countries with more developed legal and financial systems. Beck and Demirguc-Kunt also state, that in developing countries the role of friends and family in financing companies is more important. More generally they say that in many developing countries SMEs form a tight network of long-term business relationships that allows them to get around the failures in systems and institutions and help them overcome the problems of asymmetric information and weak contract enforcement. The authors argue that innovative financing instruments can improve access by SMEs to resources even in markets where financial institutions are not well developed. They conclude by stating that it is important for an economy to have a business environment that promotes innovative entrepreneurs that results in a Schumpeterian process of "creative destruction" rather than simply having a large number of SMEs that do not grow but do not exit the market either.

Schiffer and Weder (2001) also provide findings that support that firm size is important in terms of the obstacles for growth that companies face. Smaller firms have more problems with financing, taxes and regulations, crime and anti-competitive practices. These findings are similar for the different developing regions in the World Survey, with some country specific differences. Results show more pronounced effects in Latin America and the Caribbean and in transition economies. Their probit[1] regression model, shows a pronounced bias against small firms in the area of financing in large Latin American countries like Brazil, Argentina and Colombia.

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[1] An ordered probit model is used in situations where the dependent variable is an ordinary variable reflecting a ranking so that ordinary least squares regression is not possible.

Lingelbach, de la viña, and Asel (2005) explore what is distinctive about growth-oriented entrepreneurship in developing countries, while Schoar (2009) studies the differences between transformational entrepreneurship and subsistence entrepreneurship. The latter is consistent with the definition of Reynolds et al. (2005) that distinguishes between necessity and opportunity-based entrepreneurship used in the reports of the Global Entrepreneurship Monitor GEM. In her paper Schoar argues that people engaging in these two different types of entrepreneurship are not only different in nature, but that there is rarely a transition from subsistence to transformational entrepreneurship. She states that transformational entrepreneurs are more likely to achieve rapid growth, but they are less common in developing markets and they are more difficult to identify for investors and policy makers. According to the author, cross section patterns of similar studies, suggest that entrepreneurs in emerging markets are not able to grow their businesses from small firms to large and established companies. The obstacles that appear to prevent transformational entrepreneurs from growing are capital constraints and labor and product market frictions. Findings from different studies analyzed by Schoar show that in developing markets regulatory environments affect the ability of people with entrepreneurial skills to express their talents and increase the importance of social networks. This can lead to inadequate allocation of capital. An important conclusion of this analysis is that in developing countries there is a need for channels and organizations that foster the selection and financing of transformational entrepreneurs. International Private Equity and Venture Capital investors, an emerging class of local venture investors and improvement in lending technologies can have a positive impact on high-growth entrepreneurs.

Lingelbach et al. (2005) cite the work of Liedholm and Mead (1999) that defines four types of entrepreneurial firms in developing countries: newly established, established but not growing, established but growing slowly, and graduates to a larger size. They find that opportunity, financial resources and apprenticeship and human resources are three of the distinctive attributes of entrepreneurship in developing countries that appear to improve the probability of success of growth-oriented firms. They affirm that opportunities are broader in scope in developing markets and that this generates a

counterintuitive response by entrepreneurs that spread resources across separate but related businesses to mitigate risk. Lacking alternative sources of financing the entrepreneurs use funds from one business to finance other businesses. These interlocking businesses provide, in addition to financing, access to information and a broad pool of skills and resources. They also provide a good source of reputation if well executed. In terms of financing they find that limited personal and family savings and the absence of financial innovation severely affect the growth of promising companies in developing countries. With respect to the third component, apprenticeship and human resources, they raise more questions than provide answers. They highlight the importance of preparation and mentorship and state that emerging markets require a revolutionary change but have few people with the skills and experience to effect such change. As a result of this, entrepreneurs look for people with other characteristics like the ability to navigate the political environment and to understand the economic context. Trust becomes highly regarded in these markets.

Westhead et al. (2003) studied the difference between firms owned by novice, serial and portfolio entrepreneurs in 354 companies in Scotland and concluded that portfolio entrepreneurs have more experience and resources than serial or novice entrepreneurs and appear to have better growth prospects.

Herrera and Lora (2005) studied the determinants of firm size that might be altered by government policy in Latin America. They explore the impact of demand factors, supply factors and institutional factors. Apart from the size of domestic markets and income per capita they find that Latin American firms are smaller in size compared to developing and developed world standards. They found three factors that affect the size of companies in the different countries: There are larger firms in more open economies, in countries with deeper financial markets and with better physical infrastructure. In contradiction to previous studies they find no evidence of the impact of institutional quality on company size.

2.2. Venture Capital and Private Equity in Developing Markets

Lingelbach et al. (2005) state that risk capital finance is particularly important for growth-oriented companies in developing markets, they help align the incentives of entrepreneurs and investors and if properly designed and staffed organizations are in place, they can add substantial post-investment value to the growth-oriented enterprise. However, they conclude that while risk capital has been an important part of the entrepreneurial process in developed countries, it had not been yet successful in developing countries. They argue that the American model has been adopted by many fund managers in spite of its limited applicability to developing markets. Difficulties related to exits due to the liquidity limitations of the stock markets, lack of venture capital experience and skills and little financial innovation are cited as the main causes for risk capital failing to achieve better results.

Gompers and Lerner (2001) provide a good description of the origins and the empirical academic research on venture capital and highlight what the academic community and practitioners did not know about the industry at the time their paper was written. They say that uncertainty and information asymmetries characterize young firms particularly in high-tech industries. This makes writing a contract between the investor and the entrepreneur difficult especially in the case of companies with intangible assets and difficult to assess performance. They assert that the tools that venture capital firms use to address these issues are intensive firm scrutiny and ex-post monitoring. They cite other studies that discuss and test the use of staged capital infusion as a mechanism to control the actions of entrepreneurs. In addition to this, according to the authors venture capital firms frequently enter into syndicated investments with other experienced venture capital firms to get a second opinion on the investment opportunities. Gompers and Lerner also summarize studies that find that venture capital monitoring is often performed through the firm's board of directors and say that there is evidence showing that geographic proximity is an important factor in determining board membership. They also argue that venture capitalists employ compensation controls like vesting options to retain the entrepreneur and that they can significantly dilute the entrepreneurs if the firm does not reach performance targets. In this article the authors discuss the

characteristics of venture backed initial public offerings in the United States and the importance of venture capital firm reputation and experience for this process. Research suggests that the strength of the IPO market has an important influence on venture capital commitments in later-stage funds internationally.

Metric and Yasuda (2010) also provide an interesting review of the theory and evidence of venture capital and private equity in terms of their reasons for existing, what they do with their portfolio companies, the returns they earn and the characteristics of the contracts they sign. They mention illiquidity and information asymmetry between entrepreneurs and investors as the key defining characteristics of the broader Private Equity industry. The latter was shown by a study conducted by Chan (1983). According to the authors the literature identifies three groups of economic activities for both VCs and Private Equity Buy Out firms: 1. Pre-investment screening, 2. Monitoring and governance, and 3. Exit. They state that the economic rationale for the existence of VC funds is to overcome the problem of imperfect information and positive search costs in the market setting of private small firms. Some studies, according to the authors, focus on the ex-ante screening ability of VCs like Ueda (2004), while others like Winton and Yerramilli (2008) discuss their ex-post monitoring ability. Jensen (2007) and other authors argue that debt reduces agency costs of free cash flows and disciplines managers and Private Equity Leverage Buy Out firms help reduce conflicts between managers and shareholders.

Chocce (2003) presents a discussion of the necessary conditions for Venture Capital development in Latin America using the Chilean case. He argues that there are four factors that condition VC development in a country: 1. Economic context and the dynamism of the companies, 2. Fiscal and regulation context, 3. Availability of a special stock market for SMEs, and 4. Existence of an entrepreneur mentality regarding opening the enterprise capital. In summary he finds that in Chile there are many investment projects but most of them are not innovative or are not well formulated. Potential firms for Venture Capital Investments are not well informed about financing alternatives. He states that structural reforms in the stock market and tax laws are

expected to improve the environment for VC investment. The author argues that dynamism of existing companies is improving in Chile as well as the willingness of entrepreneurs to open their companies to new investors, but there is evidence that entrepreneurs are still afraid of losing control of their companies.

Van Auken (2001) studies the familiarity of owners of Small technology companies with alternative forms of capital by stage of development in relation to their ability to price and negotiate external investment. The results of this study provide some evidence that there is indeed an information gap and it appears to be greater for sources of capital that are used to finance growth, especially for those coming from government agencies. This information gap appears to affect the ability of entrepreneurs to price and negotiate external capital. The need for more information is most evident in the early stages of development but respondent companies in this study indicated that they felt less capable of negotiating and pricing equity than of negotiating and pricing debt at all stages of the business development of their firms.

Metric and Yasuda (2010) also refer to several studies that argue that better networked VC firms perform significantly better. This can be because these networks allow them to better screen prospect companies, or helps VCs get access to better skills and add more value or because they use the networks to deter entry and improve deal prices.
The authors also provide a literature review of contracts between VCs or PE firms and Portfolio companies that I discuss in the next section.

2.3. Financial Contracts

Metric and Yasuda (2010) refer to an extensive academic literature both theoretical and empirical that studies the features of contracts between venture capital firms and portfolio companies. They assert that the VC industry is a natural laboratory for testing the implications of the theory of financial contracting without distracting factors associated with public firms. Various studies offer explanatory arguments for the prevalent use of convertible securities in the VC and Private Equity Industry. Berglof

(1994) for example analyzes the conflict of interest between the investor and the entrepreneur that comes from the future sale of the company to a third party. The entrepreneur values the private benefits of control in the good state, while the VC is afraid of a low-price exit in the bad state. This study demonstrates that the combined use of debt and equity or the use of convertible debt or convertible preferred stock allows for allocation of control rights that mitigate the conflicts of a future sale of the firm. Schmidt (2003) on the other hand, argues that convertible securities are used in VC investments because of their incentive properties. They help achieve best investment outcomes when costly efforts from investors are also important for the success of the firm.

Aghion and Bolton (1992) study the incomplete contract between an entrepreneur with no initial wealth and an investor. They develop a model to address the question of how should control rights be allocated to achieve efficiency. They show that selecting an efficient financial structure is closely related to selecting the efficient government structure and that debt is a natural way to implement contingent control allocations.

Hellman (1998) examines the relationship between entrepreneurs and venture capital firms from the perspective of corporate control. His model predicts that the smaller the entrepreneur's stake in the company, the more wealth constraint and the less experienced the founder as a manager the more likely it is for investor to get control. He argues that entrepreneurs self-select and that only those willing to yield control seek venture capital while others look for more passive sources of private capital.

Kaplan and Stromberg (2001) discuss the theoretical work that studies the principal-agent conflict in VC investments, identifying three ways in which investors mitigate the conflict: 1. Sophisticated Contracting, 2. Pre-investment Screening and 3. Post-investment monitoring and advising. They argue that these three are closely interrelated, allow for separation of rights and help provide the right incentives.

Kaplan and Stromberg (2003) in an empirical work based on 213 VC investments, compare the characteristics of the real world VC contracts with financial contracting theory. They affirm that the distinguishing characteristic of VC contracts is that they allow for separation of cash flow, board, liquidation and other control rights and conclude that real life contracts are more complex that theory predicts and that these rights are often in practice contingent to observable measures of financial and non-financial performance.

Lerner and Schoar (2005) analyzed international PE contracts involving both VCs and Buy Out funds and found that while convertible preferred stock with covenants is more used in high-enforcement and common law countries, majority equity ownership combined with debt and board control are often used in low-enforcement and civil law nations. They also found that transaction valuations are higher in high-enforcement countries. Evidence suggests that PE firms in countries with less developed legal enforcement systems rely on ownership (majority control) rather than on financial provisions to deal with enforcement problems. This inability to separate control rights from cash flow rights, according to Lerner and Schoar, distorts the contracting process making PE investors increase their equity stakes and reducing entrepreneurs' incentives as they need to give up rights to a substantial amount of cash flow.

Van Osnabrugge (2000) presents a comparison of the investment criteria used by VCs and Angel investors in light of the agency theory. He discusses two particular problems, moral hazard and adverse selection; and analyzes two approaches, the ex-ante principal agent approach and the ex-post incomplete contracts approach. The study concludes that VCs are more rule-based and attempt to reduce agency problems in the pre-investment process while Business Angels seem to place more emphasis on post-investment involvement to reduce agency risks.

Shleifer and Vishny (1997) present a very comprehensive survey on corporate governance research around the world with emphasis on the legal protection of investors and ownership concentration. They explore corporate governance from the

agency perspective and outline the various ways in which firms can attract capital despite the separation of ownership and control. They conclude that large investors and legal protection are complementary and that successful corporate governance systems combine both. Those countries where legal protection is not strong end up with family and insider dominated firms with little external financing.

2.4. Asymmetric Information in Investment

Much of the literature has been concerned with the role of asymmetric information in Venture Capital investment after contracting. Trester (1998) develops a model where entrepreneurs and investors contract under symmetric information and studies the effects of ex-post asymmetric information on control and the choice between preferred and common stock. Then he presents empirical evidence consistent with the outcome of the model. These types of studies are related to the agency problem described in the previous segment. In this research I am also interested in the perverse selection effects of asymmetric information in the screening and investment process of SMEs' investors.

Berger and Udell (1998) in their study of the economics of financing small companies, state that private equity and debt markets, structure complex contracts to small firms which are informationally opaque. Financial intermediaries then play a critical role as information producers who assess small business quality, structure the financial contracts and signal the market. They state that modern theory of financial intermediation suggests that financial intermediaries exist in part because of economies of scale in information production. They conclude that the mix between equity and debt in the capital structure of small firms is affected by three dimensions of the information opacity: Costly state verification, Adverse selection and Moral hazard.

Most of the academic research however, has focused on the last two and on how to write the contracts and design the mechanisms to mitigate the information problems as opposed to on how to reduce the information asymmetry in a cost effective way to reduce adverse selection. Lerner (2004) in the first chapter of the book public policy and

the economics of entrepreneurship explains that even in the absence of moral hazard on the side of managers, there is a "lemons" problem (Akerlof 1970) demonstrated by the studies of Myers and Majluf (1984) and Greenwald, Stiglitz, and Weiss (1984) in the case of equity offerings of firms. Stiglitz and Weiss (1981) show the same effect in the case of bank loans. Lerner states that if there were public venture capital awards that could verify the quality of firms, these information asymmetry problems would be overcome and investors would confidently invest in small firms. Leland and Pyle (1977) show that when information asymmetries exist and the supply of poor projects or companies is large compared to the good investment alternatives, the venture capital markets may fail to exist. According to the authors one way to solve the problem is to send a signal to the investors about the quality of the projects. Entrepreneurs send this signal by willing to invest their own resources in these projects. The authors suggest that these information asymmetries provide a good reason for intermediaries to exist. Once and organization or groups of organizations become more efficient in telling the risks apart, sellers of risks with good characteristics would want to be identified and would deal with the intermediary rather than with the uninformed provider of capital even if the costs of sorting are relatively high.

Seghers et al. (2009) focus on asymmetric information from the demand side, the side of the entrepreneur. They surveyed 125 Belgian start-ups and demonstrated that entrepreneurs with less human capital (experience and/or knowledge in business and finance) and less social capital (networks that provide them with access to this knowledge) tend to have less knowledge of financing alternatives and are more constrained in their access to capital.

2.5. Incubators, Accelerators and similar Models

Besides the venture capital and private equity model of intermediation between investors and entrepreneurs, the academic literature discusses other business models that allow entrepreneurs to get access to managerial, financial and social capital but all of them focus on seed and early stage investing. Incubators and accelerators have been widely studied, but these models are used for supporting entrepreneurs in the

early stages of their ventures. Carayannis, and Von Zetwitz (2005) argue that incubators have been catalysts and accelerators of clusters formation and growth and that their role is even more important in less developed countries where they can help bridge knowledge, digital, socio-political and even cultural divides. The authors affirm that in developing economies incubators can help increase availability and accessibility of financial, human, intellectual and social capital, key ingredients for entrepreneurial success. They go on to propose an architectural business model of a network of incubators that would link entrepreneurs at the local, regional and global level with networks of customers, suppliers and complementors. Bangert et. Al (2005) describe how an entrepreneur can use the network organizational form by creating a both strong and flexible structure to get access to social capital that enables collective action through trust, reciprocity and cooperation.

Hansen et al. (2000) give a comprehensive description of the services provided by business incubators and explain the findings of their research in which they studied 350 incubators worldwide. They compare incubators, venture capitalists and established companies on three dimensions: Scale and scope, entrepreneurial drive and network access to conclude that networked incubators combine the benefits of scale and scope of large established corporations with the entrepreneurial drive of venture capital firms.

Price (2004) is to my knowledge one of the few academics that mentions the potential impact of business incubation/acceleration processes in maturing existing businesses. He studies the case of business accelerators in Utah to explain how business development support can help companies after they are established.

Von Zedtwitz and Grimaldi (2006) studied ten incubators in Italy analyzing five different archetypes to conclude that the differences in geography, industry and segment focus (competitive scope) and in strategic objectives (profit vs. non-profit) influence the nature and quality of the incubator's services and the way in which they are managed.

Fishback et. Al (2007) compare the role of business accelerators to the American Idol competition and argue that they provide a successful formula for identifying and selecting high growth entrepreneurs. They describe the evolution of accelerators and business angels after the internet bubble and conclude that there is an increasing interest in the emerging business model of contest-based accelerators for picking up and grooming potentially successful start-ups.

CHAPTER 3 - METHODOLOGY AND DATA COLLECTION

3.1. Data Collection

This study is based on three different classes of data using a methodology that Bryman and Bell (2011) describe as a mixed methods research. It is a combination of quantitative and qualitative research strategies in an integrated approach to increase validity by means of triangulation (Webb et al. (1966)). The first type of information is secondary data collected from different sources including the World Bank, GEM and LAVCA. This information was analyzed to better understand the entrepreneurial environment, the main characteristics of entrepreneurs, the factors that shape the business environment in Colombia and the characteristics and evolution of the Private Equity and Venture Capital industry in the country. The second type of information was collected using a structured questionnaire, designed to investigate the perceptions of owners and managers of SMEs about the opportunities and limitations for growth in their companies and the required characteristics for receiving investment to finance this growth in light of liquidity, control rights and asymmetric information as expressed in the research questions of this paper.

The responses to questionnaires were used to validate the findings from the third and main source of information, the qualitative semi-structured interviews. These interviews were performed with a group of selected SMEs and Private Equity fund managers and represent the main research information upon which this study relies. The questionnaires were conducted to improve external validity in a process of cross checking findings from the qualitative research as suggested by Deacon, Bryman and Fenton (1988). The quantitative survey was not selected as the main approach for this study due to the expected low response rate from the questionnaire that was likely to affect the external validity of the research.

3.2. Secondary Data

Three main sources of secondary data were used in this study. First the Enterprise Survey conducted by the World Bank with small, medium and large companies focusing on understanding the most important factors that shape the business environment in a country. The topics covered in this Survey include infrastructure, trade, finance, regulations, taxes and business licensing, corruption, crime and informality, finance, innovation, labor, and perceptions about obstacles to doing business. A Colombia Country Report was available with these data for 2010. The second source of secondary information is The Global Entrepreneurship Monitor (GEM) survey. This is an annual survey of the entrepreneurial attitudes, activities and aspirations of individuals around the world, an initiative led by Babson College, with the participation of Universidad del Desarrollo de Chile, Universiti Tun Abdul Razak, Kuala Lampur, Malaysia and The London Business School. A country report for Colombia was available with data for 2008 and a global report comparing the different countries was available with information from 2011. The third source of secondary information is the Latin American Venture Capital Association (LAVCA). LAVCA produces an annual industry Data report that summarizes the results of their survey with Private Equity and Venture Capital management firms. They also produce a Scorecard on the Private Equity and Venture Capital environment in Latin America. Both reports were available for 2011 with data from 2010.

3.3. Primary Data: Structured Questionnaire

A self-completion structured questionnaire was designed to assess the perceptions of company owners and managers about growth opportunities and limitations for their organizations and about their attitudes and requirements with respect to accepting resources from potential investors to help grow their businesses. A 2010 data base with firms reporting information to the superintendence of companies was the source for selecting the sample entrepreneurs. The starting criterion was company size in terms of annual revenues. There is no universally agreed definition of SMEs. Some analyses

define them in terms of revenues while others use the number of employees. In this study I use my own definition of SMEs in terms of their annual revenues since I believe the number of employees is not the best indicator of company size, especially in the case of services and innovation-based firms. I selected companies with revenues between 5,000 million and 50,000 million Colombian pesos (approximately between 2.5 and 25 million dollars), that were operational (not under the equivalent of the US chapter 11 nor in the process of liquidation) and that had complete contact information (7090 companies). Then this database was filtered to select only those companies with headquarters in the five major cities of the country: Bogotá, Medellin, Cali, Barranquilla and Bucaramanga since only companies in large cities are likely to get Venture Capital, Private Equity or other type of professional Private investment. To get a group of companies with high potential for growth and more likely to receive investment from capital or strategic investors the database was further filtered using revenue growth, financial debt to assets ratio and gross margin as criteria. The result was a group of 696 companies with revenue CAGR for the last 3 years above 10%, financial debt/total assets of less than 60% (higher levels of debt are more likely to be candidates for turnaround PE rather than for growth PE or VC investment) and gross margins above 10% (To make sure that the business had a positive marginal contribution).

The questionnaire had 28 multiple choice questions divided into five different sections: The first section included general questions about the company, the characteristics of the firms, their owners, industry in which they participate, the resources that owners had invested in the business and the perceived opportunities and limitations for future growth. The second section was about fundamental constraints for the separation of liquidity and the entrepreneur's option to sell the company. The third section dealt with constraints for separation of ownership and control rights. The fourth section investigated asymmetric information between owners and investors in the case of a potential deal. This section had the objective of understanding the attitude of owners and managers of SMEs with respect to sharing different type of information with potential investors. The answers to these questions were later compared to the

interview opinions of other owners and managers and more interestingly with the perception of fund managers about real transactions.

The self-completion questionnaire was selected as the method for the quantitative part of the research because it is less costly, gave us access to a larger number of SMEs, it has less social desirability bias since there are no interviewer effects and people are less likely to underreport sensitive issues. This method is also easy and convenient for respondents. The questionnaire was developed and pre-tested before sending it out by e-mail in January 2012. No major problems were found and suggestions by test respondents in terms of the phrasing of the questions were incorporated. A reminder to all the potential respondents was sent two weeks after the initial mailing and a sample of 180 potential respondents was called by phone to remind them of completing the survey. Even with these actions the response rate was lower than expected with only 23 questionnaires completed.

Since a self-completion questionnaire was expected to have a low response rate and it has limitations in terms of the number of questions and the access to additional information, a mixed research method including semi-structured interviews was selected for this thesis.

3.4. Primary Data: Semi-structured interviews

The third type of information collected for this study came from a set of 9 semi-structured telephone interviews, 4 with owners and managers of SMEs and 5 with investment personnel or partners in five different Private Equity Funds that have made investments in SMEs in Colombia. The Data collected in this process was complemented with material from the companies and investment firms' websites, with articles and other publically available information.

The SMEs for interviews were not selected through a probability procedure. Instead I used a purposive sampling approach, sampling in a strategic way to select subjects that were relevant to the research (See Bryman and Bell (2011)). I used more specifically a theoretical sampling approach (Data collected as a function of the emerging theory (See

Glaser and Strauss (1967)). Generalization of these data to the population may be a problem but this approach did not intend to statistically test the validity of certain relationships, but to generate hypotheses and new interesting questions that provide deeper insights into the potential theory under research.

To make sure that all the relevant characteristics of firms and entrepreneurs and their growth financing options were present in the sample I used the following criteria for selecting the interviewed SMEs: All of them were successful companies with demonstrated high growth in the past three years following the same criteria previously described for selecting the quantitative sample of this study. One company was currently part of a PE portfolio, one SME had been part of an unsuccessful negotiation process with a PE fund, one company had never been involved in a negotiation process with a Private Equity Investor and one company had grown with self-generated funds and did not require additional capital. In addition, the sample was required to have at least one company with a single owner, one family owned business and one enterprise formed by friends or college class mates.

The interviews were conducted in Spanish and transcripts were written after each interview. Data analysis was conducted in the original language of the interviews (Spanish) and translated to English during the coding process.

3.5. Data analysis

The interview transcripts were analyzed individually after conducting each of the interviews. A grounded theory approach to coding was used to facilitate understanding and analysis of the data. These codes or indices of terms were used to improve the following interviews, to outline relationships between the different concepts and to relate the data to the previously and newly reviewed academic literature. These concepts were then grouped into categories that were deemed relevant and related to the three hypotheses of this research. Relationships among the different categories and between

them and the hypotheses were explored and these relationships were later used as the base to propose an emerging theory.

3.6. Interviewed SMEs

The identity of the people and companies that participated in this research is confidential, but here I present a basic description of the SMEs to provide the readers with some context and characteristics that facilitate their understanding of the following discussion.

COMPANY A

This company is a leading specialized waste management provider formed by three engineers, two of them chemical engineering class mates. The company was founded more than 10 years ago as one of the founders, who had worked for several years for a multinational corporation and had serial entrepreneurial experience, saw a business opportunity related to his professional experience. In 2010 the company had revenues of around $5 million dollars and close to 100 employees. Company A received investment from a Private Equity fund at the end of 2010 as part of a plan to geographically expand their business country-wide.

COMPANY B

Company B is a successful software testing company created by a single founder with no previous entrepreneurial experience. More than 10 years ago, the founder was working in a software business and as part of a joint venture with an international software company, was exposed to new testing techniques. These techniques were later on in great demand by telecommunication companies, financial institutions and companies in other software intensive industries. Company B grew based on customer financing and cash flow reinvestment to become in 2010 a $9 million dollar revenue enterprise with more than 400 employees.

COMPANY C

This Company was created more than 25 years ago by three engineers working at that time in different industry-related companies. It provides specialized engineering and construction services. The company is now a family owned business belonging to two families and has grown based on client advances to become a $19 million dollar company in 2010 with 48 direct employees and hundreds of workers hired on a per-project basis. As the market competitive environment changes and customers are no longer willing to provide project advances, the company is analyzing different alternatives to finance expansion to take advantage of growth opportunities.

COMPANY D

Company D is an aeronautic consulting and engineering firm formed by 20 industry experts as a combination of a market opportunity and a search for an employment alternative. This company was involved in an unsuccessful negotiation process with a Private Equity fund in an attempt to expand their portfolio of services. The company has more than 45 engineers and revenues in 2010 reached 2.5 million dollars.

Table 3.1. Summary Description of Interviewed SMEs

	Summary Description of Interviewed Companies			
	Company A	**Company B**	**Company C**	**Company D**
Industry	Specialized waste management	Software testing	Specialized engineering and constructing	Aeronautic engineering and consulting
No. of founders	3	1	3	20
Years since created	More than 20	More than 10	More than 25	More than 8
Revenues	$ 5 million	$ 9 million	$ 19 million	$ 2.5 million
Experienced Entrepreneurs	Yes	No	No	No
Employees	100	400	48 direct + per project	45
Technology Transfer	Yes	Yes	Yes	Yes
Motivation for start-up	Opportunity related to job	Opportunity and customer requirement	Opportunity related to job	Opportunity and job alternative
Financing for growth	Commercial credit	Customer finance and Self-generated cash flow	Customer finance and Self-generated cash flow	Commercial credit and self-generated cash flows
Private Equity Involvement	Part of a PE fund portfolio	Explored PE investment	No exposure to PE	Unsuccessful PE negotiation

3.7. Interviewed Private Equity Firms

Table 3.2. provides a summary of the characteristics of the Private Equity firms interviewed for this study. Four of these firms were selected from the Private Equity Catalog of the Colombian Ministry of Industry and Commerce and Bancoldex. This catalog presents information for 11 Private Equity funds 6 of which invest in assets like infrastructure, early stage start-ups, art, mining, real estate or timber which are not

relevant for this study. Interviews were conducted with investment officers or partners of the management firms of 4 of the five funds listed on this catalog that had invested in SMEs in Colombia. I also conducted a fifth interview with a senior investment officer of a large international fund manager that had recently invested in Colombian SMEs and was not listed in the catalog.

Table 3.2. Summary Description of Interviewed PE firms

	Summary Description of Interviewed PE firms				
	Firm 1	**Firm 2**	**Firm 3**	**Firm 4**	**Firm 5**
Relevant Assets under management	$ 105 million	$ 420 million	$ 45 million	More than $ 500 million	$ 22 million + $ 72 million just raised
Type of firm	Binational	Domestic with investment scope in Latin America	Domestic	Global	Global
Investment strategy	Multi-sector growth	Multi-sector growth/buyout	Multi-sector growth	Opportunity growth buyout	Multi-sector growth
Ticket Range	$ 15 - $ 20 million	$ 25 - $ 50 million	$ 2.5 - $ 8 million	$ 100 million	$ 0.5 - $ 3.5 million second fund $5 - $15 million
Target Companies	$ 25 -$75 million in revenue	$ 10 -$60 million in revenue	$ 2.5 -$30 million in revenue	More than $100 million in revenue	$ 1.0 -$30 million in revenue, second fund $20 - $70 million
Target Percentage Stake	Target 50% plus	Target 50% plus	50% plus or minority with Share Holders' Agreement	Target 50% plus	Minority with SHA

CHAPTER 4 - PRESENTATION OF MAIN THEMES

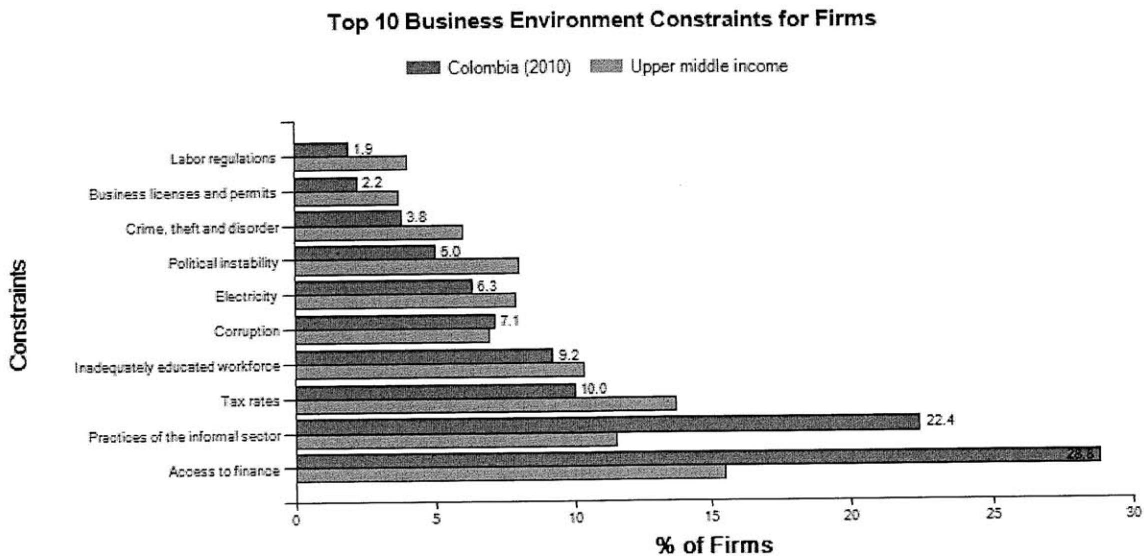
In this chapter I present the results from this research in a similar structure to the one used for arranging the relevant academic theory. First I discuss the findings about entrepreneurship growth, access to finance and human capital in developing markets based on the Colombian case. Then I present the relevant insights associated to the Private Equity and Venture Capital Industry and finally I summarize the outcomes directly related to the research hypotheses of control, liquidity and asymmetric information organized in what I call the main themes of the research findings.

4.1. Entrepreneurship and Growth in Colombia

Access to finance and the practices of the informal sector are the most important constraints for firms in Colombia. Less than one third of the Small and medium companies use banks as the source of financing for investments. The majority of the investments are financed by internally generated funds and a very small portion of them use equity as the source of funding.

The World Bank's enterprise survey provides interesting insights about the growth limitations perceived by entrepreneurs in different countries around the world. This survey was conducted in Colombia for 942 companies in the non-agricultural formal private economy. Consistent samples are defined in the survey for all countries across the different geographic regions and cover small, medium and large companies.

Figure 4.1. Business Constraints in Colombia



Source: Enterprise Surveys (www.enterprisesurveys.org)

Figure 4.1. illustrates the two most important concerns of Colombian entrepreneurs for growing their businesses: Access to finance and the practices of informal competitors. It is interesting to notice that these two issues are very high when compared to their peer countries in the upper middle income group of the Enterprise Survey. While the latter seems to be very important for entrepreneurs, and policy makers need to address it, it is outside the scope of this study. In the next paragraphs of this section I will focus on presenting the information related to the access to finance constraint.

4.2. Access to Financial Capital

Access to finance appears to be a major concern for small firms. As seen in figure 4.2., more than 50% of the small companies identify this as a major issue. However, less than 16% of medium and 12% of large firms sees finance as a key constraint for doing

business. It is important to note that firm size for the Enterprise Surveys is defined as a function of the number of employees and not as a function of revenue as in this paper[2].

Figure 4.2. Access to Finance as a Constraint for doing business in Colombia

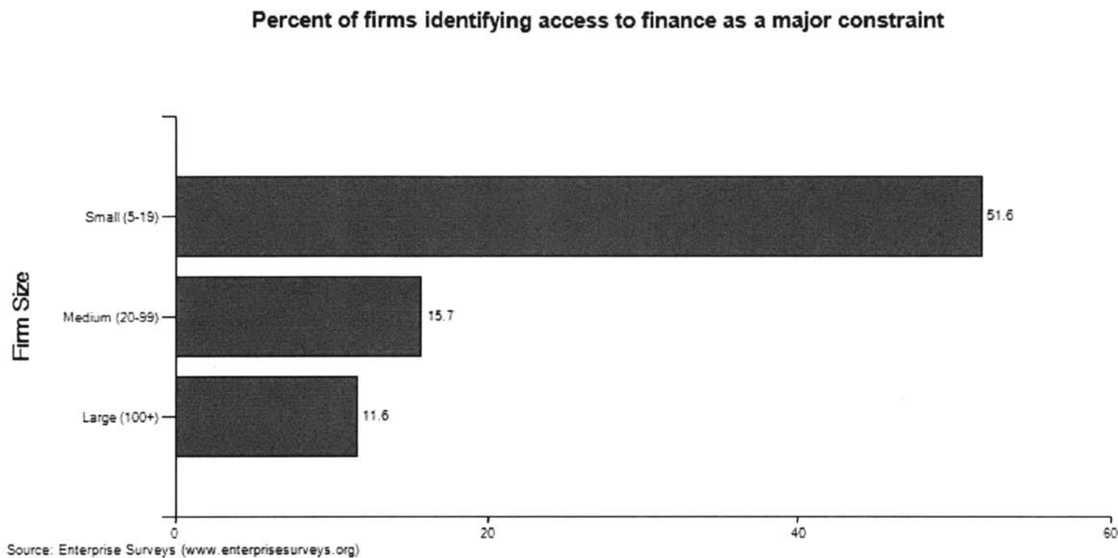


Figure 4.3. indicates that the percentage of small and medium companies using banks to finance investments is less than 30%, very low when compared to the 86% of large firms. This suggests that even if medium companies don't see access to finance as a constraint for operating their businesses, they either have some constraints to finance investments with commercial banks or they just choose not to use them for investment purposes. Most of the investments in small and medium firms are financed with internally generated funds as presented in figure 4.4. Small firms finance 45% of their projects internally while medium firms finance 52% of projects with their own resources.

[2] The World Bank defines small firms as those with between 5 and 19 employees, medium firms as those with between 20 and 99 employees and large firms as those with more than 100 employees.

Figure 4.3. Companies using Banks to Finance investments in Colombia

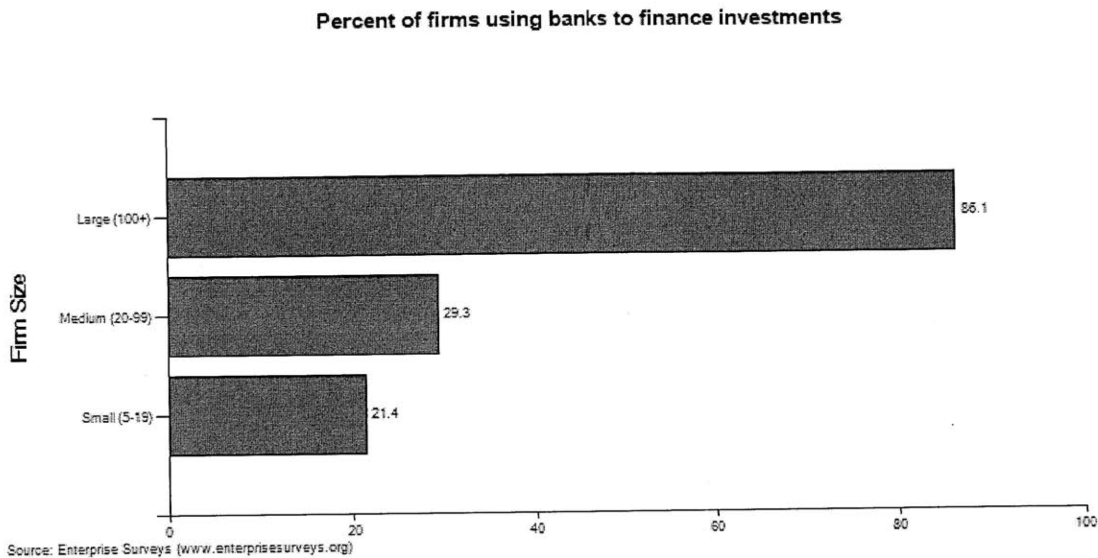


Figure 4.5., shows how in medium firms only 25% of their investments are financed by banks while small companies finance less than 10% of their projects with this institutions. Equity plays a very small role in financing investments in Colombia, as seen in figure 4.6. Even large companies finance only around 4% of their projects with equity. All this information suggests either that there are not enough growth opportunities which is very unlikely for a developing country like Colombia or that SMEs limit their growth when related to capital investments to their own capacity to generate and reserve funds. The latter is consistent with the findings of Beck et. Al (2010), Schiffer and Weder (2001) and other academic studies that emphasize access to finance as a great constraint for growth in small and medium enterprises in developing countries and with their findings about the role of other sources of financing.

Figure 4.4. Use of Internal Funds to Finance investments in Colombia

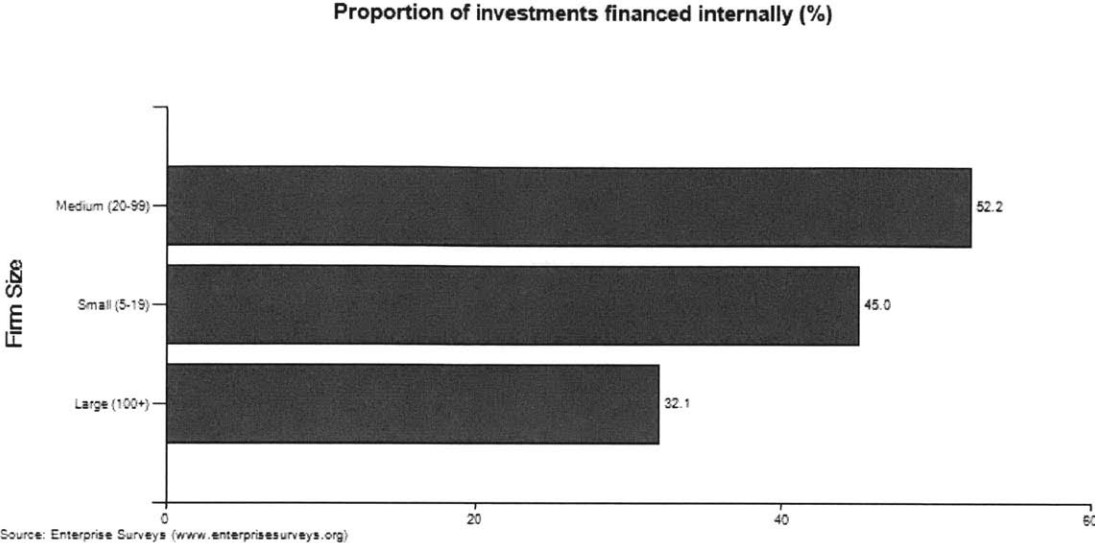


Figure 4.5. Use of Banks to Finance investments in Colombia

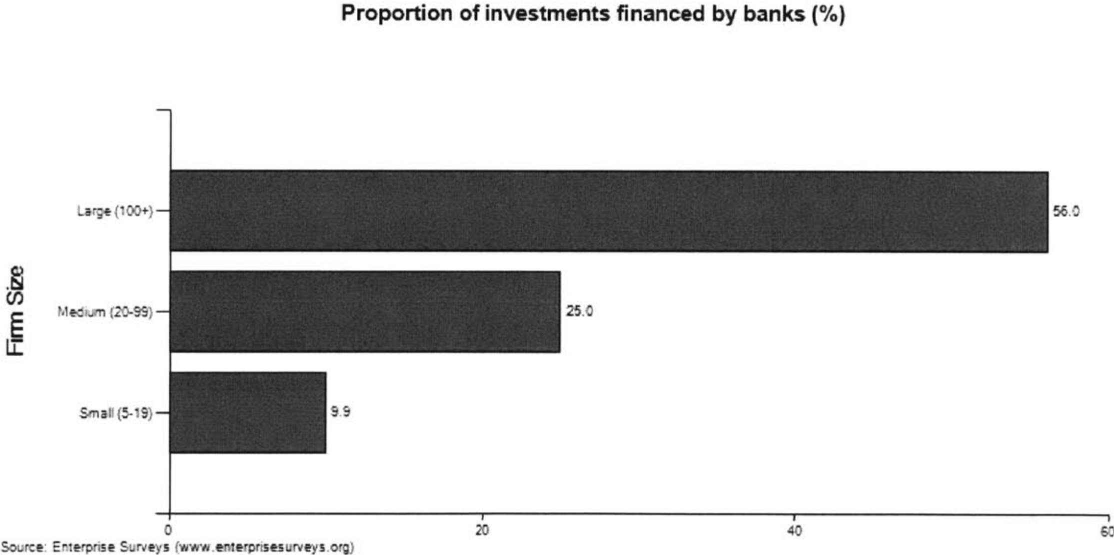


Figure 4.6. Use of Equity to Finance investments in Colombia

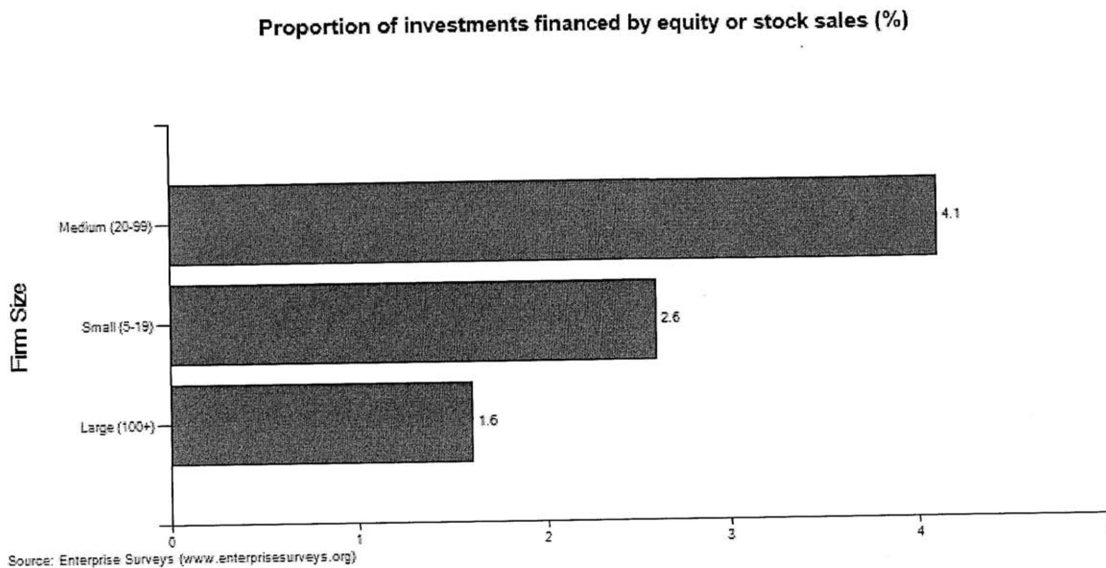
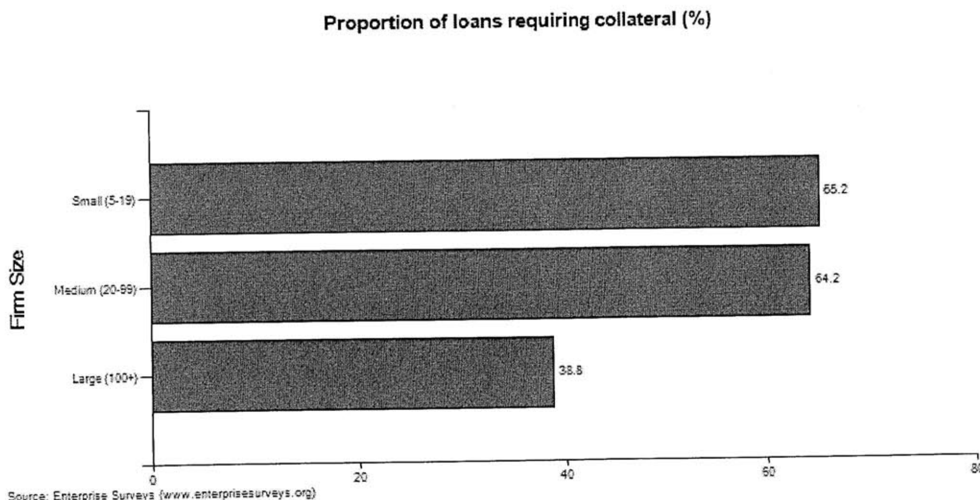


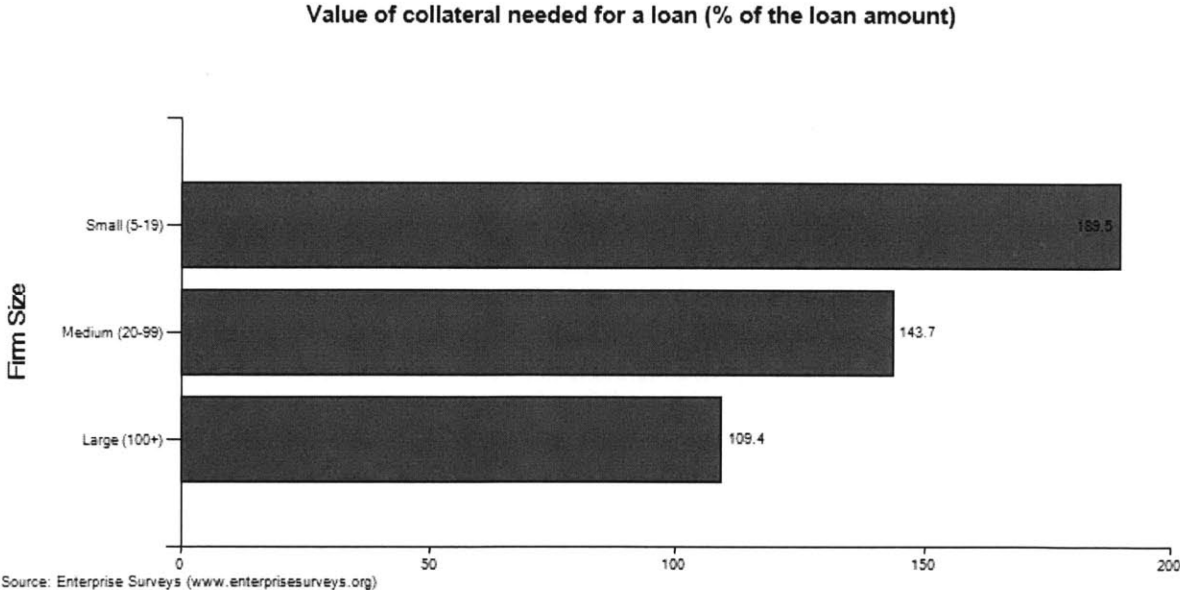
Figure 4.7 may give us a possible explanation for why SMEs do not use banks to finance investment. More than 60% of the loans require collateral in the case of small and medium firms and as shown in Figure 4.8., the required level of collateral is above 160% of the required loan amount. Small and medium growing companies have little tangible assets and their owners seldom have enough sources for collateral to get access to credit under these conditions.

Figure 4.7. Collateral Requirements for Loans in Colombia



Owners and managers in the survey[3] for this study, when asked for the origins of funds for financing their company's growth, mention in 57% of the cases family and personal savings, in 39% resources from capital investors different from private equity or venture capital funds, but still 61% of the companies say they use bank loans as a source for growth (See figure 4.9.). The use of family and personal funds is consistent with Beck, Dermirguc-Kunt (2006). However, at first the use of banks appears inconsistent with the GEM study. There could be an explanation for 61% of the surveyed companies using bank financing for growth. It appears that established companies are using short term resources from banks to finance working capital requirements for expansion. Investment on the other hand seems to be financed by internally generated funds, family and personal savings and private investors different from formal PE/VC funds (See figure 4.9.). More in depth research is required to fully understand the exact sources and instruments used by SMEs for growing their businesses especially to explain the differences in financing working capital and investment.

Figure 4.8. Value of Collateral for Loans in Colombia



[3] It is important to remember that the response rate of this survey was very low and its results are used here to complement the secondary information and other sources of data for the study rather than to present them as statistically representative of the characteristics of the overall population of SMEs in the country.

Figure 4.9. presents a table comparing the financing of firms and their investments in Colombia to those in the rest of the world. These results show that there is a similar perception in Colombia and the world about access to finance being an important constraint for firms. In Colombia the percentage of firms that identify access to finance as a major constraint is higher than in other economies presented in the table. The percentage of firms using banks to finance investments is higher in Colombia than in most developing countries and very similar to that of OECD countries. However this result is highly influenced by large firms. Since consolidated Data for the other regions is not broken down by firm size it is difficult to draw conclusions from this table.

However, when one analyzes the World Bank Studies for individual countries finds that in Colombia larger firms use more banks to finance investments when compared to companies in countries like Brazil, Chile, Mexico or India. In Colombia 86% of large firms use banks for investment purposes while in Mexico only 16% and in Brazil 68% do so. On the other hand only 21% of Small and 29% of medium firms in Colombia finance investments with banks, while in countries like India 36% of small firms and 54% of medium firms do so. Brazil and Chile have similar data with percentages that range from 22% to 56% of the small and medium companies using banks for investment purposes. The most interesting result in this comparison is the proportion of investments financed by other type of sources different from banks, equity and internal investments.

In Colombia other type of financing accounts for 22% of the financing of investments, more than twice the proportion of developed countries and more than three times the world average. More than 66% of the investments are financed by internally generated resources and other sources of finance different from banks. This figure is similar for all developing markets and does not differ much from developed countries either. This suggests that investment for growth in most countries is limited to the capacity of firms to internally generate resources and to the network and access of firms and their owners to other sources of private financing. This appears to be consistent with the experiences of owners interviewed in the qualitative part of this study where companies expressed that they relied on internally generated funds and customer financing for

growing their companies. Even though all of the interviewed companies use credit financing they seem to use other sources for investing or just limit growth to their internal generation of funds while they look last (if interested) for external sources of private capital. These findings seem to be consistent with the pecking order view of Myers and Majluf (1984) where firms use first internal funds, then debt and only when it is not sensible or possible to use more debt they use equity to finance their investment projects or in many cases they forgo these projects even if returns are attractive.

Figure 4.9. Financing of firms and investments in Colombia and the World

FINANCING OF FIRMS AND FINANCIAL CONSTRAINTS									
Economy	Percent of firms using banks to finance investments	Proportion of investments financed internally (%)	Proportion of investments financed by banks (%)	Proportion of investments financed by equity or stock sales (%)	Proportion of investments financed by other financing (%)	Percent of firms using banks to finance working capital	Proportion of loans requiring collateral (%)	Value of collateral needed for a loan (% of the loan amount)	Percent of firms identifying access to finance as a major constraint
All	26.5	68.4	17.1	4.5	5.6	30.4	78.2	161.8	31.5
East Asia & Pacific	27.5	64.7	18.5	5.1	8.9	30.9	78.1	172.9	19.2
Eastern Europe & Central Asia	37.0	59.3	23.0	9.4	3.3	48.2	81.1	134.0	24.9
High-income OECD	35.6	60.9	21.1	4.5	10.1	35.3	71.4	128.4	14.6
Latin America & Caribbean	33.6	63.2	20.3	4.3	4.7	43.0	72.4	197.3	30.8
Middle East & North Africa	11.0	76.6	12.1	2.0	6.4	21.5	85.8	155.5	34.8
South Asia	27.4	73.9	17.7	3.2	4.0	29.7	81.2	198.1	24.7
Colombia	35.0	43.9	21.2	2.6	22.2	49.2	60.5	169.6	41.4
Small Companies	21.4	45.0	9.9	2.5	29.8	44.4	65.2	189.5	51.6
Medium Companies	29.4	52.2	24.9	4.1	12.2	48.1	64.2	143.7	15.7
Large Companies	86.1	32.1	56.0	1.6	5.5	84.8	38.8	109.4	11.6

Source: World Bank Enterprise Survey 2010

According to the GEM 2008 report based on a survey of 2000 individuals and 36 entrepreneurship experts, Colombia has one of the largest TEA (Total early-stage entrepreneurial Activity in the world). With 24.52% this is the third largest TEA in the world after Peru and Bolivia. Interestingly the three top entrepreneurial countries in the world are located within the Andean Region. The percentage of established firms rose from 11.56% to 14.07% from 2007 to 2008. Results for 2008 show, that the percentage of new businesses that expect to create more than 10 jobs within 5 years and the percentage of this firms that are involved in medium and high technology activities, place Colombia among the top countries in Latin America. However, the motivation for creating these new businesses is related more to "none-opportunity" and "necessity" factors than to real quality opportunities. These findings cause some concern in line with Schoar's (2009) definition and importance of transformational entrepreneurship and

may require further analysis from policy makers and investors as they select their target companies for financing and growth policies. While these results are lower for Colombia than for innovation-based economies (See fig 4.13) they seem to be similar to those for other efficiency-based economies. From this information it is clear that if Colombia wants to evolve from an efficiency-based to an innovation- based economy it needs to work on creating the right ecosystem and policies to promote development of more transformational entrepreneurs. This however, requires time, is complex and it is not the main concern of this research.

This thesis focuses on how to help existing transformational entrepreneurs grow by developing an alternative model for combining managerial and financial capital. In the short term investors and policy makers can focus on helping this small percentage of existing transformational entrepreneurs improve access to managerial and financial capital to impact growth. Increasing the chances for success of these entrepreneurs may generate a significant impact on the creation of more entrepreneurs of this type and on growth.

As shown in figure 4.10., and consistent with both the Enterprise Survey and the quantitative questionnaires of this study, experts surveyed by GEM believe that new entrepreneurs depend almost exclusively on their own resources and those of family and friends to finance their enterprises as other sources of finance are still incipient. Risk capital presents some improvement but it still receives a very low rating and chances for growing businesses to do IPOs are very small according to experts. This financing alternative has the lowest rating of all and instead of improving it appears to be moving in the wrong direction.

Figure 4.10. GEM's Expert Assessment of financing conditions in Colombia

GEM Expert Assessment of conditions for business financing in Colombia (1 to 5 Scale with 5 being best)		
	2007	2008
There are sufficient means of outside financing for new and growing businesses	2.44	2.61
There is sufficient public funding available for new and growing businesses	2.42	2.28
There are sufficient internal sources of funding within companies to finance new and growing companies	2.47	2.17
There is enough funding available from private investors different from founders to finance new and growing enterprises	1.81	2.06
There is adequate supply of risk capital for new and growing businesses	1.33	1.75
There is enough funding available through listing to finance new and growing businesses	1.79	1.5

Source: GEM Colombia 2006 and 2008. Experts Survey.

4.3. Entrepreneurship and Human Capital

According to the World Bank's Enterprise Survey Colombian managers are very experienced in their industry (See figure 4.11.). Management teams for companies of all sizes exceed 24 years of practice in their firm's sector. This indicates they know their industry very well. However, as seen in figure 4.12., the expert survey of GEM shows that experts believe that managers are not very well qualified to run a high-growth enterprise. They give managers a 2.11 over 5 score on their ability to create and run a high-growth potential company. This perception is also consistent with the opinion of investors from the interviews of this study who think that entrepreneurs even though are improving their management skills as generations become more educated, still need management preparation to grow their companies.

Figure 4.11. Sector Experience of Top Managers in Colombia

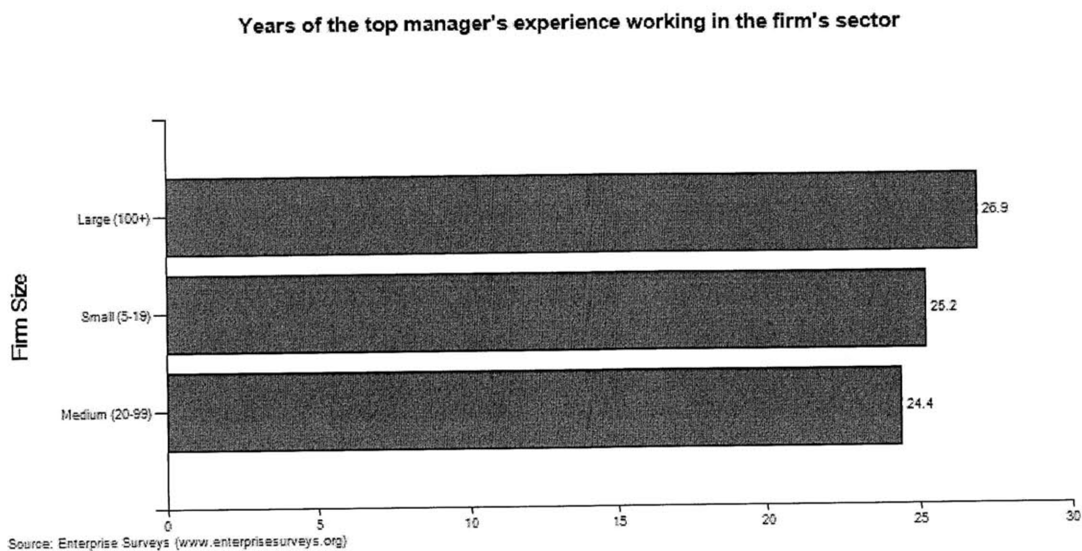
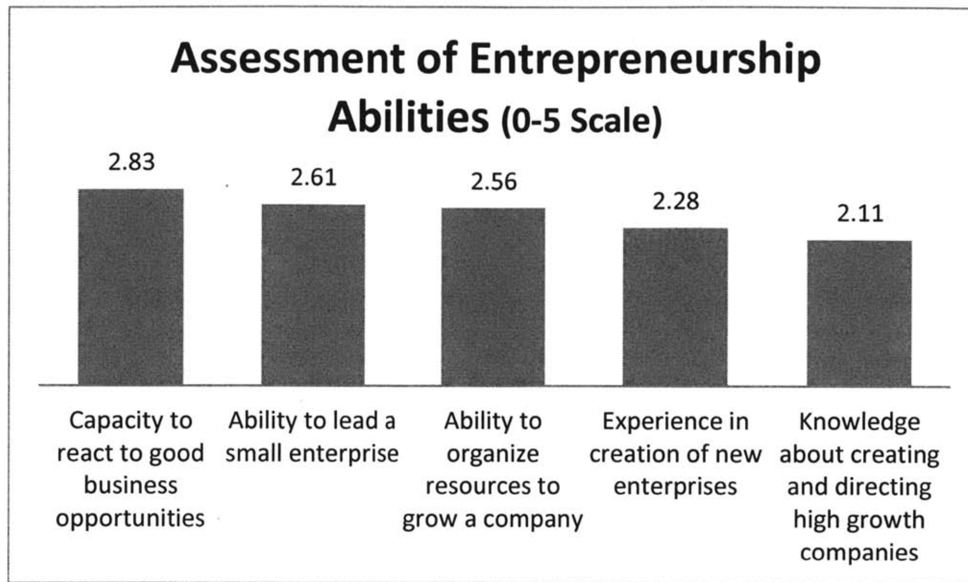


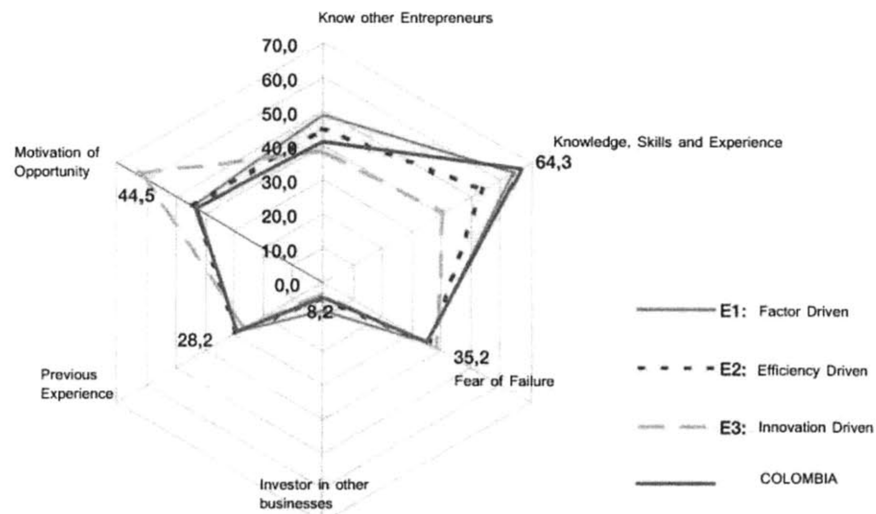
Figure 4.13., presents a summary of the results of Colombian entrepreneurs in relation to their motivation, knowledge and experience compared to those of entrepreneurs in different countries included in the GEM survey. It is interesting to notice that perception of Colombian entrepreneurs about their own abilities and attitudes towards entrepreneurship is high compared to the rest of the countries in the study. This is consistent with the interviews where most of the entrepreneurs did not express management limitations as one of their constraints for growth. However, the perception of investors was very different. Almost all of the interviewed investors expressed the need for entrepreneurs to improve their management related skills. Colombian entrepreneurs seem to be too optimistic about their own skills and their entrepreneurial abilities. This is confirmed by the low score (compared to international entrepreneurs) in indicators of actual behavior like the number of people that mention knowing an entrepreneur or the number of people that affirm having been part of financing a new venture. The most important conclusion of this graph, however, is the strong difference in entrepreneurial motivation. Colombian entrepreneurs are still highly motivated by "non-opportunity" related factors. This in line with Schoar (2009) is associated with lower level of innovation and growth and as mentioned before presents an enormous challenge for policy makers and investors.

Figure 4.12. Experts' assessment of abilities for entrepreneurship in Colombia



Source: GEM Colombia 2008 Experts Survey

Figure 4.13. GEM's comparison of entrepreneurs' characteristics in Colombia with other countries in the study



Interviewed Entrepreneurs and questionnaire respondents even though may think highly of their own abilities for managing their companies, expressed the need for investors that contribute more than capital. 52% of the companies say they need both capital and managerial and strategic support while 26% require just managerial and strategic help. This means that 78% of the respondents state that their companies require improvement in their managerial capital.

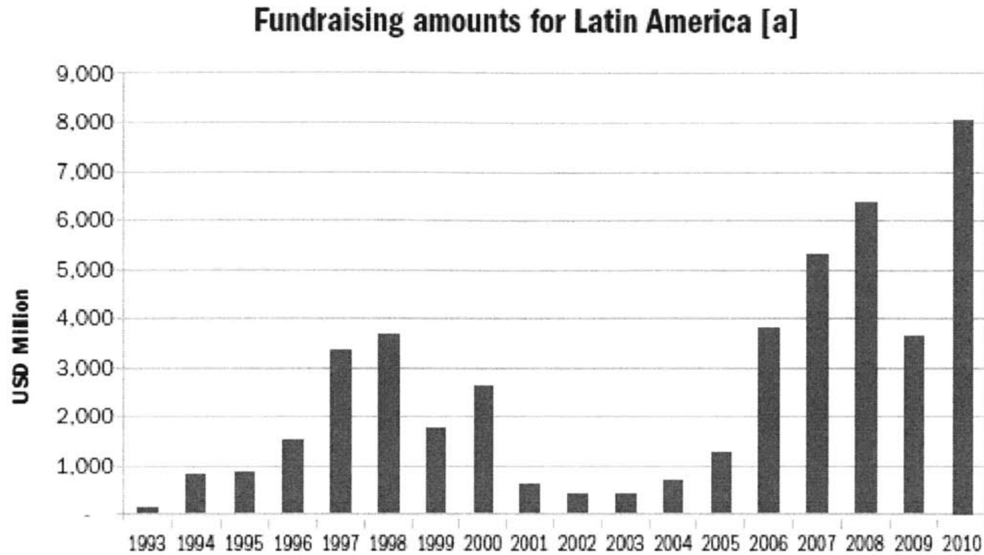
Figure 4.14 Companies' needs from structured questionnaires

Which of the following describes best the needs of your company for growth?		
	My company only needs Capital	9%
	My company only needs managerial and strategic support	26%
	My company needs both capital and manageria and strategic support	52%
	My company does not need capital nor managerial or strategic support	13%
	Total	**100%**

4.4. Private Equity and Venture Capital in Colombia

The Private Equity and Venture Capital industry in Colombia is still very young as is the case in most of the developing countries. The formal structure of the industry was created in 2007 with the legal framework defined by decree 2175 of 2007. In 2010 according to the Ministry of Commerce, Industry and Tourism there were eleven established Private Equity funds with $ 924 million dollars in commitments and 19 new funds in the process of fund raising an estimated $ 1.5 billion dollars. Figure 4.15. shows the Private Equity fundraising in Latin America by year. Fundraising has risen consistently every year since 2003 - with the exception of 2009 when the financial crisis had a negative impact on resources allocated by investors to the Private Equity industry- to reach $8 billion dollars in 2010.

Figure 4.15 Private Equity Fundraising in Latin America by Year



Source: LAVCA 2011 Industry Data

In 2010, 5% of Latin America's fundraising was conducted in Colombia with $431 million dollars raised. 13% of the investments of Private Equity in the country were directed towards growth and expansion. These types of investments represented 32% of the number of deals in 2010. Distressed and turnaround investments represented the majority of the resources invested by private equity in 2010. Expansion and growth financing accounted only for 13% of the resources representing 32% of the transactions. While energy is still the largest recipient of investment in dollar terms and in number of deals, other industries like IT, logistics and distribution, financial services and retail are also receiving investment from Private Equity and Venture Capital funds.

Figure 4.16 Private Equity Fundraising in Latin America by Country

2010 PE/VC Fundraising by Country/Region

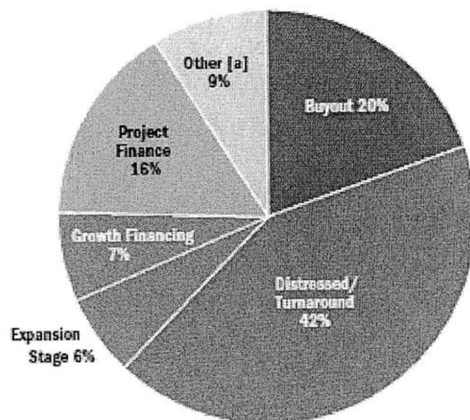
2010 FUNDRAISING BY COUNTRY / REGION		
Country / Region	**USD Million**	**% of regional total**
Regional	$4,984	62%
Brazil	1,166	14%
Mexico	880	11%
Peru	553	7%
Colombia	431	5%
Chile	28	0%
Central America	16	0%
Argentina	0	0%
Total	**$8,059**	**100%**

FUNDRAISING CONCENTRATION			
	% 2008	**% 2009**	**% 2010**
Top 5 firms	56%	44%	57%
Top 10 firms	72%	68%	73%
Top 15 firms	82%	85%	84%

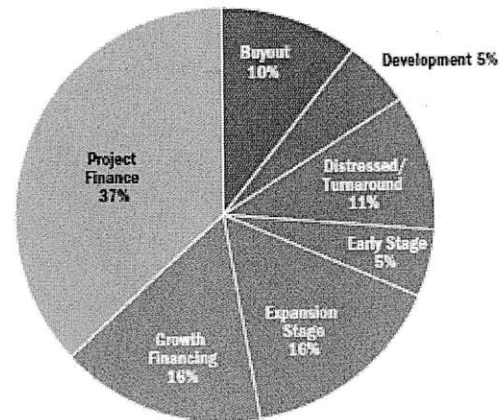
Source: LAVCA 2011 Industry Data

Figure 4.17 Private Equity and Venture Capital Investment in Colombia by Stage

2010 Investments by Stage ($)

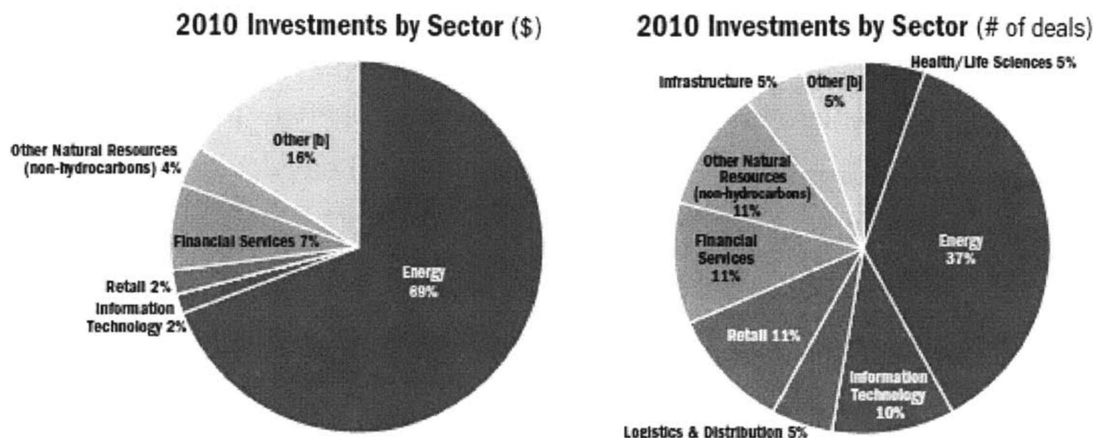


2010 Investments by Stage (# of deals)



Source: LAVCA 2011 Industry Data

Figure 4.18 Private Equity and Venture Capital Investment in Colombia by Sector



Source: LAVCA 2011 Industry Data

According to LAVCA Colombia is in the fourth position in terms of attractiveness of the overall conditions for Private Equity development in Latin America. Chile, Brazil and Mexico lead the rankings. Interesting for the purpose of this study are the scores of 3, 2 and 1 (on a 0 to 4 scale as shown in figure 4.20.) for the protection of minority shareholder rights and corporate governance requirements, the strength of the judicial system and perceived corruption, respectively. This is consistent with the GEM's Enterprise Survey where more than 25% of small and medium firms have the perception that the Colombian court system is a major constraint for doing business (See figure 4.19). Interestingly only 14% of large firms have the perception of the court system being a major constraint. This could be because large firms have access to better legal advice, are better prepared to deal with the system or perhaps because they can find ways to influence it.

Corporate governance requirements and minority protection aim at giving investors power by means of legal protection. This is what Shleifer and Vishny (1997) characterize as the first approach to reduce the agency problem. However in the case of countries with low strength of their judicial system and high perceived corruption this approach is unlikely to solve the problem as presented by Lerner and Schoar (2005). This leads to the second approach to solve the agency problem as presented by

Shleifer and Vishny, the concentrated ownership approach. This approach however, has costs like the potential expropriation of other investors including the founders of the company. The challenge for this research is to find a way to separate ownership and control in a way in which the solution of this agency problem does not depend on the sophistication of the legal system but does not create a heavy cost for other investors in the firm either.

Figure 4.19. Legal System as a business Constraint in Colombia

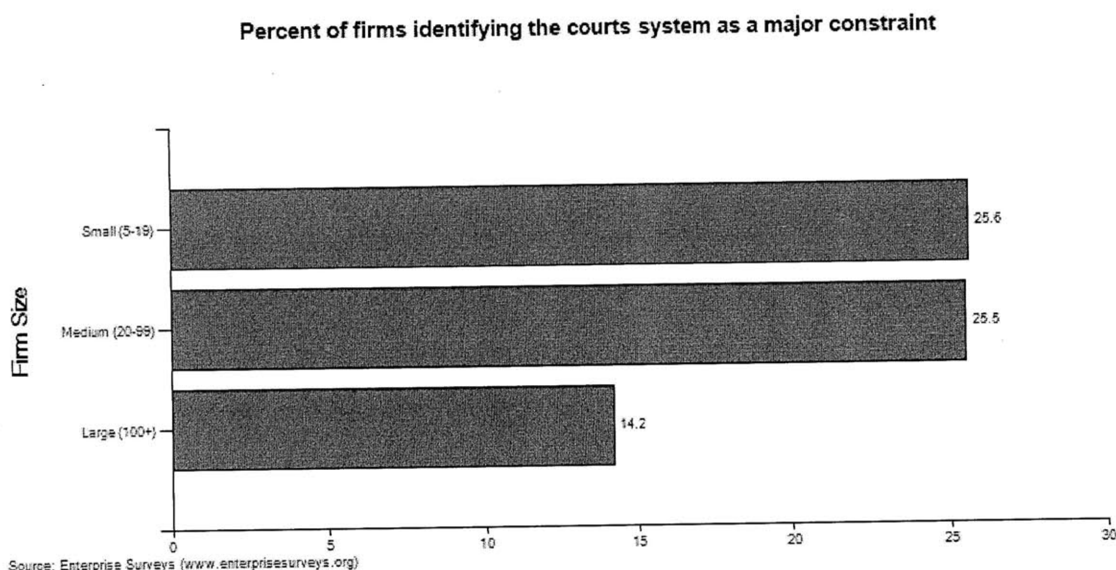


Figure 4.21. shows how the Private Equity and Venture Capital investment as a percentage of GDP is generally higher for those countries with higher overall Lavca scores. Colombia lies right on the linear regression line demonstrating that the penetration of the PE/VC industry reflects the country's overall conditions for industry development identified by Lavca.

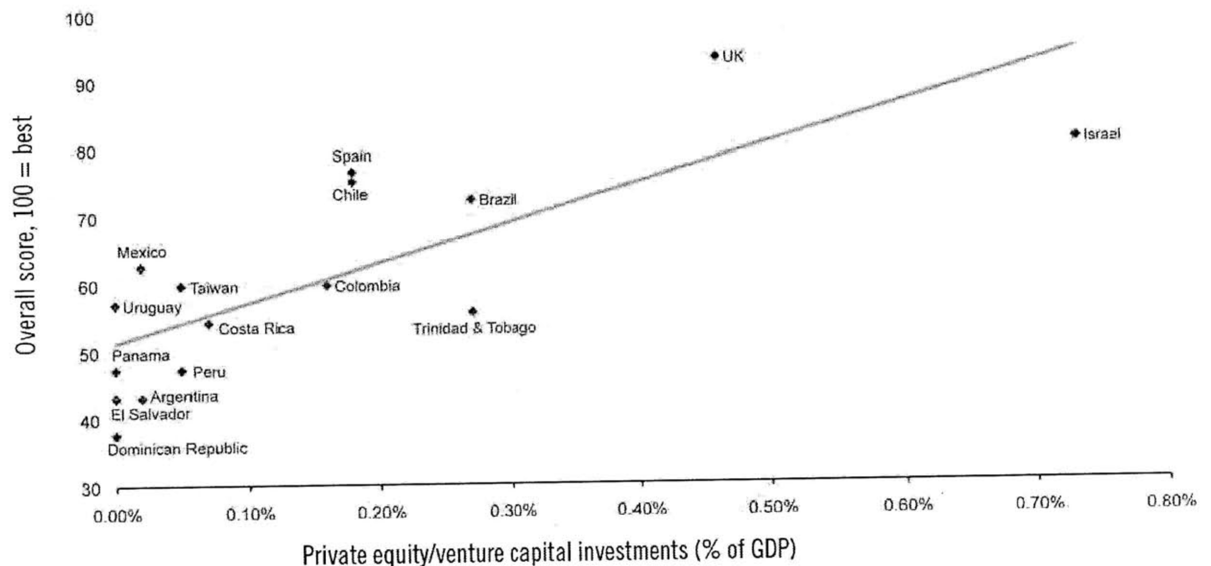
Figure 4.20 Private Equity and Venture Capital LAVCA Score for Colombia

	score
Overall score	**54**
Laws on PE/VC fund formation and operation	1
Tax treatment of PE/VC funds & investments	3
Protection of minority shareholder rights	1
Restrictions on local institutional investors investing in PE/VC	1
Protection of intellectual property rights	3
Bankruptcy procedures/creditors' rights/partner liability	2
Capital markets development and feasibility of exits	2
Registration/reserve requirements on inward investments	3
Corporate governance requirements	2
Strength of the judicial system	3
Perceived corruption	3
Quality of local accounting/use of international standards	4
Entrepreneurship	2

Indicators are scored from 0-4 where 4 = best score

Source: LAVCA 2011 Industry Data

Figure 4.21 Private Equity and Venture Capital LAVCA Overall Scores



The interviews with Private Equity investment officers and managing directors show that most of the firms are increasing the size of their funds and thus increasing the average ticket size, which makes them look for larger companies. Private Equity investors do not seem to be specialized or in the process of specializing in specific industries. Even though they have slightly different investment strategies they all seem to be opportunistic and diversified in terms of industries. They all seek to have active strategies through board and committee participation and with only one exception they all look for control via a majority stake in the companies. The one exception could be explained by the size of the fund which was very small. This probably had an impact on the strategy making the fund select minority investments to invest in slightly larger companies.

4.5. Main Concepts

According to the primary and secondary information analyzed in this study, entrepreneurs, the investment environment and the Private Equity Industry in Colombia do not seem to be too different from those of other developing countries. There are some minor differences that are worth studying in future research. Especially in the use of bank financing for working capital and the degree of importance of some of the constraints for growth, like informality. Colombia however, appears to be a representative developing country for analyzing the separation between control rights, cash flow rights and the option to sell. This analysis can help understand the factors affecting the separation of rights to develop a framework for improving the financing strategy of SMEs in developing countries. This of course does not mean that the conclusions derived from this study can be applied to other developing markets. This study only provides a basic framework that should be considering the first step in the process of understanding how to improve SMEs financing in Colombia and in other developing countries. Further research and experimentation is required before reaching generalizable conclusions.

The following table presents the main comments and characteristics extracted from the data collected from the structured interviews and from alternative sources like companies' websites, articles and conversations with people that had previous knowledge of the owners and their companies and the investors. These observations are grouped under common concepts to facilitate further analysis.

Figure 4.22. SMEs Summary Comments and Characteristics by Concept

CONCEPTS	Company A	Company B	Company C	Company D
Reason for creation	Company Creation as opportunity related to current job included technology transfer	Company Creation as opportunity related to current job included technology transfer	Company Creation as opportunity related to current job included technology transfer	Company Creation a combination of opportunity and need, related to current job included technology transfer
Type and number of partners	3 partners, 2 of them school college classmates	One founder and then as time went by invited other colleagues	3 Partners as friends related to the industry	20 Partners as professional colleagues
Industry specific expertise	One of the partners worked in that area for a multinational and other for a key supplier	The founder learned from an international organization that transferred the technology	All partners were involved in the industry	All partners industry experts
Transaction knowledge or previous experience	No previous experience in transactions or raising money, low capital below 100K	Never raised money, self financed growth and advances from initial customer. Low capital below 100k	Experience with bank financing, mostly self financed growth, family funds and advances for customers. Low capital	No experience in transactions and some experience with bank financing. Low capital below 500K
Management preparation	Serial entrepreneurial experience, preparation would have been nice	No entrepreneurial experience	No entrepreneurial experience but owners think they are prepared	Second company and partners experience but mostly technical. They feel they are making progress
Network	Not mentioned	Not mentioned	Not mentioned	Not mentioned
Attitudes towards entrepreneurship	Entrepreneurship as a business but passionate about the industry and what they do	Entrepreneurship as vehicle for helping others/making a difference. Passion about intellectual challenges	Entrepreneurship as a family matter	Entrepreneurship as a way to work in what they like
Company formalization of information	Moving in the direction of a more formal company	Limitations are internal in terms of knowledge and succession. Company is prepared but owners are not	The company needs help with governance and processes	They think they are well organized
Type and characteristics of potential investor	Company needed capital plus management support	Company needs management support and especially innovation capacity	Company needs capital and strategic support	The company needs capital to grow. A strategic investor that knows the industry
Willingness to sell	No problem they were looking for a partial sell.	Doubts about selling and concerns about the characteristics of the buyer	Looking for a partial sell	Concerned about owners jobs and with maintaining company style
Information sensitivities	Information sensitivities relate to commercial and market especially if the strategic investor is local	Information sensitivities relate to strategies and projects but don't see problems in sharing	Information sensitivities relate to strategies and administrative practices	No problem with sharing information
Aggressiveness of plans	Gradual investment was also an alternative	Very conservative growth	Lots of opportunities that want to be tackled to grow	Aggressive plan to launch new line of business
Cash out expectations	Key factor to compensate for loss of control and the option to sell	Not mentioned	Not mentioned	Not mentioned
Willingness to share control	Control of business decisions the most important right	Control of business decisions the most important right	Control of business decisions the most important right	Control of business decisions the most important right then cash flow
Competitive pressure or threat	Race to achieve national presence in an industry with economies of scale and oligopolistic characteristics	No competitive pressures	Increased competition due to industry attractiveness	Moderate competition in a very specialized niche
Financial constraints of current operation	Urgency due to financial matters and competitive pressure was the reason for looking and accepting an investor	No urgency due to financial matters	Urgency due to financial matters and competitive pressure was the reason for looking and accepting an investor	Moderate urgency the company needs money to expand but can continue as it is growing slowly
Growth opportunities	Very good growth opportunities. Geographic expansion the most important one	Very good growth opportunities in all areas of expansion	Very good growth opportunities mostly more sales to the same customers and new customers in the same business	Very good growth opportunities but capital is needed and owners say that investors don't understand the opportunities in the industry

Figure 4.23. PE Fund Managers' Summary Comments and Characteristics by Concept

CONCEPTS	Fund 1	Fund 2	Fund 3	Fund 4	Fund 5
Competitive pressure or financial constraints	Owners accept losing control and reducing cash flow rights due to market or financial pressure	Negotiations take between 10 to 12 months			Sometimes the process is fast it depends on entrepreneurs urgency
Entrepreneurs preparation				Owners accept losing control as a consequence of understanding the industry, preparation and trust	
Fund size and ticket	Target ticket is between 15 and 20 million	Diversified type of companies with large range of ticket from 25 to 50 million. Company size and ticket are increasing as	Specific sectors with ticket from 5 to 10 million. Companies with revenues between 3 to 30 million	Target ticket is between 1 and 3.5 million. In second fund between 5 and 15 million	Opportunity fund tickets around 100 million
Company revenue size	Companies with revenue between 25 and 75 million			Companies with revenue between 20 and 70 million	
Cash out expectations	Use of Cash out to buy other partners out completely or partially	Mostly cash-in investors don't like large cash outs		No Cash out as policy but used if needed up to 20%	
Entrepreneurs preparation			Entrepreneurs want to learn on the go. They don´t prepare in advance	There is an opportunity to prepare companies and increase the likelihood of getting resources from PE/VC	Only if we want we keep the entrepreneur to continue as a shareholder. It is difficult they don't know how PE works
Industry specific experience of owners/managers	Only stay with previous owners if they add value to company. Mostly commercially	Three types of entrepreneurs, if not operators or professional investors lots of conflicts so rather own 100%			
Growth opportunities		Look for companies with regional or global expansion opportunities			
Entrepreneur's expectation about control	The most difficult issues for entrepreneurs are formalization, control and price		Giving away their control rights scares the entrepreneurs	The most difficult issues for entrepreneurs is control. Moral quality key to avoid legal issues	
Company formalization and information			Poor planning and information. No price formation yet.Surprises in information. Most of them in accounting and creative tax planning		Different levels of information. Some surprises but in large companies they have less impact
Type of investment instrument	In most of the cases the instrument is equity (ordinary shares)			In most of the cases the instrument is equity (ordinary shares) but mezzanine or convertible is used when issues with	
Expectations about exit	The option to exit has to be clear from the beginning and it is more difficult to negotiate control	The option to exit has to be clear from the beginning	The option to exit is more difficult for the entrepreneurs because we use veto and not control		
Other			Policy reducing taxes for PE, improvement of PE professionals and promotion of entrepreneurship		Opportunities for external advice to facilitate process. Willingness to pay is in doubt due to characteristic of Colombian entrepreneurs
Degree of intervention	Active strategy through board, committees and closeness to management	Active strategy through board and management committees	Active strategy through board and management committees	Active strategy with involvement in corporate governance and M&A	
control and enforceability	Control directly or via syndicated investments. In some cases veto rights and minority protection rights	Control directly with more than 50% stakes	Control directly or through SHA	Minority with share holders' agreements with stakes between 15 and 40% some use of mezzanine debt in part due to find size. If there are management problems or complex partners we stay away	Control over 51%.To avoid problems of enforceability sometimes offshore holding
Entrepreneur's expectation about price			Low number of offers. Entrepreneurs do not have many options		
Company formalization and information	Main opportunities for company improvement are in Information Systems, relationships with financial sector, expansion and capacity planning, management teams.There are some surprises mainly in tax issues that affect accounting and once in receivables	Low preparation with main opportunities for company improvement are in understanding financing life cycle and legal, negotiation and finance.. There are surprises mainly in tax issues and family expenses entrepreneurs are creative	Entrepreneurs are not prepared for boards and follow up	Main opportunities for company improvement are in general management. Companies are improving. . There are some surprises mainly in tax issues fixed asset and other accounting	Different type of entrepreneurs with different levels of preparation. Normally latest generations are more prepared. Entrepreneurs use help. Sometimes external in many cases internal

4.6. Entrepreneurs, Investors and separation of ownership and control

H1. In order for the investors to maintain control in the deal they need a large ownership stake in many countries where it is difficult to separate cash flow and control rights. This usually means that the founders lose control and creates a disincentive for entering into the deal.

Investors in their interviews confirm the first part of this hypothesis. All of the funds with the exception of the one previously discussed that had to change the strategy as a consequence of raising too little money, were focused primarily on majority interests in the companies. They all saw majority stakes as the best or in many cases the only mechanism to achieve control. However, with the exception of the large international fund, they don't seem to be that conscious of the importance or impact of difficulties in law enforceability on the separation of cash flow and control rights. In other words investors seem to know that in order for them to control companies they need to own a majority stake in them but they don't seem to rationalize or at least they did not verbalize the reason for that. The second part of the hypothesis was also confirmed by entrepreneurs in both the interviews and the questionnaires. In all the four companies interviewed control of the business decisions was the most important right for owners and managers to maintain after an investment transaction. In the questionnaires 65% of respondents assert that maintaining control of the business decisions of the company is the most important consideration for the owners to accept an investor and 71.4% of the companies interested in receiving resources from an investor consider this the top priority.

Figure 4.24. Owners' priorities for accepting investors from structured questionnaires

What would be the most important factor for the owners to accept an investor?		
	To maintain the control of when to sell the company	9%
	To maintain the control of to whom to sell the company to	9%
	To have a large share of the profits	9%
	To maintain control of the business decisions of the company	65%
	They would not be interested in accepting an investor	9%
	Total	**100%**

It is interesting though that when the question is asked the other way. That is when entrepreneurs are presented with the statement that owners are more interested in having a large participation of profits than in having a large portion of the voting rights, 35% completely agree and 17% partially agree. This and the comments during the interviews suggest that entrepreneurs have some difficulty choosing between cash flow rights and control rights. Both seem to be very important for them but if asked to make a trade off they would chose to maintain control to accept an investor. It appears that in general if everything else is equal founders want to maintain as much of the cash flow rights as possible.

Figure 4.25. Owners' priorities cash flow rights and control rights from structured questionnaires

For the owners of the company it is more important to have a large participation of the profits than to have a large participation in the voting of the business decisions of the company.		
	I agree completely	35%
	I partially agree	17%
	I am neither in agreement nor in disagreement	13%
	I am partially in disagreement	17%
	I totally disagree	17%
	Total	**100%**

4.7. Investment liquidity and the importance of maintaining the option to sell

H2. In some cases VC and PE funds might have to drag along the entrepreneurs to complete the sale of an equity stake and achieve liquidity. This can create disincentives up front for the entrepreneurs if they are concerned about maintaining control about when to sell and the selection of the buyer.

The first part of this hypothesis is validated by all the interviewed fund managers. Given the fact that the possibility for a SME in Colombia to do an IPO is very low, drag along clauses are fundamental for liquidity. All interviewed funds were emphatic in saying that

drags are discussed up front with entrepreneurs and if not accepted negotiations are stopped there.

The second part of the hypothesis does not seem to be confirmed nor denied in this study. Some entrepreneurs were very concerned about who would buy their companies, how the new owners would treat employees and how they would change the culture of the organization. Other entrepreneurs who were familiar with the Private Equity industry understood the importance of liquidity and drag along clauses as part of the exit strategy for investors. The importance of maintaining the option to sell seems to vary depending on the characteristic of the entrepreneur. Some seem to be more emotionally attached to their companies and thus more affected by the notion of having to sell them with no control over who would buy. Other more business oriented entrepreneurs (mostly serial entrepreneurs) on the contrary seem to understand the exit process as part of the strategy for making money. It is interesting to notice from the responses to the questionnaires that only 48% of the entrepreneurs are interested in selling their companies when presented with a fair offer.

Figure 4.26. Owners' intention to sell from structured questionnaires

If the owners of the company had an offer to buy the company at a fair price they would sell it.		
	I agree completely	22%
	I partially agree	26%
	I am neither in agreement nor in disagreement	17%
	I am partially in disagreement	13%
	I totally disagree	22%
	Total	**100%**

However, when the entrepreneurs need to prioritize between the right to have the option to sell and having control of their business decisions, the latter seems to be much more important. Unfortunately we don't have a large enough sample to confirm the impact of these different types of entrepreneurs on the importance of the option to sell. This is an interesting topic for future research. The results also suggest that it is important to have a professional and reputable VC/PE industry since otherwise owners might rightfully be

concerned about selling the firm to funds which might not do a good job with the assets they buy.

4.8. Asymmetric information and adverse selection

H3. The difference in information between SMEs' owners and investors in a difficult investment environment where investors are developing specific skills affects the price and conditions of transactions implying that the VC alternative is not very attractive for founders of good companies.

Figure 4.27. Owners' intentions to share information from structured questionnaires

The owners of the company would be willing to share company information with an INVESTOR in the case of a potential transaction		
	I agree completely	65%
	I partially agree	17%
	I am neither in agreement nor in disagreement	13%
	I am partially in disagreement	0%
	I totally disagree	0%
	Total	**100%**

This is the hypothesis that is most challenging to validate or negate. Entrepreneurs in this study both from the companies interviewed and from the responses to the questionnaire assert that they would be willing to share information with a potential investor. These responses reflect intention and not actual behavior. Interviewed companies do mention commercial and strategic information as sensitive material to share with investors. This is consistent with questionnaires where 17% of the respondents say they would be less willing to share strategic information. 13% mentioned business opportunities and company projects as the most delicate issues while 22% of respondents say that they were hesitant to share all the types of information presented in the question. Even though 82% of the respondents state that they don't have a problem with giving out information, 57% mention information that they are sensitive about sharing with investors. Investors when asked about their real experiences in transactions declare having surprises in information after due diligence.

Mainly in areas like accounting and taxes. It appears to be difficult from investors to assess and rationalize that there is asymmetric information in transactions. My interpretation is that both entrepreneurs and investors know there is a difference in the levels of information but they don't seem to be willing to admit it. Entrepreneurs don't want to be perceived as dishonest by accepting they withhold information. And investors don't want to admit that they don't completely know what goes on in the companies in which they invest, since this would be admitting liabilities in their fiduciary responsibility to their Limited Partners. It is also the case that "in normal times" firms are willing to give out information without a problem. It is when firms are doing poorly that they do not want to provide information. Of course these are the most important times for the investors and thus this will erode the trust of investors overall.

The attractiveness of the VC/PE offers in terms of prices and conditions and the willingness of entrepreneurs to accept them seem to vary depending on the urgency and characteristics of each of the entrepreneurs. Again, this is an interesting topic for further research. This research however is not easy and would need to wait for the industry to evolve in order to have sufficient data to reflect actual behavior in terms of transaction valuations.

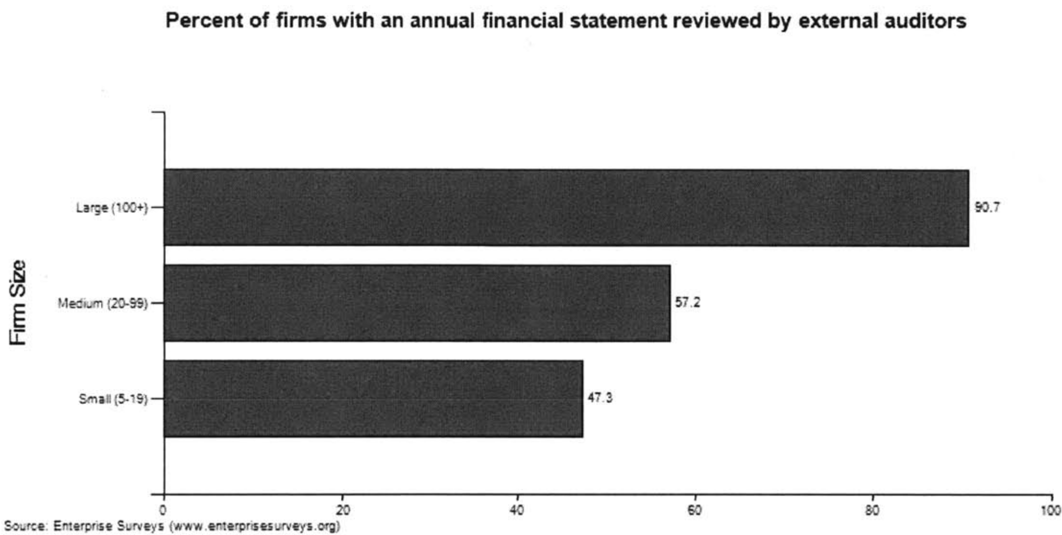
Figure 4.28. Owners' information sensitivities from structured questionnaires

What type of information would the owners be less willing to share with a potential investor?	
Company accounting practices	0%
Company tax strategies	4%
Company business strategies	17%
Company business opportunities and projects	13%
All of the above	22%
No problems in sharing the information described above	43%
Total	**100%**

It is interesting to note that only 57% of medium firms and 47% of small companies in the GEM study have their financial statements reviewed by external auditors (See Figure 4.29). In my experience even those that do have external auditors contract this

service with firms or individuals that are not qualified or completely independent from the owners of the company. In many cases owners themselves don't see the importance of having qualified independent auditors until too late in a transaction process. This increases the information asymmetry problem described in the hypothesis.

Figure 4.29. External Auditing in Colombia



4.9. Emerging Themes

Figure 4.30. presents a summary of the concepts of this study by grouping them to facilitate analysis in categories that represent what I consider real-world phenomena. Based on these categories in the final stage of grounding theory I refine and integrate the findings with the existing literature to develop the theory. The framework is based on three emerging themes that summarize the concepts from the table and describe the interaction between investors and entrepreneurs in an environment of low degree of legal enforceability as the one that characterizes developing countries. These three emerging themes are: 1. Entrepreneurs, company formation and preparation, 2.

Urgency and the business environment, and 3. Expectations about investment and transactions.

Figure 4.30. Axial Coding

<table>
<tr><th>Category</th><th>Concept</th></tr>
<tr><td rowspan="3">Entrepreneur's urgency and business environment</td><td>Competitive pressure or threat</td></tr>
<tr><td>Financial Constraints of current operation</td></tr>
<tr><td>Growth opportunities</td></tr>
<tr><td rowspan="8">Investors' expectations about companies and/or transactions</td><td>Fund's size and ticket</td></tr>
<tr><td>Desired Stake</td></tr>
<tr><td>Company size</td></tr>
<tr><td>Management preparation</td></tr>
<tr><td>Valuation</td></tr>
<tr><td>Growth opportunities</td></tr>
<tr><td>Liquidity and exit</td></tr>
<tr><td>Company formalization and Information</td></tr>
<tr><td rowspan="3">Intervention and control</td><td>Degree of investor intervention</td></tr>
<tr><td>Type of investment Instrument</td></tr>
<tr><td>Corporate Governance, Control and enforceability</td></tr>
<tr><td rowspan="8">Type of entrepreneur, preparation and formation</td><td>Entrepreneur's Network</td></tr>
<tr><td>Management preparation</td></tr>
<tr><td>Company formalization and Information</td></tr>
<tr><td>Knowledge about the Private Investment Industry</td></tr>
<tr><td>Experience with previous transactions</td></tr>
<tr><td>Industry specific expertise of owners/managers</td></tr>
<tr><td>Type and number of partners</td></tr>
<tr><td>Attitudes towards entrepreneurship</td></tr>
<tr><td rowspan="7">Entrepreneurs' expectations about investors and/or transactions</td><td>Cash out</td></tr>
<tr><td>Aggressiveness of plans, amounts and timing</td></tr>
<tr><td>Information sensitivities</td></tr>
<tr><td>Willingness to sell and let go of the company</td></tr>
<tr><td>Type and characteristics of desired investor</td></tr>
<tr><td>Perceived need for management support</td></tr>
<tr><td>Willingness to share and let go control of the company</td></tr>
</table>

4.9.1. Entrepreneurs, Company Formation and Preparation

The concepts that define the type of entrepreneurs and how well prepared they and their companies are for receiving investment from professionals are of three types: Concepts that are inherent to the entrepreneurs and the company formation that are difficult to change or cannot be modified, concepts that relate to the entrepreneurs that can be learned, modified or complemented and concepts that relate to the company, its management and processes.

CONCEPTS INHERENT TO ENTREPRENEURS AND COMPANY FORMATION

Within this category we have the type of entrepreneurs (portfolio, serial or novice) and their reason for creating the company (opportunity vs. need), the number of partners and their attitudes towards entrepreneurship (i.e. company as a business, as integral part of the family or as profession) and the industry specific experience of the owners. If the company is large enough to have professional management, the industry specific experience can be hired by bringing on board a professional team. This however, increases the principal-agent problem.

CONCEPTS THAT CAN BE LEARNED, MODIFIED OR COMPLEMENTED

Knowledge about the Private Investment Industry, experience with previous transactions and the entrepreneurs' network are factors that can be transferred to entrepreneurs via training and couching or complemented by advisors or intermediaries.

CONCEPTS RELATED TO THE COMPANY AND ITS PROCESSES

Management preparation and company formalization of processes and information systems are factors that need to be adopted by the organization and require the right people, structure and set of attitudes. The adoption of these concepts can be facilitated by couches and consultants but need to be incorporated by the organization and accepted by its people.

All entrepreneurs in the four companies interviewed for this study explained the creation of their companies as taking advantage of an opportunity that they came across as part of their work as employees in a company. These opportunities in all the cases were related to the job they were performing at the time and involved some sort of technology transfer. While this is by no means a representative sample of the Colombian SMEs base it is an interesting finding knowing that these companies were selected using the same criteria described in the methodology chapter. These criteria had nothing to do with how companies were formed but with their success and growth potential. It may be just a coincidence worth future research outside the scope of this study.

Figure 4.31. Origin of funds for growth from the SMEs questionnaire

What has been the origin of resources to finance business growth?	
Personal and family savings	57%
Bank loans	61%
Government loans and subsidies	4%
Resources from capital investors	39%
Seed Capital, Venture Capital or Private Equity Funds	0%

Respondents selected as many options as they considered appropriate so the sum is not 100%

In three of the four companies studied, partners are college class mates or friends with a common interest and similar backgrounds. In two of the companies entrepreneurs had no previous experience or education in entrepreneurship, in one case this was their second company, while in another case at least one of the partners considered himself a serial entrepreneur. All together these characteristics of how the companies were created, the number, type and underlying motivations of partners and their entrepreneurial experiences vary from firm to firm and appear to have an important role in defining the degree of readiness of entrepreneurs to accept professional investors. I will define and elaborate later on this concept and its importance on the financing strategy of SMEs.

Figure 4.32 Questionnaire Serial and Portfolio Entrepreneurs

The owners of the company usually maintain several companies simultaeously (portfolio) or sell one before investing in other (sequential)?		
	Normally they own various companies simultaneously (portfolio)	63%
	Normally they sell one before investing in another (sequential)	0%
	This is the only company that owners have own	33%
	Total	**100%**

In three of the cases the companies grew to became SMEs with little investment most of it coming from family and friends. In one case the invested money was moderate reaching close to the equivalent of 500 thousand dollars. In companies B and C growth was not limited and it was financed by customer advances and company reinvested resources. More recently customer financing was no longer available for company C as the market competitive conditions changed. Companies A and D on the other hand saw their growth limited from the beginning to their borrowing and cash flow generation capacity.

It is interesting to see how most of the entrepreneurs tend to think that their companies are well prepared in terms of managerial capital. Some of them affirm that having some help in terms of finance, negotiation and strategy would be helpful. Investors on the other hand unanimously state that companies are not well prepared in terms of information systems, finance, marketing and strategy, and other managerial areas. They say that companies are very informal in the way they manage their businesses. Limitations for growth varied substantially amongst the different companies.

4.9.2. Urgency and the business environment

Urgency and the business environment for entrepreneurs and their businesses depend on the competitive pressure or threat their enterprises face which is a function of the industry and the company positioning as described by Michael Porter in his article “The five competitive forces that shape strategy”, by the financial constraints for maintaining their current level of operation and by the growth opportunities that the company and its competitors have.

While all the companies agree on the fact that there are many opportunities for growth (this is also consistent with the quantitative research where 87% of respondents state that opportunities are good or very good) and that capital is needed to take advantage of them, the degree of urgency for resources varies across companies. This degree of urgency is important in explaining why some of the companies made the decision to look for an investor and as I will explain later is one of the drivers that define the right strategic approach that SMEs should take regarding their financing decisions. The owners of interviewed companies under more competitive pressure or with more financial constraints to run their current operations seem to be more willing to forgo control rights, cash rights and their option to define when and to whom to sell their stake in the company. While owners of companies with moderate competitive and financial pressure express that they can continue growing slowly with their own resources while they find the right investor. Although all the interviewed companies value and understand the importance of these rights, companies facing less urgency seem to be less willing to forgo these rights, especially control and the option to sell.

4.9.3. Expectations about Investment and Transactions

Both entrepreneurs and investors have expectations about the characteristics of the right potential transaction. Investors' expectations can be defined in two groups. Those concepts that are related to the characteristics of their funds and their strategies and those related to characteristics they look for in the target companies. Entrepreneur's expectations about transactions come from two different concepts. Those directly related to the company and its expansion plans and those related to their owners. There is another group of factors that are common to both entrepreneurs and investors and that because of their critical importance for the success of the transactions are worth being analyzed separately. I am referring to those concepts related to intervention and control.

INVESTOR CONCEPTS RELATED WITH FUND STRATEGY AND SIZE

The determinants of investor's expectations about transactions in this group are the size of their funds and their ticket ranges, which together with the desired stake in the companies determine the target company size.

INVESTOR CONCEPTS RELATED TO TARGET COMPANY

Valuation, Management preparation, company formalization and information, company's growth opportunities, potential liquidity and exits are all concepts related to the characteristics of the target companies that play an important role in setting investors' expectations about transactions.

ENTREPRENEUR CONCEPTS RELATED TO COMPANY

Entrepreneurs and their management teams have different levels of aggressiveness in terms of their growth plans, different timing expectations and ideas about the required amounts for executing their growth strategies.

ENTREPRENEUR CONCEPTS RELATED TO OWNERS

The owners of the company have different expectations about the amount and characteristics of the amount they want to cash out from a potential transaction. They all have different information sensitivities, they differ in their willingness to let go of the company, they want specific characteristics for the right investor (this also has to do with what the company requires but in practice is driven by the desire of the entrepreneurs), They vary in the perceived need for management support (idem.) and they have dissimilar ideas about how much they want to share or let go control of their companies. All these characteristics vary among firms and among owners within the same firm and play an important role in defining entrepreneurs' expectations about a potential transaction.

CONCEPTS RELATED TO INTERVENTION AND CONTROL

These are the most fundamental aspects to the success of the financing strategy and are common to both entrepreneurs and investors. These are treated here separately

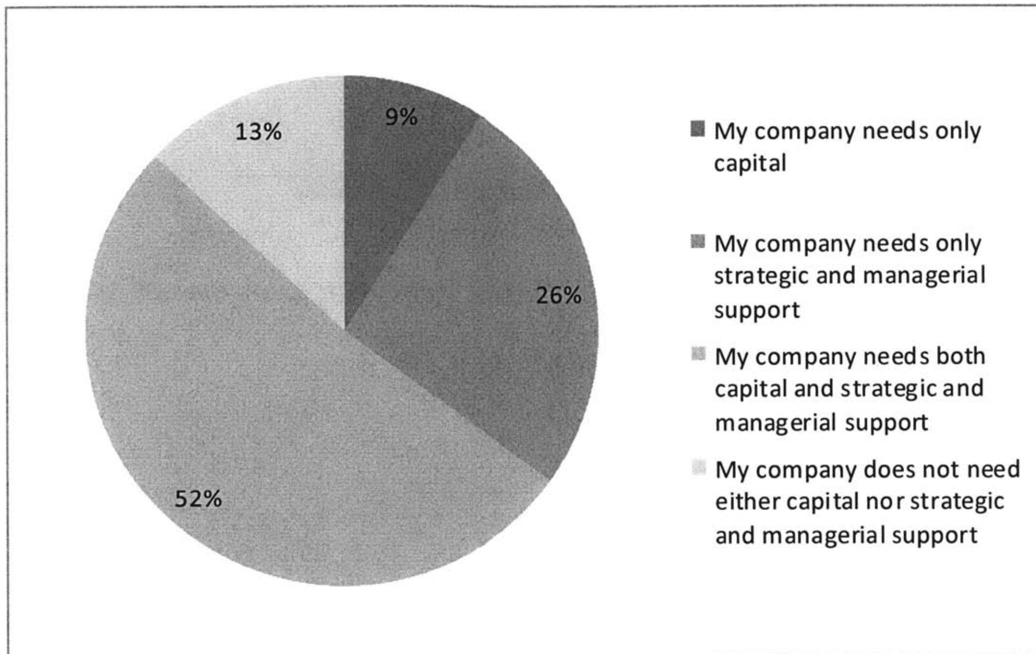
from entrepreneurs and investor specific concepts because they are part of the building components of the current business model of Private Equity and Venture Capital investment and are directly related to the separation of control and cash flow rights. These concepts are: The degree of investor intervention, the type of financial instruments, the mechanisms for corporate governance and control and the level of enforceability of contracts. Control and the enforceability of contracts can determine the required stake in companies as investors prefer majority stakes in countries with weak legal systems and low enforceability.

All companies interviewed expressed that the right to control the business decisions is the most important factor for them when contemplating accepting an external investor. In all of the cases cash flow rights were the second factor and in two of the interviewed companies owners also expressed concerns with foregoing the option to sell. In these cases the entrepreneurs cared about the style of the strategic buyer for the sake of employees and the organizational culture of the company. In countries with a poorly developed capital market where trade sales are the more likely exit strategy for investors, the option to sell becomes very important for liquidity. Even though entrepreneurs are more concerned about control, developing financing alternatives in which they maintain an important ownership and the option to sell -at least while they prepare themselves for other alternatives- can help reduce dilution and facilitate intermediate financing for growth.

In many cases entrepreneurs mentioned they were looking for a partial sale or a partial capitalization to raise cash, but most of them were also looking for management support. This is consistent with the questionnaires where 52% of the respondents affirm that there companies need capital and management support. In the interviews entrepreneurs mention they would like help in areas like strategy, innovation and finance. Some entrepreneurs feel that there management abilities are right for the challenges they are facing but investors seem to disagree arguing that they need better educated management teams and entrepreneurs.

Figure 4.33 Questionnaire Company Needs for growth

Which of the following describes best the needs of your company for growth?

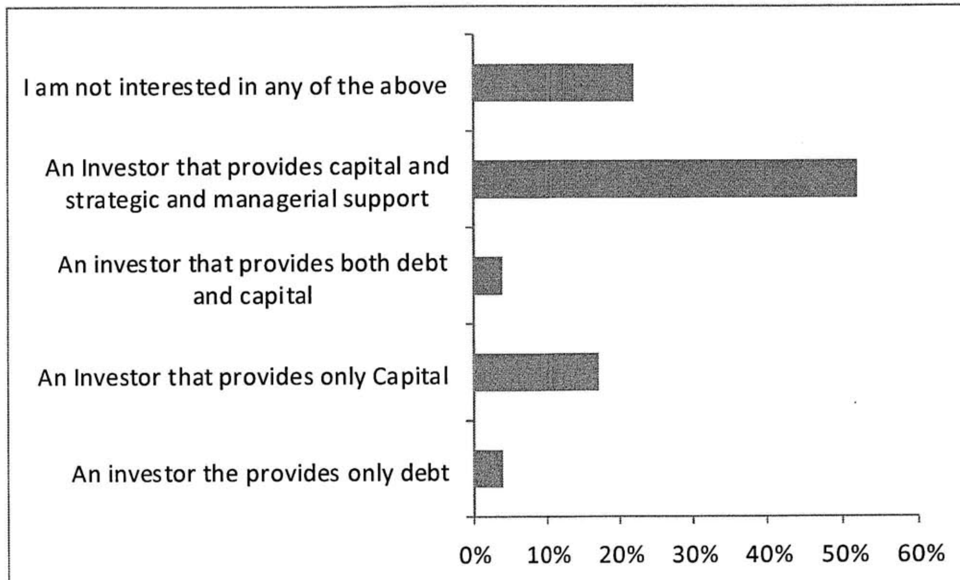


Interviewed company owners assert that they are open to sharing information with potential investors but some of them appear to be sensitive with respect to sharing information related to commercial and market information in the case of local strategic investors, business strategies and in one case the administrative practices procedures for payroll and other payments. (I assume that in this particular case it has to do with some creative tax structure which is common in this segment of companies).

Entrepreneurs do not seem very concerned with sharing information with a potential investor. However, all of the interviewed investors mentioned information discrepancies after closing the transaction in areas like accounting, taxes and in one case strategic position of companies in the markets.

Figure 4.34 Questionnaire Company Type of Investor

What type of Investor would you be interested in for your company?



Deals appear to take very long time while investors need to help entrepreneurs understand the financial instruments, the requirements of risk financing and deal with emotional and organizational issues.

Asymmetric information is not openly expressed as an important issue for entrepreneurs or investors. They still do not appear to recognize the impact of asymmetric information in transactions. There is academic support to consider this effect and to try to reduce it. Probably this is one of the reasons why transactions take this long.

The results of this study and my own experience suggest that entrepreneurs do self-select in agreement with Hellman (1998). The problem in my opinion is that since entrepreneurs know so little about Private Equity or Venture finance and they have little experience with sophisticated financial alternatives, it takes them a long time during the negotiation to come to the conclusion that this is not the right instrument for them. Since there are not many alternative passive private equity options, those that face urgency conditions and desperately require resources to survive are more likely to forgo their

rights and accept risk investment conditions. While those that have more time or less urgency realize they have other options even if taking this path constraints the rate at which they can grow.

Results are also consistent with Lerner and Schoar (2005) as most of the funds investing in Colombia prefer control via an equity majority stake in their companies. It is clear from this study too that entrepreneurs value very much control rights and that they are only willing to give them up if they really have urgency to get access to funding. In some cases and depending on the type of entrepreneur, the reluctance to accept external investors appears to have to do with a psychological or personal attachment to control.

One of the most important conclusions from the information and results presented in this chapter is that there is an interesting opportunity for a new and simpler business model. One in which investors would use an angel-based approach (incomplete and simpler contracts with easier to understand financial instruments). One that combines the benefits of a venture-like pre-investment selection (signaling) with more focus on post-investment collaborative involvement in a way that agency problems are reduced.

In the next chapter I present the framework and the bases for a business model based on these characteristics.

CHAPTER 5 - DISCUSSION

This chapter is organized in three sections. First I develop a framework for understanding the entrepreneur investment strategy for growth. In the second section I present what I consider the fundamental characteristics of a business model that allows for the separation of ownership and control to address the requirements of entrepreneurs and investors in a developing market. And in the final section of the chapter I end with a description of the implications of this study for practitioners, for policy-makers and for future research.

The financing strategy is one of the most important decisions entrepreneurs need to make as part of the growth strategy of their firms. It involves significant risks not only for the company but for its owners. Finding the right investor and raising the money under the right conditions could have significant implications for the growth of the company and for the future of the owners. The right investor should provide financial capital as well as other important ingredients like managerial support and an extensive network of contacts for commercial and strategic purposes. But these investors or intermediaries also will have a number of conditions that affect the rights of entrepreneurs and the degree of control over their business decisions.

Entrepreneurs face crucial questions like: Who is the right investor for my company? How do I go about finding the right intermediary to get these resources? What are the implications of accepting an investor for the future of my company and for me as an owner?

In the following paragraphs I develop a framework that will enable entrepreneurs and owners of SMEs in developing markets to address these questions. The analysis of the findings of this research based on the three emerging themes of Entrepreneurs, company formation and preparation, Urgency and the business environment, and Expectations about investment and transactions set the building blocks for the

framework focusing on the first two themes to explain the third one. In other words there are two factors that have a profound impact on the financing strategy of SMEs by affecting expectations of both investors and entrepreneurs in relation to a potential transaction and thus become the drivers of a successful financing strategy:

1. The degree of urgency faced by the company: The pressure under which the company is operating from the competitive and financial stand point.

2. The entrepreneurial investment readiness: This measures the extent in which the company and its owners are ready to receive investment for growth.

5.1. The Framework

5.1.1. The Degree of Urgency faced by the Company

The Degree of urgency faced by entrepreneurs depends on three things: The market pressure, the financial restriction for current operation of the company and the growth opportunities of the firm. As explained in the previous chapter, the first depends on the competitive positioning of the company and the characteristics of the industry (Porter (2008)). In the case of a difficult competitive environment entrepreneurs will be more likely to forgo some of their rights to accept money from investors. The other factor affecting the decision to trade some of the rights for investment resources is the degree of financial constraints. That is, when entrepreneurs are in a situation in which the company is financially restricted to keep up with the cash flow requirements of operating the business. Under either of these conditions the owners of the companies will be more willing to give control rights to the investor, reduce their cash flow rights or forego their option to sell the company.

It is important however to stress that facing competitive pressure or having financial constraints to the current operation of the company does not mean that the company has no interesting growth opportunities. It means that the firm is under short term

pressure and thus cannot execute an expansion strategy unless it gets access to the financial resources to overcome the short term constraints before growing. Of course when the company does not have interesting growth opportunities there is no need to raise capital and thus the firm does not need a financing strategy for growth.

5.1.2. Investment Readiness

Investment readiness is more complex to assess. It depends on attitudes, practices and the degree of social and human capital of the entrepreneurs and the firm. Managerial practices in the organization regarding important subjects like corporate governance, risk management, information transparencies, etc. are fundamental to determine if a company is ready to receive resources from investors and to define the right type of investors. Attitudes like willingness to accept different opinions and learn from others as well as the degree of awareness of the different alternatives of financial capital and their implications, and the experience of owners and managers are also critical for defining the financing strategy. The social capital of the company and its owners in terms of the type of networks and contacts for implementing a growth strategy are key determinants too.

In summary the factors that affect investment readiness are: Knowledge about financial instruments and the private investment industry, experience with similar transactions, industry specific experience of managers and owners, type and number of owners and their attitudes towards entrepreneurship.

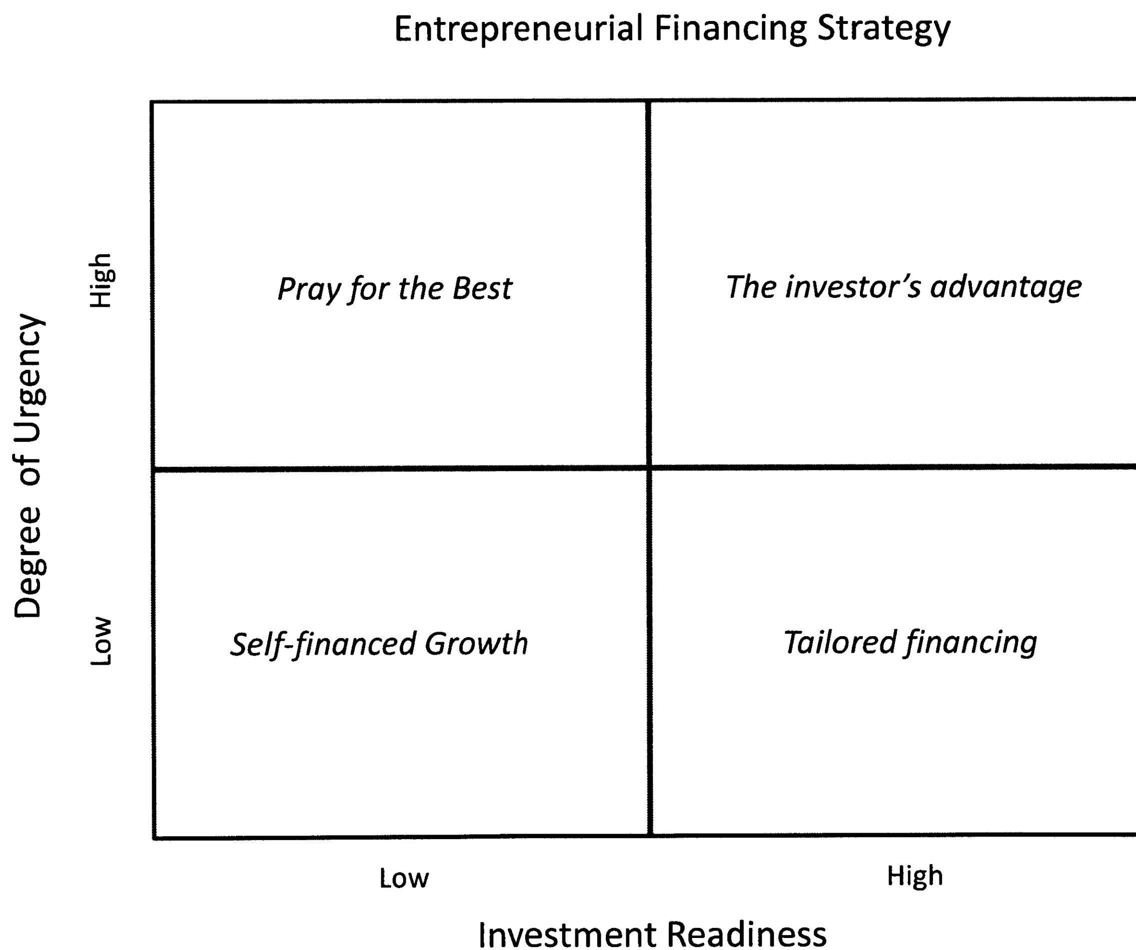
5.1.3. The Impact of Urgency and Readiness on the Financing Strategy

The right financing strategy is determined by the two drivers mentioned above: The degree of urgency faced by the company and the investment Readiness. The combination of these two factors defines four different financing strategies for SMEs in developing markets. This framework is shown in the matrix presented in figure 5.1. and

is based on the findings from the research conducted with entrepreneurs and investors in this study, presented in the previous chapter.

This framework reflects the circumstances under which entrepreneurs are willing to give away their control, cash flow and option to sell rights to satisfy the requirements and conditions of different investors that use sophisticated contracts in markets where there is no common law and enforceability of contracts is weak.

Figure 5.1. Entrepreneurial financing strategy matrix



As the degree of urgency increases, that is as one moves from the bottom half to the top half of the matrix due to new entrants, changes in the bargaining power of suppliers

or customer, increased presence of substitutes, changes in the regulatory environment or in the characteristics of complements, in the rivalry or in other factors that affect the competitive pressure or that increase the financial constraints for current operations of the firm; the entrepreneurs are more likely to trade off rights in exchange for financial and managerial capital. As entrepreneurs and companies are better prepared for professional investors, in terms of attitudes, processes and managerial and social capital they move to the right side of the matrix. This readiness increases their bargaining power, the access and number of potential investors and reduces the asymmetric information that affects valuations. As readiness increases investors have a better chance to suggest more sophisticated outside financial deals to entrepreneurs.

5.1.4. Self-Financed Growth

When entrepreneurs and their companies present a low level of investment readiness, are facing a low or moderate degree of pressure in the competitive market and do not have financial constraints for their current level of operations, the effective financing strategy is self-financed growth. Under this circumstances owners are not ready to deal with the conditions imposed by investors and do not have the market or financial pressure to give up their rights. The company can continue growing at the pace that internally generated cash allows as long as it has growth opportunities. They have time to either increase their level of readiness (I will explain later how they can do this should they chose this path) and prepare themselves with the help of external advisors for more competitively challenging times when market pressure increases and financial constraints appear. Investors can not present interesting external financing deals to companies in this quadrant since entrepreneurs are not sophisticated enough for complex financial structures nor they feel enough pressure to accept investors in exchange for their rights.

5.1.5. Tailored financing

When urgency is moderate because the company is not facing large competitive pressure, self-generated resources are enough to maintain the current level of operation and the company and its entrepreneurs have a high degree of readiness, the best financing strategy is what I call tailored financing. In these circumstances the company has enough time to plan and execute a tailor-made plan for growth. It may use an advisor for pre-investment preparation, signaling and negotiation and may require intermediate financing as it prepares itself for investors or starts executing the growth strategy to improve valuation. In this strategy companies and owners have time to design a financing strategy, define the type and characteristics of the right investor for the company and device and execute a plan for raising money under the best possible conditions. Investors can offer more sophisticated financing structures to companies in this quadrant but have to be aware that entrepreneurs do not have time pressure and may take a long time to make financing decisions. However, those entrepreneurs that decide to accept the investments will do so for strategic reasons rather than for financial or competitive urgency.

5.1.6. The Investor's Advantage

When companies face urgent market and financial pressures but they and their owners are investor ready, they can go directly to a sophisticated investor or intermediary. Here the key for getting a good valuation from investors is to reduce asymmetric information to avoid the problem of adverse selection. Depending on the moment within the life-cycle of the company and the preferred type of investor they can go directly to a VC, a PE fund, or hire the services of an Investment Banker to look for a strategic investor. However, it is important to note that under this financing strategy investors have the advantage of time given the critical urgency condition of the firm. The key here is not to let the investors see you sweat. It is under this urgency conditions that the owners will be willing to accept losing control rights, cash flow rights and the option to sell. This is the condition where Venture Capital and Private Equity deals take place in developing

countries. It is the case of adverse selection and under-valuation described on hypothesis 3.

5.1.7. Pray for the Best

When there is a critical urgency and the company has a low level of investment readiness there is a high risk of failure in the financing strategy. On the one hand the company needs the resources urgently to deal with the competitive environment and the financial constraints for the current operation. On the other hand the company and the entrepreneurs are not ready to deal with the investors. Failing to raise the required resources would probably risk the survival of the company but accepting an investor without being ready will cause an excessive dilution of current owners due to a low valuation. Things are even more complicated than that. The relationship of the owners with the new investors under these conditions will be prone to all sorts of difficulties and conflicts that are likely to affect the performance of the company. In most cases the investor (either a PE/VC fund or a strategic investor) ends up replacing the entrepreneurs as managers and it is also very likely that they buy out the previous owners in an attempt to control the company.

5.1.8. Dynamics within the Matrix

Vertical movements in the matrix depend on external factors like the competitive environment and the industry characteristics. But as Michael Porter explains in his five forces theory, the company also plays an important role as they assess the competitive characteristics of the industry and make the strategic choices to position themselves in that industry. It is possible then for a company to define and finance a strategy that could reduce the degree of urgency as it understands the forces shaping the industry and finds a better strategic position in the market. In some cases urgency can be reduced by getting financial resources to reduce the short-term financial constraints.

Horizontal movements within the matrix depend on improving company and owner preparation and on increasing access to social and managerial capital. Notice that some sort of transitional financial capital may be required for improving this readiness. Some of the ingredients in readiness like company formalization and information can be modified. Some can be acquired, learned, transferred or complemented by advisors like experience with similar transactions, network and management preparation. But there are some characteristics that are intrinsic to the entrepreneurs or the company like attitudes towards entrepreneurship and the type and number of partners. These are difficult if not impossible to change. It is therefore important to assess the different aspects of readiness to make sure that there is room for improvement. By increasing the ones that can be modified and understanding the impact of those that cannot - those that have to do with structural values and the formation of the company- companies can move in the direction of the tailored financing quadrant. Trying to change the structural factors of readiness can turn out to be an impossible and frustrating endeavor and a waste of time for both the advisors and the entrepreneurs.

The green arrow in figure 5.2. shows the horizontal move from the lower left side to the lower right side of the matrix. When there is no urgency a company has time to increase the readiness by improving the entrepreneurs' and the company's social and managerial capital, formalizing the company practices, enhancing information systems and learning about the private investment industry, its instruments and its transactions.

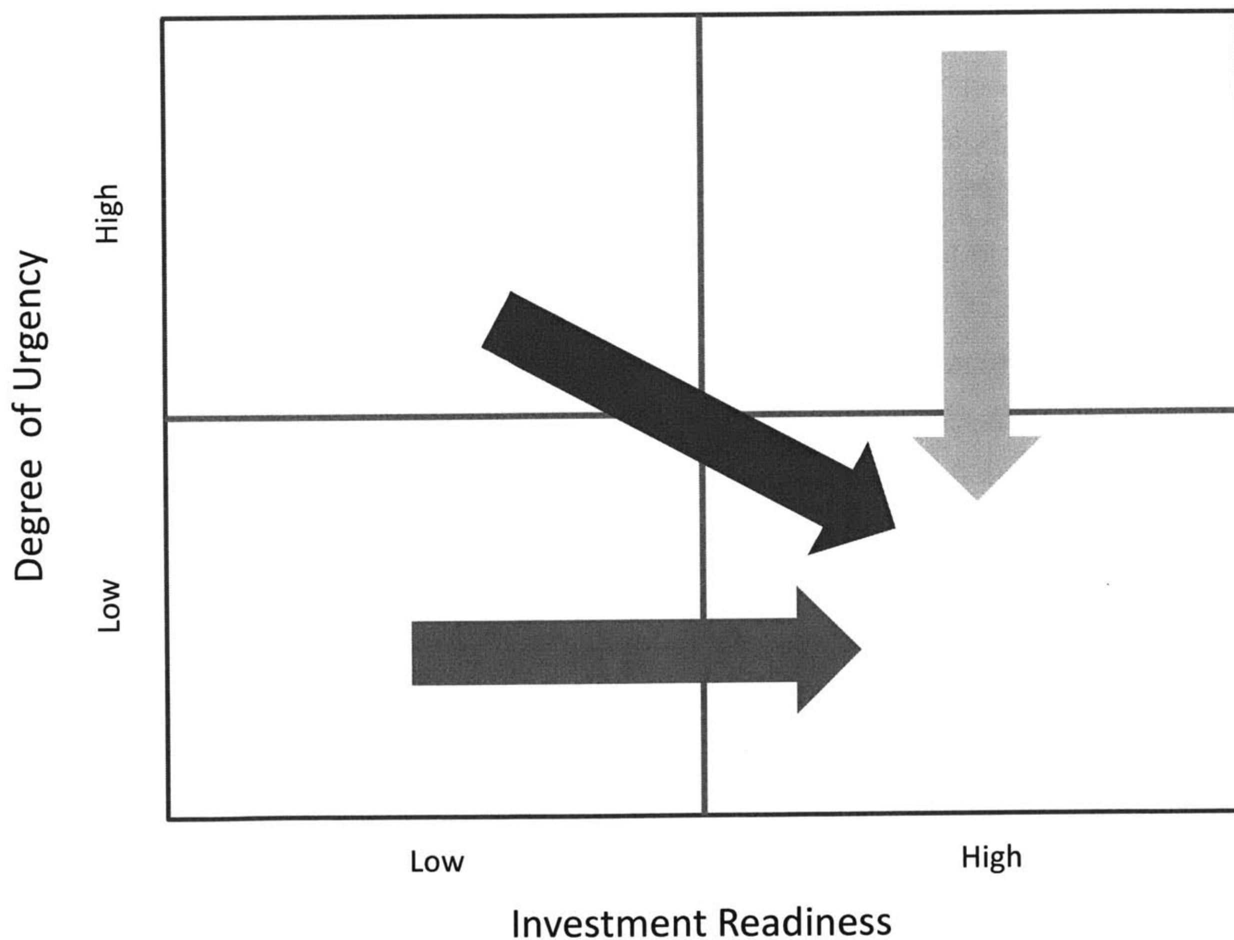
The second path is represented in figure 5.2. by the yellow arrow. In this case entrepreneurs and the company are ready to deal with professional investors but are pressed by the competitive environment and the short term financial situation. Here the company needs capital for strategic repositioning and for solving the short term financial constraints in order to reduce urgency and gain time to design the right growth strategy and to raise the required long-term resources to execute it.

The red arrow in figure 5.2. shows a more difficult path for companies. Moving from right to left and top to bottom simultaneously requires improving readiness and changing the

company position in the market and/or overcoming its financial short term constraints to reduce urgency. This path is more risky for entrepreneurs and investors since it requires a change in positioning and strategy with training and the transfer of managerial and social capital simultaneously which is challenging.

Moving from the top left to the bottom left quadrant is very difficult if not impossible because it would require an unprepared entrepreneur to reposition the company to reduce urgency and short term financial constraints which is less likely to happen.

Figure 5.2. Moving within the matrix



5.1.9. Implications for Entrepreneurs

Financing Strategies in Developing Markets should reflect the competitive environment, the financial condition of the firm and its investment readiness. The entrepreneurs' willingness to forgo control and cash flow rights and the option to sell depends on the urgency the company faces in terms of competition and financial constraints for the current operation. Some of the factors affecting both urgency and readiness can be modified by entrepreneurs with the help from advisors and financial intermediaries. This opens an opportunity for a new type of intermediary to provide and develop managerial and social capital while investing transitional financial capital. It can allow entrepreneurs to stay in control of the business in the good state by reducing the urgency and thus the need to forgo important rights. This new intermediary would have to provide social, managerial and financial capital while separating control rights, cash flow rights and the option to sell the company. This is the challenge for the innovative business model presented in the second part of this chapter.

5.2. The "Business Elevator" Model

The objective of the Business Elevator model is to help SMEs in developing markets grow based on innovation in products, services, processes and business models by providing them access to financial, managerial and social capital. The concept is an adaptation of the "Business Accelerator" model for start-ups described by Price, R. (2004) and other authors, to the established companies' space. It is structured using current components like consulting practices, coaching and Private equity/venture capital intervention methodologies and private capital in the form of mezzanine debt with performance based interest. This intermediary would help entrepreneurs and their companies move from left to right and from top to bottom in the entrepreneurial financing strategy matrix.

The business elevator model is based on architectural innovation (Henderson, Clark (1990) innovation that changes the architecture of a product without changing its

components). It adapts the early stage accelerator concept to the needs of existing SMEs and combines it with a relevant network and the right set of complementary assets. O'Mahony and Bechky (2008) and Beck, Demirguc-Kunt (2006) provide interesting insights about the effects of networks, collaboration and reputation in different entrepreneurial settings.

The Business Elevator as defined by Cardenas (2011) is a two-sided platform that links the market of SMEs on one side with the market of investors and complementary services on the other side. It uses a combination of networks, management practices, experience and talent to help SMEs achieve the right balance between the structure and formality of corporations and the flexibility, creativity and entrepreneurial spirit of small companies. It provides a network (See figure 5.4) of complementary services that include investors (PE funds, VCs, multilateral and development organizations, angel investors and Family offices.), advisors (business consultants, lawyers, market research firms and financial auditors), sources of technology and innovative practices (universities and research institutions) and sources of talent (executive search firms, a network of experienced executives and industry specific experts). (See Alliances in figure 5.3.)

The key competitive advantage in this model comes from architectural innovation, the ability to integrate different components to provide a complete and difficult to replicate solution to the growth problem faced by SMEs. These components include board and corporate governance practices, business development and strategic management processes, financial structure optimization, management information systems, preparation and strategy for fund raising and continuous support for C-level executives.

The SMEs side of the platform has indirect network effects. As more companies are successfully "elevated" the value of being accepted in the process increases for new SMEs. There are two components to these network effects: 1. Exchange of information and experience from current and previous portfolio companies and 2. Higher probability of raising resources and better valuations as perception by investors of the selection

process improves with success cases (increased value of the quality of the deal flow signal provided by the elevator). There is also a very important direct network effect. The larger the number of SMEs that want to participate in the process the better the selection and the deal flow for investors and complementary service providers. This is similar to the effect of more users for advertisers in the search engine industry. The combination of SMEs, investors, complementary service providers in a "business elevator" platform creates the right ecosystem for entrepreneurship and innovation in developing markets.

Pricing strategy for each side of the network is one of the most difficult challenges in this model. In principle the willingness to pay of investors is high so they should be able to pay a fee to get access to a deal flow of pre-selected, formalized, better organized companies. Suppliers of complementary services also are willing to pay a fee to get access to deal flow for their services. Entrepreneurs need to improve their companies and to get access to better deals and valuations but they are probably more price sensitive and their volume (input for the pre-selection process) is fundamental for the model to be successful. More research needs to be done to identify the appropriate pricing structure. However, this basic analysis suggests that if there was to be a subsidized side on this platform it would have to be the entrepreneur's side.

Figure 5.3. Strategic Alliances

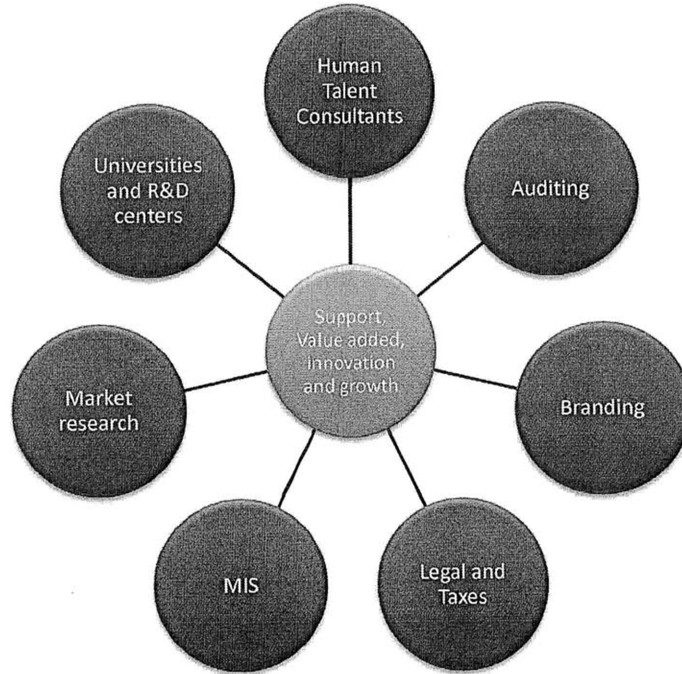
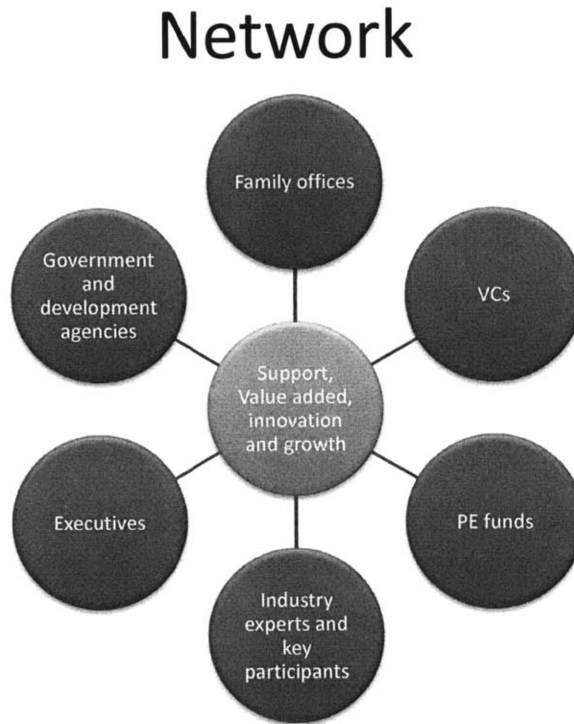


Figure 5.4. Investor Network

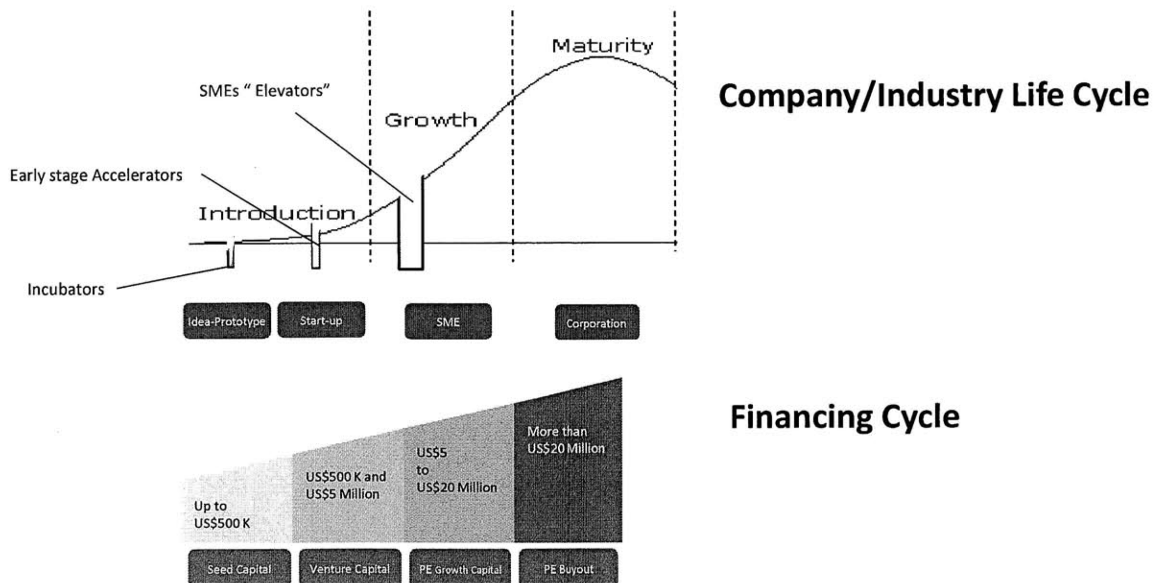


By preparing and investing in 8 to 10 companies at a time, the Business Elevator provides a platform for community-based innovation. It serves as the catalyzer of cooperation, as a source of tools, information and skills that can be leveraged by them to facilitate distribution of innovations and increase the speed at which best practices can be implemented by community members (portfolio companies of the business elevator). Examples can be in R&D within the cluster, innovation in management systems, planning, performance measurement, information systems, corporate governance, distribution and marketing, product development and why not, in techniques to help them identify their own lead users and take advantage of their innovations as illustrated by Von Hipple (2005). These communities also facilitate access to markets, suppliers and investors, combine the benefits and access to resources of large corporations with the flexibility and entrepreneurial spirit of small companies.

5.2.1. The Three Gaps

Conceptually Burdiles, Cardenas, Lee and Chang (2011) defined three gaps in the company life cycle that require special attention from entrepreneurs. The company life cycle shows the different stages of development of a SME in the process of becoming a large corporation. These stages have to be adequately matched by the right type of financing and support as shown by the financing cycle below in figure 5.5. As mentioned, not only financial resources are needed in this process. Specialized support is required to help the SMEs advance and get passed the gaps that threaten the life of these companies at different stages of their cycle. Of course this is a simplification of the complexity of the world but one that allows us to understand and group the different challenges and requirements of companies as they move along the life cycle and the right business models for companies that have the important role of assisting entrepreneurs in this process. The first gap is one that occurs at the beginning of the venture when entrepreneurs have an idea and maybe a prototype and are trying to find a specific use or a commercial application for the technology. It is the role of incubators to help entrepreneurs overcome this gap.

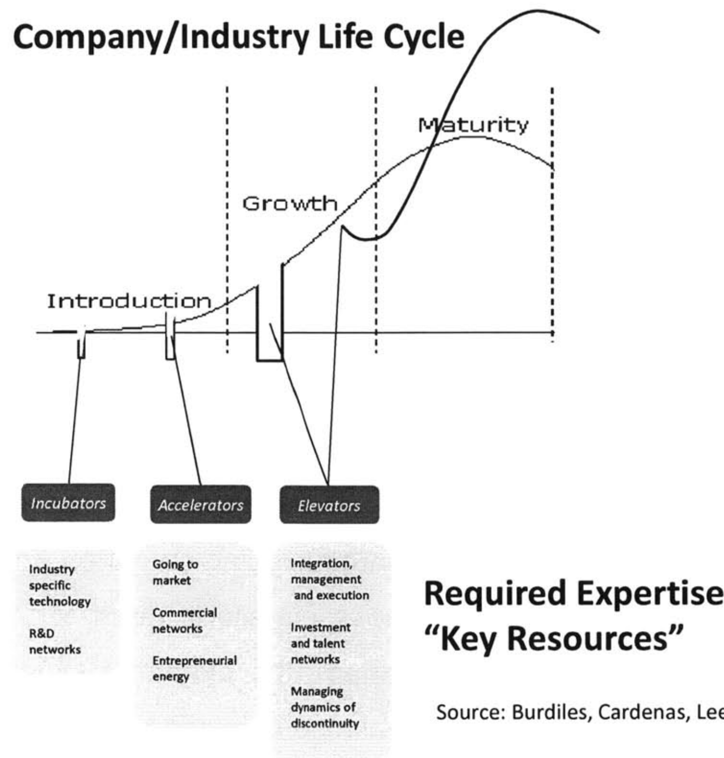
Figure 5.5. Company life cycle and financing cycle



Source: Burdiles, Cardenas, Lee and Chang (2011)

The second gap is larger and is present during the start-up phase when entrepreneurs are faced with the difficulties of launching products or services to the market. It is here where business accelerators play an important role in helping entrepreneurs put in place the right basic structures and develop the right processes for going-to-market. The third and largest gap is the focus of our analysis in this thesis. It is the gap that causes companies to run out of cash and forgo their ambitions to grow. During this stage SMEs are happy with the great results achieved in the introduction of products or services to the market and expect that success to continue as they grow, extending their product lines or expanding to different regions. After a short time they find out that their structures, strategies, talents, networks and in many cases their people are not the right ones for growing and transitioning to a corporate model. This gap, is the most important cause of company mortality and one of the most interesting and less understood phenomena in entrepreneurship in developing countries. In addition to help SMEs overcome the third gap, these business elevators, need to perform the very important function of helping companies manage the dynamics of discontinuity. The challenge is to help SMEs develop the right balance between the structure and required formality of a corporation and the creativity, flexibility and entrepreneurial spirit of ventures. This balance is not an easy one to achieve.

Figure 5.6. Company life cycle and the role of support entities



Source: Burdiles, Cardenas, Lee and Chang (2011)

Helping companies achieve the best of both worlds is quite a challenge. It is here where the business elevators differentiate from incubators, accelerators, consultants and all other potential substitutes. This requires a combination of practices, networks, learning, experience and talent. It needs people with experience in both, the entrepreneurial world and the corporate space, people with experience in the private equity and venture capital industry and in the operational and execution world. The right business model for these elevators requires also a combination of internal talent and experience, the right strategic partners and the right networks.

5.2.2. The Process

The process for business elevation starts with a pre-selection of the potential portfolio companies. The pre-selected companies undergo a process of training and formalization that would normally take between 6 to 8 months. This time allows the elevator and its partners to assess the characteristics of the entrepreneurs, the company and the industry as they help the owners determine the best strategic alternatives for the company. This period is intended to eliminate the information asymmetry while the right government and management formalization practices are put in place. After training and formalization the companies are presented to an external advisor committee for approval. Those companies selected as "idols" proceed with the execution of the growth strategy with support from the elevator and financial capital from private investors via the investment vehicles that I describe in the next sub-section. At the end or during the growth phase –depending on the financing strategy and the desired investor type- owners decide if they want to and when to exit. They can sell part or the totality of the company, accept an investor or stay and continue growing it. Since the contracts and financial instruments used by the elevator are debt based as will be describe later, owners will not lose control as long as they pay the debt service.

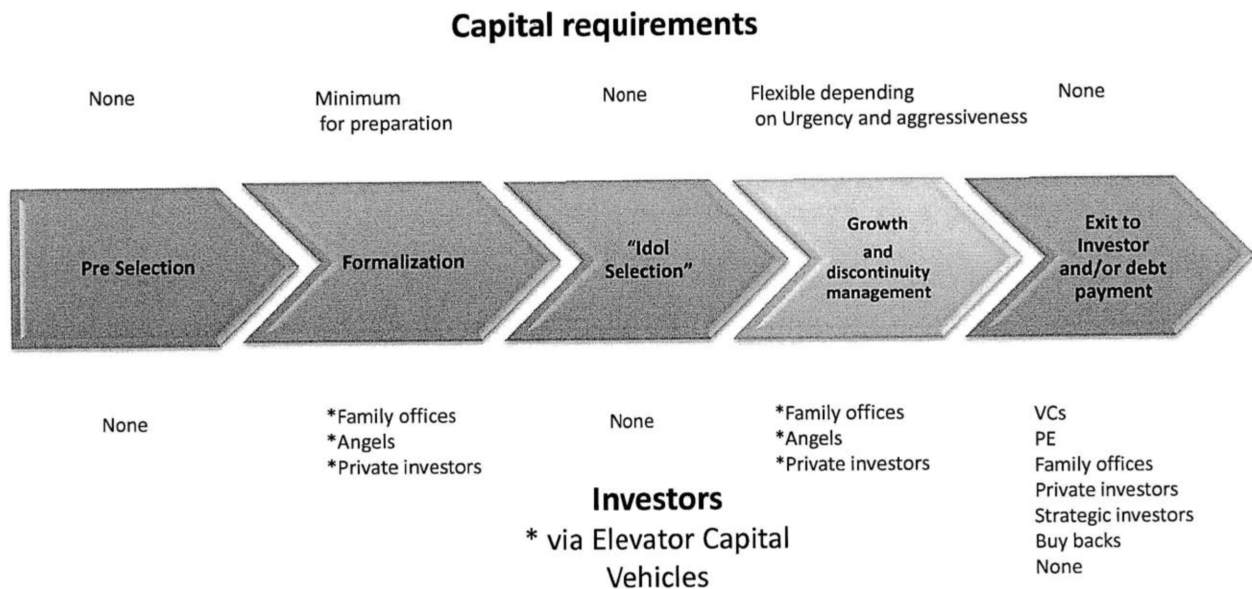
For this model to work the size of the companies have to be large enough and have positive cash flow. Also, the effect of improved valuation due to reduced asymmetric information, reduced probability of contingencies and improved quality signaling has to be larger than the implicit cost of mentoring.

Different type of resources from different sources could be used in the different stages in a flexible way as shown in figure 5.7. This increases the real options for entrepreneurs by staging finance as they prepare and improve their readiness.

The pre-selection, formalization and "idol selection" processes allow the elevator to get to know the company and the industry and provided the elevator has the right track

record and reputation it can adequately signal to potential investors the quality of the companies for future investment.

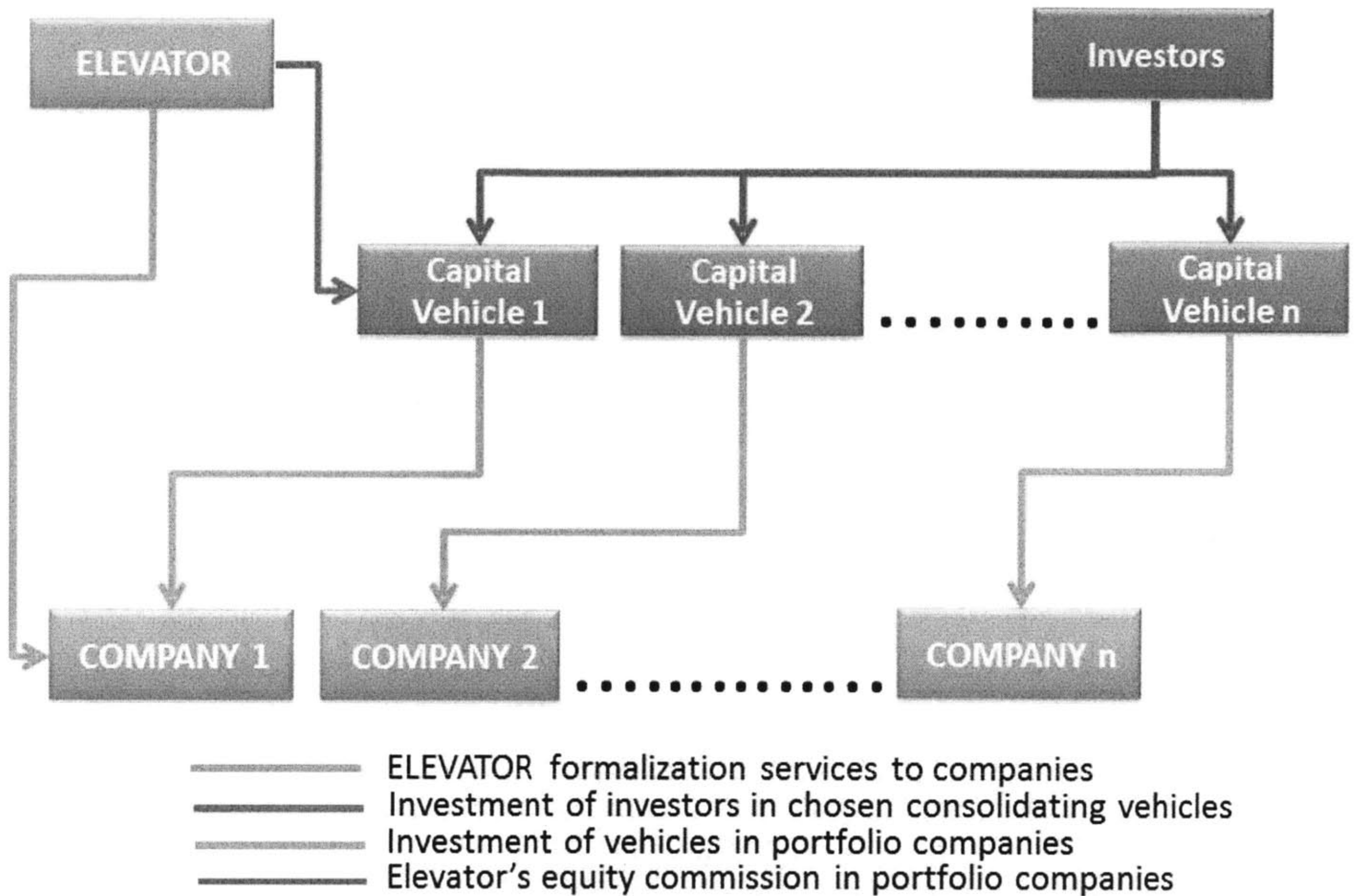
Figure 5.7. Process, capital requirements and sources



5.2.3. The Structure

Figure 5.8., shows the investment structure in which special purpose vehicles are created to receive the investments required from different investors at different stages of the process. This structure allows for maximum flexibility for investors that have the opportunity to invest only in those companies that they like. This is very different to the VC/PE model in which family offices and other institutional investors make commitments based only on the investment manager track record without knowing the companies before committing the resources.

Figure 5.9. Investment structure and flow of resources and services

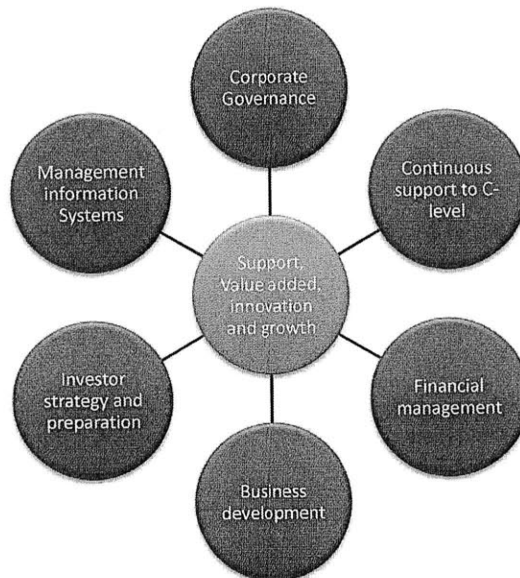


5.2.4 The Key Components of the Service

As mentioned before the key ingredient in a business elevator is the architectural innovation. The capacity to integrate and put together in the best way possible a complete solution comprised of different services like those shown in figure 5.10.. The components of the value proposition of a Business Elevator are not very different from what other firms do. In fact, the most important difference from other models stems from the fact that they offer a complete solution to the growth problem faced by entrepreneurs. The Business Elevator bundles services that are performed by consultants in different fields, by investment bankers, incubators and venture capital

funds. However, it is the combination and architecture of these components and the way in which they are linked, coordinated and delivered what makes the difference.

Figure 5.10. Elevator business services and value added



5.2.5. Contracts and the Financial Instruments

The main objective of this research was to find a business model that could put together managerial and financial capital for SMEs in a way in which we could separate the cash flow rights from the control rights. The Business Elevator model allows for this separation as it helps reduce the problem of asymmetric information between entrepreneurs and investors, uses simple financial instruments and provides intermediary financing. The formalization step of the process allows the Business Elevator to get to know the company and their owners while working with them to formalize their processes and improve the quality and transparency of their information.

A well-structured and rigorous idol selection process provides a signal to future investors about the quality of the company. This is equivalent to the venture capital awards suggested by Lerner (2004). The growth and discontinuity management stage

of the process prepares the companies and the entrepreneurs for growth and for professional investors as the next stage in the lifecycle. All these phases are governed by simple contracts in which the Business Elevator provides advice, access to the network of investors and allies and intermediary capital from the investment vehicles for a monthly fee. The intermediary resources for the process are provided by the investment vehicles using a mezzanine debt arrangement where interest is based on an observable performance variable like EBITDA or Operating Profit with a minimum rate floor. The amount of this mezzanine debt has to be small enough to make sure that there are no distress effects but large enough to reduce urgency and pay for the resources required to increase readiness.

Small quantities of debt are assumed to be almost riskless and are preferred by manager-owners to take advantage of positive NPV opportunities for growth in line with Myers and Majluf (1984). In the meantime the elevator helps the company formalize and provides a signal to investors. The firm can take larger resources using equity when the information advantage of owners is reduced after the formalization process.

The performance-based interest has the main objective of creating an incentive for the business elevator to put enough effort during the formalization and growth stages while the floor rate provides investors with a minimum low-risk return. This financial instrument provides the control to the entrepreneur in the good state but gives the Business Elevator and the investors (via the investment vehicles) control in the bad state using covenants. This instrument can also be structured in a way in which investors gain an equity ownership in case of a transaction or if the companies default. Even if for some reason this is not possible, the risk is still lower than for equity since mezzanine financing is senior in case of liquidation. Some of the advantages of mezzanine financing are: 1. It is flexible as it can be structured in a way that matches the cash flow pattern of the company over time, 2. It provides leverage that increases equity return for owners, 3. It is usually treated like equity on the company's balance sheet, 4. It usually facilitates access to bank financing, 5. It allows for creative structures to link interest payments to observable performance and contingent control rights and 6.

It permits the separation of ownership and control rights since it has the characteristics of debt and investors are not interested in an equity stake in the good state.

The disadvantages of this type of financial instrument are: 1. In some cases the company will have to grant some attributions to investors in the form of covenants, board voting or veto rights, 2. Interest rates are higher than those for commercial banks, 3. If there are equity conversion conditions the mezzanine can be costly for entrepreneurs compared to other credit facilities.

Figure 5.11. provides a summary comparison of the characteristics, requirements and challenges incubators, accelerators and elevators.

Figure 5.11 Comparison between Incubators, Accelerators and Elevators.

	Incubators	E. Stage Accelerators	SMEs "Elevators"
Focus	Ideas, prototype, company creation	Taking company to market	Formalization and growth
Expertise	Business plan and idea validation	Launching products/services and companies	Corporate governance, management practices
Term	Indefinite	Short (3 months)	Medium (12 to 18 months)
Type of Network	Closed, personal	Open, personal	Institutional
Services	Office space, couching, PR	Coaching and one-stop financing	Flexible complete solutions for growth
Challenges	Application and development of technology	Market awareness and acceptance of products/services	Transition of structures and talent
Type of financing	Small basic amounts	Medium amounts	Flexible
Uses of financing	Establishing company and developing business plan	Launching products/services	Formalizing and growing

Source: Burdiles, Cardenas, Lee and Chang (2011)

5.3. Implications for Practitioners, Policy-makers and Future Research

There is an important role in developing markets for "business elevators" as financial, managerial and social capital intermediaries. A business model that would create a knowledge network tapping on local and global expert resources and other "elevators" in different parts of the world would help reduce the divide between SMEs in developing countries and their counter parts in the developed world. Even more important, it would reduce difference in opportunities between SMEs and large companies in their own countries, in a world where the new source of competitive advantage is knowledge.

Policy makers and developing agencies can play an important role in financing, testing and improving the elevator model. The latter can provide financing for setting up an experimental model in a country like Colombia. Using their network and experience in private investment they can help improve and replicate the model in various countries to help create a global network of elevators. Developing agencies can also invest in the vehicles to finance companies providing the resources for formalization and growth.

Policy-makers can facilitate the process by setting in place or adapting the legal framework to reinforce the business elevator model. They can invest together with developing agencies to promote the right groups of individuals to establish business elevators in cities where the conditions are adequate for fostering entrepreneurial ecosystems.

An obvious limitation of this thesis is that all the research and information relates to one country. I believe that there is enough evidence to conclude that Colombia is a good representation of the developing world countries, however, if one wants to advance in using and testing the key insights from this study it is important to consider the differences in environmental and cultural characteristics of developing countries. That is why future research is imperative not only for studying in more depth the main themes of this research but for analyzing the implications of differences among country conditions.

A good empirical quantitative research with a larger sample of companies and investors to validate the framework would bring more insights for refining the theory and for improving and adjusting the elevator business model.

Additional research and experimentation is required before extending the model to improve the chances for success. This is important to answer some questions that are implicit in the analysis developed in this paper. First, it is fundamental to better understand the characteristics of the entrepreneur ecosystem and their importance for SMEs in terms of their growth. This relationship is the basis for the network effects. Second, it is fundamental to validate with a larger number and different type of investors, the attributes that would make an elevator service deal flow of SMEs attractive for them. This relationship will define investors' willingness to pay and to be part of the network. This information would be revealing as to how to structure the model to take advantage of the complementary assets.

Finally, another interest thing to research is the relationship between strategic partners and the business model. What are the conditions that consultants, accounting firms, lawyers and other potential partners need for this type of association.

CHAPTER 6 - CONCLUSIONS

This study provides a new framework for analyzing the financing strategy of SMEs in developing markets and presents an innovative business model for supporting their growth. The main argument for the need of a new business model is that the existing contracts connecting investors and entrepreneurs do not allow for the separation between control rights, cash flow rights and the option to sell. Difficulties in separating these rights and the asymmetries in information between entrepreneurs and investors affect the attractiveness of the traditional PE/VC business model for SMEs and their access to managerial and financial capital.

Based on the existing academic literature, secondary information and interviews with SMEs and professional investors in Colombia, I argue that entrepreneurs face different competitive conditions and financial restrictions that affect their willingness to trade control, cash flow and option to sell rights for financial capital. I also state that there are different types of owners and enterprises with diverse levels of preparation which affect the choice of financing strategy. In the framework presented here I explain how the degree of urgency faced by the firm and the investment readiness of the company and its owners determine the right choice of financing strategy for growth. Companies facing low urgency and with low investment readiness usually use a self-financed approach to growth. Companies facing a high degree of urgency but with low investment readiness should pray for the best as there is a high risk of failure when accepting investors. Companies with high degree of urgency and a high level of preparation are more likely to give up their rights to get capital from the traditional professional investors. In this case however, the investors have the advantage, as the owners of the company do not have time to plan and execute a more convenient financing strategy. Firms with high readiness facing a low degree of urgency are in the best condition to plan and develop a tailor-made strategy for growth as they can look at the right time for the right amount of money from the right type of investors to suite the specific requirements of the company and its owners.

I presented here a business model that can help entrepreneurs move towards the tailored finance strategy by providing financial, managerial and social capital while allowing for the separation of rights. I argue that moving from the left to the right of the entrepreneurial financing matrix is easier than moving from the top to the bottom. This is based on the fact that many of the factors affecting urgency are exogenous to the firm or their advisors while most of the aspects related to readiness are endogenous.

The framework presented in this study serves as the base for the business elevator model in which less sophisticated contracts – a debt mezzanine with interest linked to performance- allow for the separation of rights. The Business Elevator serves as an intermediary for financial, managerial and social capital to help prepare SMEs for growth and reduce asymmetric information for their future long-term financing.

The framework presented in this thesis and the Business Elevator model can allow more resources from private investors and development agencies to be directed to transformational entrepreneurs to promote growth, innovation and economic development.

BIBLIOGRAPHY

Aghion, P., and Bolton, P.(1992), "An incomplete Contract Approach to Financial Contracting, *The Review of Economic Studies,* Vol. 59. No. 3, July 1992, 473-494.

Akerlof, G. A. (1970), "The Market for "Lemons": Quality Uncertainty and the Market Mechanism", *Quarterly Journal of Economics,* 84, 488-500.

Amit, R., Brander, J., and Zott, C. (1998), "Why do Venture Capital firms Exist? Theory and Canadian Evidence", *Journal of Business Venturing,* 13, 441-466.

Bangert, D.C., Gibson, G., Harris, L.B., and Leng, C.B., (2005), "Spinning a Global Web: Today's Entrepreneur", *Silicon Valley Review of Global Entrepreneurship Research,* Vol. 1, Proceedings of the 2005 San Francisco-Silicon
Valley Global Entrepreneurship Research Conference March, 2005.

Beck, T., Demirguc-Kunt, A. (2006), "Small and medium-size enterprises: Access to finance as a growth constraint", *Journal of Banking and Finance",* 30, (2006) 2931-2943

Berger, A., and Udell, G.F. (1998), "The Economics of Small Business Finance: The Roles of Private Equity and Debt Markets in the Financial Growth Cycle", *Journal of Banking and Finance",* Vol. 22 (1998)

Berglof, E. (1994), "A Control-Theory of Venture Capital Finance", *Journal of Law Economics & Organization,* Vol. 10 No. 2, October 1994, 247-67.

Bloom, N., Eifert, B., Mahajan, A., McKensie, D., and Roberts, J, "Does Management matter? Evidence from India", *International Growth Centre,* Working Paper 10/083, December 2010

Bruhn, M., Karlan, D., and Schoar, A. (2010), "What Capital is Missing in Developing Countries? *American Economic Review,* May 2010, Vol 100 No.2.

Bryman, A and Bell, E (2011). "Business Research Methods". Third Edition, Oxford University Press. New York.

Burdiles, S., Cardenas, F., Lee, J., Chen, J.,(2011), "An Innovative model for Accelerating SMEs in Latin America: The Chilean and Colombian Cases", *Paper for the course Strategic Management in Innovation and Entrepreneurship,* Sloan School of Management 2011.

Carayannis, E., and Von Zetwitz, M., (2005), "Architecturing GloCal, real-virtual incubator networks as catalysts and accelerators of entrepreneurship in transitioning and developing economies: lessons learned and best practices from current development and business incubation practices", *Technovation,* 25 (2005) 95-110.

Cardenas, F., (2011), "Business Elevators: A Two-sided Platform for SMEs' growth", *Paper for the course Advanced Strategic Management,* Sloan School of Management 2011.

Cardenas, F., (2012), "Business Elevators: A User-based Innovative Model for Financing and Supporting SMEs' growth in Developing Markets", *Paper for the course How to Develop Breakthrough Products and Services,* Sloan School of Management 2012.

Chan, Y.S. (1983), "On the Positive Role of Financial Intermediation in Allocation of Venture Capital in a market with Imperfect Information", *Journal of Finance,* Vol 38 No. 5, 1983 1543-68.

Chocce, G.R. (2003), "Necessary Conditions for Venture Capital Development in Latin America: The Chilean Case." *Int. J. Entrepreneurship and Innovation Mangement,* Vol. 3, Nos. 1/2, 139-150.

Deacon, D., Bryman, A., and Fenton, N. (1998). “Collision or Collusion? A discussion of the Unplanned Triangulation of Quantitative and Qualitative Research Methods”. *International Journal of Social Research Methodology,* 1: 47-63.

Fishback, B., Guilbranson, C. A., Litan, R. E., Mitchell, L., and Porzig, M. (2007), “Finding Business “Idols”: A New Model to Accelerate Start-Ups”, *Kauffman Foundation,* July 2007.

Glaser, B. G. and Strauss, A. L. (1967). *The Discovery of Grounded Theory: Strategies for Qualitative Research.* Chicago: Aldine.

Gómez, L., Martínez, P., Figueroa, C.A., Pereira, F., Quiroga, R. F., Vega R.A., Varela, R., and Álvarez, L.M. GEM (2009), *Global Entrepreneurship Monitor: Reporte anual Colombia 2008.* GEM. 2008 Universidad de los Andes, Universidad ICESI, Universidad del Norte y Universidad Javeriana 2009.

Greenwald, B. C., Stiglitz, J. E., and Weiss, A. (1984), “Informational Imperfections in the Capital Market and Macroeconomic Fluctuation”, *American Economic Review.* 74, May 1984, 194-199.

Gompers, P., and Lerner, J. (2001), “The Venture Capital Revolution”, *The Journal of Economic Perspectives,* Vol. 15, No. 2 (Spring 2001), 145-168.

Hansen, M., Chesbrough, H. W., Nohria, Nitin, and Sull, D.N., (2000), “Networked Incubators: Hothouses of the New Economy”, *Harvard Business Review,* September-October 2000.

Hellman, T. (1998), “The Allocation of Control Rights in Venture Capital Contracts”, *The RAND Journal of Economics,* Vol. 29,No. 1 (Spring 1998), 57-76.

Herrera, A., and Lora, E. (2005), "Why so Small? Explaining the Size of Firms in Latin America", *Unpublished Working Paper,* 2005.

Jensen, M.C. (2007), "The Economic Case for Private Equity (and some concerns)-pdf of keynote slides", *Working Paper Harvard University,* 2007.

Kaplan, S., and Stromberg, P. (2001), "Venture Capitalists as Principals: Contracting, Screening and Monitoring", *NBER Working Paper Series,* April 2001.

Kaplan, S., and Stromberg, P. (2003), "Financial Contracting Theory Meets the Real World: An Empirical Analysis of Venture Capital Contracts", *Review of Economic Studies, (*2003) 70, 281-315.

Karlan, D., and Murdoch, J. (2010). "Access to Finance", *Handbook of Development Economics, Vol 5.* Dani Rodrik and Mark Rosenzweig (Eds.), North-Holland.

Kelley, D. J, Singer, S., and Herrington, M. GEM (2011), *Global Entrepreneurship Monitor: 2011 Global Report.* GEM. 2011..

LAVCA (2011), *2011 LAVCA Industry Data.* LAVCA, Latin American Venture Capital Association 2011.

LAVCA (2011), *2011 ScoreCard: The Private Equity and Venture Capital Environment in Latin America.* LAVCA, Latin American Venture Capital Association 2011.

Leland, H. and Pyle, D. (1997), "Informational Asymmetries, financial structure and financial intermediation", *Journal of Finance,* 32, 371-378.

Lerner, J. (2004), "When Bureaucrats Meet Entrepreneurs: The Design of Effective "Public Venture Capital" Programs", *Public Policy and the Economics of Entrepreneurship"* The MIT press, 2004. 1-22

Lerner, J., and Schoar, A. (2005), "Does legal enforcement affect financial transactions? The contractual channel in private equity, *Quarterly Journal of Economics,* Vol. 120, No. 1, February 2005, 223-46.

Liedholm, C., and Mead, D (1999)., "Small Enterprises and Economic Development. The Dynamics of micro and small Enterprises.", *Routledge, Taylor and Francis Group.* 1999.

Lingelbach, D., de la Viña, L., and Asel, Paul (2005). "What's distinctive about Growth-oriented Entrepreneurship in Developing Countries?", *UTSA College of Business Center for Global Entrepreneurship Working Paper No. 1*. March 2005

Metric, A., and Yasuda, A. (2010), "Venture Capital and Other Private Equity: A Survey", *National Bureau of Economic Research,* Working Paper No. 16652, December 2010.

Ministerio de Comercio Industria y Turismo, and Bancoldex (2010), "*Catálogo Fondos de Capital Privado en Colombia".* Ministerio de Comercio, Industria y Turismo and Bancoldex. 2010.

Myers, S. C., and Majluf, N. S. (1984), "Corporate Financing and Investment Decisions when Firms have Information that Investors do not have", *Journal of Financial Economics,* 13, 187-221.

Porter, M., (2008), "The Five Competitive Forces that Shape Strategy", *Harvard Business Review,* January 2008.

Price, R. (2004), "The Role of Service providers in establishing networked regional business accelerators in Utah", *International Journal of Technology Management,* Vol. 27, No. 5, 2004.

Reynolds, Paul., Bosma, N., Autio, E., Hunt, S.,De Bono, N., Servais, I., Lopez Garcia, P., and Chin, N. (2005), "Global Entrepreneurship Monitor: Data Collection and Implementation 1998-2003", *Small Business Economics.(*2005) 24: 205-231.

Schiffer, M., Weder, B. (2001), "Firm Size and the Business Environment", *Worldwide Survey Results The World Bank and International Financial Corporation.* August 2001.

Schoar, A. (2009). "The Divide between Subsistance and Transformational Entrepreneurship", *NBER Innovation Policy and the Economy.* May 2009.

Schmidt, K. M.(2003), "Convertible Securities and Venture Capital Finance", *Journal of Finance,* Vol. 58, No. 3, June 2003, 1139-66.

Seghers, A., Manigart, S., and Vanacker, T. (2009), "Entrepreneurs' Knowledge about Financing Alternatives: Impact of Human and Social Capital, *Frontiers of Entrepreneur Research,* Vol 29, Issue 5, Article 4.

Shleifer, A., and Vishny, R. (1997), "A Survey of Corporate Governance", *The Journal of Finance,* Vol. 52, No. 2 . June 1997, 737-783.

Stiglitz, J. E. and Weiss, A. (1981), "Credit Rationing in Markets with Imperfect Information", *The American Economic Review,* Volume 71, Issue 3, June 1981, 393-410.

Trester, J. (1998), "Venture Capital Contracting under Asymmetric Information", *Journal of Banking & Finance,* 22 (1998) 675-699.

Ueda, M. (2004), "Banks versus Venture Capital: Project evaluation, screening and expropriation", *Journal of Finance,* Vol. 59 No. 2, April 2004, 601-21.

Van Auken, H. E. (2001), “Financing Small Technology-Based Companies: The Relationship between Familiarity with Capital and Ability to Price and Negotiate Investment, *Journal of Small Business Management,* 2001 39(3) 240-258.

Van Osnanbrugge, M. (2000), “A Comparison of Business Angel and Venture Capitalists Investment Procedures: An Agency Theory-Based Analysis”, *Venture Capital,* 2:2, 91-109.

Von Hipple, E. (2005), *“Democratizing Innovation”*, Cambridge MA, MIT Press, 2005.

Von Zedtwitz, R., and Grimaldi, R. (2006), “Are Service Profiles Incubator-Specific? Results from an Empirical Investigation in Italy”, *Journal of Technology Transfer,* 31, 459-468, 2006.

Webb, E. J., Campbell, D. T., Schwartz, R. D., and Sechrest, L. (1966). “Unobtrusive Measures: Nonreactive Measures in the Social Sciences. Chicago: Rand McNally.

Westhead, P. Ucbasaran, D., and Wright, M. (2003), “Differences Between Private Firms Owned by Novice, Serial and Portfolio Entrepreneurs: Implications for Policy Makers and Practicioners”, *Regional Studies,* 37, 187-200.

Winton, A., and Yerramilli, V. (2008), “Entrepreneurial Finance: Banks versus Venture Capital”, *Journal of Financial Economics,* Vol 88. No. 1, April 2008, 51-79.

The World Bank, and IFC (2010), *Colombia Country Profile 2010.* Enterprise Surveys. The World Bank 2010.