



Effectiveness of South African public sector venture capital investment terms in managing risks and supporting entrepreneurs

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ABSTRACT

The venture capital (VC) contract prescribing various deal terms and conditions is considered vitally important to the VC investment process and should provide incentives for the entrepreneur whilst managing the venture capitalists (VCs) financial risk. This aspect of venture capital has not been extensively studied in South Africa especially amongst public sector funding agencies which have become an important source for early-stage VC funding.

The objective of this study was to determine whether public sector VC investment terms in South Africa have been effective in supporting entrepreneurs and managing risk. The effectiveness of government's VC intervention was gauged through assessing various perceptions of entrepreneurs and public sector VCs on typical deal terms and conditions put in place between them. The perception study focused on 14 terms or provisions in relation to its frequency of use, importance to stakeholders, effectiveness in managing risk, rationale for inclusion and acceptance by entrepreneurs.

The research found that VCs and entrepreneurs alike generally agree on the typical terms that should be included in the VC contract. Most of the terms which entrepreneurs considered to be important for the enterprise were also frequently used in VC contracts suggesting that the terms were generally effective in supporting entrepreneurs. Nevertheless, the research points towards a greater need for VCs to use incentivising terms such as the clawback provision in their contracts since the terms most frequently used were perceived to be effective in managing investment risk.



KEYWORDS

Entrepreneurial support

Investment terms

Risk

Venture capital



DECLARATION

I declare that this research project is my own work. It is submitted in partial fulfilment of the requirements for the degree of Master of Business Administration at the Gordon Institute of Business Science, University of Pretoria. It has not been submitted before for any degree or examination in any other University. I further declare that I have obtained the necessary authorisation and consent to carry out this research.

	10/11/2010
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CHAPTER 1: INTRODUCTION TO THE RESEARCH PROBLEM

1.1 Background and motivation for research

A recent report by the Global Entrepreneurship Monitor (GEM) suggested that South Africa's entrepreneurial environment is mediocre, and identified access to finance as a perennial problem for all small businesses (Herrington, Kew and Kew, 2008). The report also highlighted government policies/programmes and technology transfer amongst the most frequently cited limiting factor to entrepreneurial activity since 2001. These findings are contradictory compared to recent research conducted by the Southern African Venture Capital Association (SAVCA) suggesting that the economic impact of private equity and venture capital (VC) is significant in South Africa (SAVCA, 2009).

Field's (2008) exploratory study revealed that South African venture capitalists (VCs) believe they are performing their roles sufficiently well in relation to support services while most entrepreneurs do not. Yitshaki's (2008) research on venture capital showed that deal terms in particular present significant conflicts of interest between the venture capitalist and the entrepreneur as both parties have different conceptions of the venture capital investment and the contractual arrangements. Singh (2005) further argued that deal terms structured by the venture capitalist should address conflicts of interest by minimizing the risk and maximising the returns for the VC firm. Investment contracts are indeed considered vitally important to the VC investment process and should provide incentives for both the entrepreneur and VC investor(s) to add value to the enterprise (Cumming, 2008). This aspect of venture capital has not been



extensively studied in South Africa especially in the public sector environment. Huyghebaert and Mostert (2008) investigated the rationale of securities and covenants in venture capital contracts in South Africa from a private sector venture capitalist perspective, but the literature did not reveal any study of entrepreneur and public sector venture capitalist perceptions of typical deal terms and conditions. Therefore, the motivation for research on the effectiveness of public sector venture capital investment terms to manage investment risk and support entrepreneurial start-up businesses was warranted.

1.2 Research problem

A discussion paper by SAVCA reported that the creation of high tech, high growth potential, high risk ventures, needs to be accelerated dramatically in order for South Africa to remain competitive (SAVCA, 2008). The role of government as a provider of early-stage venture capital has become a commonplace abroad and in South Africa where the VC industry is currently in a re-emergent phase (SAVCA, 2008). The effectiveness of public sector VC initiatives to manage investment risk and support entrepreneurs, has received little empirical scrutiny to date (Field, 2008; Huyghebaert and Mostert, 2008). A qualitative study by Field (2008) was the first attempt to investigate the ability of South African VC firms to adequately support entrepreneurs. However, the study specifically focussed on the 'softer' issues relating to ancillary services and excluded capital considerations including investment terms and conditions. Huyghebaert and Mostert (2008) examined the use of venture capital contracts to limit the scope of investment risk, but the study did not include public sector VCs.



1.3 Research need

The need for this study was underpinned by three key factors. Firstly, the study on venture capital and private equity is a topical issue in South Africa as evidenced by recent SAVCA and GEM reports mentioned earlier.

Secondly, and more importantly, there was a rarity of empirical studies on the effectiveness of venture capital deal terms especially in the context of the public sector where there is constant pressure for government agencies to deliver services more effectively and efficiently. Moreover, Bartlett (2001) called for a new approach to the venture capital deal negotiation process in the early part of the decade since he regarded practices at the time as inefficient. It is unclear whether there has been any significant improvement to date.

Lastly, there was a strong business imperative for undertaking this study since deal terms and conditions are considered to be a major source of conflict between the entrepreneur and venture capitalist (Yitshaki, 2008). The census responses and the resultant analysis provides VCs and entrepreneurs alike with useful information on how to avoid potential stumbling blocks in a VC contract that could strain the long-term relationship between the venture capitalist and entrepreneur or prevent a deal from occurring all together. The census feedback also served as a useful comparison with private sector data in a similar area which included the study by Huyghebaert and Mostert (2008). This comparative analysis provided suggestions on how public sector VC providers could make their terms more effective based on VC industry norms and benchmarks.



1.4 Aim and objectives

The broad aim of the study was to establish whether government's intervention in the equity funds market in support of entrepreneurial start-up firms has been delivered effectively. The effectiveness of government's intervention was gauged through assessing various perceptions of entrepreneurs and VCs on the investment terms and conditions put in place between them. Entrepreneurs would typically consider investment terms in the context of support to their business, whilst venture capitalists would consider investment terms in relation to managing investment risk.

The research looked at whether South African public sector VCs and entrepreneurs agreed on which key terms and conditions should be included in a term sheet agreement and whether entrepreneurs were familiar with the concept and implications of such terms. This aim provided a context for the research problem. Secondly, it investigated whether specific deal terms provided any support to the entrepreneur and whether entrepreneurs appreciated the venture capitalist rationale for imposing specific terms. The former served as a primary objective that directly addressed the research problem. Finally, the research explored the public sector venture capitalist perception of entrepreneurs accepting specific terms and whether the terms were effective in managing their investment risk. The latter directly addressed the second component of the research problem whereas the assessment of the other perceptions provided a holistic view of the problem and placed the discussion of the data in perspective.



1.5 Research scope

The scope of this research was limited to determining whether venture capital deal terms are effective in managing investment risk and supporting entrepreneurs. The study focused on 14 deal terms and conditions which the literature identified as being commonly found in a typical VC contract. The research is limited to public sector VC providers in South Africa.



CHAPTER 2: LITERATURE REVIEW

2.1 Introduction

The importance of entrepreneurship in the economic development of countries is briefly introduced in order to set the context of the proposed research and to justify why funding entrepreneurs is essential. A definition of entrepreneurship and venture capital is provided at the outset for the purpose of avoiding any ambiguity in the use of these terms in the research. The literature summary also discusses various sources of finance for entrepreneurs which has been identified as a perennial problem facing entrepreneurs with a specific focus on venture capital (VC) sources.

A critique on the role of government is discussed in detail since the research focused on public sector venture capital. Finally, the literature addresses the contractual side of venture capital in considerable detail which ultimately informs the main research questions. These are the specific terms, covenants and conditions that directly impact the entrepreneur and venture capitalist. In summary, sections 2.2 to 2.4 provides an essential context for the research and a useful build-up for the key literature in section 2.5.

2.2 Defining entrepreneurship and the role of start-up ventures

Defining entrepreneurship is a matter of semantics as evidenced in the plethora of definitions present in the academic literature (Mars and Rios-Aguilar, 2010). Nevertheless, the definitions are similar in many respects. Macko and Taszka (2009) for example perceived entrepreneurship as the creation of a new



business under conditions of risk and uncertainty. Timmons and Spinelli (2003, p.48) stated that "classic entrepreneurship is the raw start-up company, an innovative idea that develops into a high growth company". Entrepreneurship, as used in this proposal is a synthesis of the above definitions, but focused on the creation of start-up companies in the South African economic landscape. Gries and Naude (2009) further argued that start-up ventures are important for economic growth although start-up rates differ significantly between countries and within regions of the same country.

2.3 Sources of finance

Finding finance, or gaining financial support for any new venture, is one of the difficulties experienced by entrepreneurs because investors want to see proven profits (Conor and Pui-Wing, 2010). These sentiments are corroborated by the latest GEM South Africa study which identified access to finance as a significant constraint affecting entrepreneurs as reported by Herrington *et al* (2008). Entrepreneurs in need of capital beyond the amount invested by the founders, family and friends (commonly known as the three F's) will turn to a variety of financing mechanisms including debt and equity options (Ben-Ari and Vonortas, 2007). Obtaining debt financing is generally seen to be more difficult for entrepreneurs due to the risk and uncertainty associated with entrepreneurial ventures. This implies that equity instruments such as venture capital are likely alternatives for entrepreneurial start-ups. De Bettignies and Brander (2007) concurred that venture capital tends to be preferred to bank finance when VC productivity is high and entrepreneurial productivity is low.



According to SAVCA (2008), "venture capital is a subset of the private equity asset class and generally refers to funding (predominantly equity funding) of high growth potential businesses, whose growth potential is typically achieved through radical global scaling, and which normally have technological or other innovative concepts at their core. Importantly, this definition does not include debt financing only or the financing of lifestyle and/or franchise opportunities". Whilst Graham (2005) made a distinction between venture capital and seed capital, the SAVCA (2008) treated seed capital as a stage within venture capital defined as follows.

- Seed capital for prototype development and pre-start-up Funding for research, evaluation and development of a concept or business model before the business starts trading.
- Start-up and early stage Funding for new companies being set up or for the development of those that have been in business for a short time (for example 1 – 3 years).

This study focussed on venture capital funding as defined above bearing in mind that some public sector institutions, including the Innovation Fund refer to concept development funding as Research and Development funding and the funding of new companies as Seed Capital. Nevertheless, only high growth businesses where the public sector venture capitalist had an equity stake were considered regardless of whether the funding was for prototype development or start-up stage. The National Empowerment Fund's (NEF) Imbewu fund was therefore excluded since their equity financing portfolio includes mostly lifestyle



or franchise businesses and not high growth ventures. According to SAVCA (2008), the few seed funds that are available are all government entities and include the Innovation Fund, Biotechnology Regional Innovation Centres (BRICs) and the Industrial Development Corporation's venture capital fund. The BRICs and Innovation Fund have since merged into a single entity called the Technology Innovation Agency (TIA) which is an initiative of the Department of Science and Technology (DST, 2010). The focus on public sector venture capital was therefore justified in this respect. The following section discusses the role of government as venture capitalist in detail.

2.4 Government as venture capitalist

The failure or success of an enterprise is dependent on the entrepreneur and the environment in which entrepreneurial activities take place (Carter and Wilton, 2006). Gries and Naude (2009) further argued that it is up to governments to ensure conducive environments for positive enterprise development. Early proponents of government as venture capitalist asserted that start-up companies are the engines of innovation, technology development and economic growth, and that private venture capitalist have significantly reduced their investments in seed capital and start-up companies in favour of less-productive activities such as later-stage investing and leveraged buy-outs (Florida and Smith, 1993; Rayna and Striukova, 2009). It could also be argued that public sector venture capital serves as developmental capital, which Rubin (2009) mentioned is the financing of businesses with equity and near-equity in order to achieve both social and financial objectives. Despite these sentiments, the appropriate role of the public sector in stimulating start-up activity remains



highly controversial, as evidenced by Crovitz's (2009) critique that government meddling in the VC space undermines market discipline. Lerner and Watson (2008, p. 1) stated that "whereas dynamic new venture markets have been catalysed by public interventions in some countries including Israel and India, there are also many examples worldwide of failed public sector efforts to promote venture capital activity". In the South African context, seed funding, or early stage funding, is extremely rare because South Africa lacks true capital according to Cape Venture Partners (2009). In light of the consensus that the VC industry in South Africa is still in its infancy, the role of government initiatives in the VC space may prove to be crucial in order to re-vitalise the industry.

2.5 The venture capital contract: Deal terms and conditions

2.5.1 As a measure of effectiveness

This study attempted to delineate the effectiveness of public sector VC organisations. Effectiveness has long been an unsettled and contested concept in general organisational theory (Herman and Renz, 2008). Deconstructing the various facets of organisational effectiveness and selecting the appropriate basis for assessment presents a challenging problem for researchers since there are no generally accepted conceptualisations prescribing the best criteria (Cameron 2005). The choice of evaluation approach usually hinges on the organisational situation that needs to be addressed.

Based on the above context, venture capital markets are characterised by multiple incentive problems, agency problems and asymmetric information that is usually minimised through financial contracts (Cumming, 2006). Cumming



(2006) also argued that these contracts should provide incentives for both the entrepreneur and investor(s) to add value to the enterprise where the rights as well as the duties of both parties are specified. More fundamentally, Cumming (2006) asserted that venture capital contracts influence investment performance and provided empirical evidence that corporate venture capitalists underperformance relative to other venture capitalists is at least in part attributable to inferior financial contracts and the choice of securities although the extent of influence is largely unknown. For example, the data showed that investments with convertible securities yield higher average returns than straight common equity. As another example, Tykvová (2007) mentioned that venture capitalist control rights are usually separated from their ownership rights in the venture capital contract in order to improve efficiency. Given the high risk and uncertainty facing VC investments, it can be concluded that financial contracts have emerged as highly sophisticated instruments that are a vital part of the VC cycle. The investment deal terms as stipulated in the contract, therefore present a suitable measure of venture capital effectiveness in supporting entrepreneurs whilst managing risk.

2.5.2 Entrepreneur familiarity and acceptance

It is common for a venture capitalist who may be interested in a deal not to invest because the venture capitalist cannot agree upon the terms with the entrepreneur due largely to conflicting objectives (De Clercq, Fried, Lehtonen and Sapienza, 2006). An entrepreneur's objectives include to give up as little equity as possible; to get as much cash as possible; and to set milestone hurdles as low as possible. De Clercq et al (2006) mentioned that a particularly



important issue for many entrepreneurs for example is the tendency among venture capitalists to stage their investments because this reduces the amount of money invested at the earliest stages of development when risk is highest. For the entrepreneur, a staged practice approach presents an obvious risk of running out of funds and being in a poor position to raise more money if the venture does not develop as planned. On the contrary, if the venture develops as envisioned (or better), the entrepreneur will end up with a larger share of the company if investments are delayed than if all the money is invested in the first round.

Another common conflict eluded to earlier is that significant control is transferred from the entrepreneur to the venture capitalist (Payne, Davis, Moore and Bell, 2009). For the entrepreneur it is often difficult to accept, for example, that the venture capitalist has a right to dismiss the management of the venture or has a final say on the budget of the venture (Payne *et al.*, 2009). Yet, board seats and certain oversight powers may be non-negotiables for many venture capitalists although ownership control is only of indirect interest to the venture capitalist (Tykvová, 2007). By using the board, venture capitalists are able to provide constant guidance to management by monitoring and maintaining control over the company (Singh, 2005). De Clercq *et al.* (2006) believed that entrepreneurs should be aware that the simultaneous accomplishment of the goals discussed above may not be possible and argued that the entrepreneur needs to be educated in industry norms as well as VC-specific norms in order not to be blind-sided by such issues at the last minute. These sentiments suggest that a perception study on entrepreneurs acceptance of specific terms



would reveal those terms that are considered deal breakers or value-specific for either party. The discourse above also suggest that it is imperative for entrepreneurs to be familiar with common terms included in typical venture capital term sheet agreements especially in the absence of an experienced legal team to assist in negotiations.

2.5.3 Importance to entrepreneur and venture capitalist

The literature suggested that entrepreneurs are not assigning the appropriate priority or importance to specific terms in a venture capital contract negotiation. Taulli (2008) for example indicated that there is a lure for the entrepreneur to focus mostly on the overall valuation of the transaction which can be fatal bearing in mind that a term sheet has a variety of protective clauses for the venture capitalist that can significantly reduce the valuation for the entrepreneur. As an early example, Bartlett (2001) argued that despite the widely held view that registration rights and board control should be heavily bargained, he suggested that the business realities of venture investing render these particular terms relatively less important to the founder/entrepreneur. In contrast, he argued that certain other terms - protections against dilution; the form of investment; the definitions of benchmarks and milestones; and severance and parachute payments should not be underestimated when drafting and negotiating a venture deal. Aronson (2009) expanded on these issues further by asserting that it is often a mistake to fight on every point in a term sheet. Aronson (2009, p13) stated "The capital-seeking business should consider, based on its own unique position, attributes, and circumstances, the terms it cares (or should care) most strongly about, and be prepared to give



ground on other terms". In short, Aronson (2009) felt it is paramount to determine what is most important for the business, existing owners and key personnel and the future, and focus most intently on the terms that drive those items. In this regard, the most relevant provisions in Aronson's (2009) view are valuation, drag-along rights, liquidation preference, anti-dilution provisions and milestone or tranche investing. In light of the above, it was interesting to consider the perspectives of entrepreneurs and public sector venture capitalist in South Africa on prioritizing these provisions during term sheet negotiations or what level of importance they assigned to the terms based on their vested interest.

2.5.4 Managing investment risk

Huyghebaert and Mostert (2008) examined the importance of various securities and covenants in the context of South Africa, where the venture capital market is still relatively young, but growing. Overall, the study concluded that venture capitalists in South Africa limit their exposure to risk, but in a different manner than is typically done in the USA. Common stock is the dominant security type used to finance portfolio enterprises in South Africa. Convertible securities, which are highly important in the USA, are not a dominant form of financing in South Africa. The study excluded public sector venture capitalists and the perceptions of entrepreneurs towards the deal terms. This warranted a need for a comparable analysis with public sector venture capitalists and their perceptions of managing risk through the use of specific terms and conditions and to confirm if public sector venture capitalists agree with typical terms used in private sector VC contracts.



CHAPTER 3: RESEARCH QUESTIONS

3.1 Introduction

Given the lack of research in South Africa on the topic of public sector venture

capital specifically in relation to investment terms to support entrepreneurs and

manage risk, a set of research questions were developed to understand public

sector venture capital better.

3.2 Research question 1

Is there consensus amongst entrepreneurs and public sector venture capitalists

on the key investment terms or conditions that should be included in a typical

venture capital contract?

This research question sought to determine whether venture capitalist and

entrepreneurs agreed in principle with what the literature revealed as key

covenants in a deal structure between a venture capitalist and entrepreneur.

Huyghebaert and Mostert (2008) identified the following as the main covenants

that South African venture capitalists apply in at least half of their financial

contracts during the seed and start-up stage in declining order of importance:

Assigning a minority of seats on the board of directors to venture

capitalists.

Assigning a majority of votes to venture capitalists to influence important

strategic corporate decisions.

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- Obliging management to sign none-compete contracts that prohibit them from working in the same kind of industry for a future period of time after leaving the portfolio enterprise.
- Vesting of management's shares over a number of years, in order to discourage management to leave the enterprise.
- Staging of financing in a number of rounds, depending upon attaining specified goals.

Singh (2005) and Aronson (2009) identified the following provisions as being common in venture capital term sheets:

- Liquidation preference A term used in VC contracts to specify the order in which shareholders are paid any claims they may have against the business, and how much they get paid in the event of a liquidity event.
- Anti-dilution provision Protects a shareholder from dilution resulting from later issues of shares, it takes many forms and could be limited to protection where shares are issues at a lower price that the investor originally paid.
- Milestone provision Staging of financing in a number of rounds, depending upon attaining specified goals.



- Drag Along provision A right that enables a majority shareholder to force a minority shareholder to join in the sale of a company. The majority owner doing the dragging must give the minority shareholder the same price, terms, and conditions as any other seller.
- Tag Along provision A contractual obligation used to protect a minority shareholder in venture capital deal.

The above references informed the terms examined in all the questionnaires.

Definitions for each term were included and checked for consistency by examining various online financial dictionaries including Investopedia.

3.3 Research question 2

Are entrepreneurs familiar with the terms and conditions stipulated in the term sheet with regards to understanding what the terms mean and its implication on the business?

3.4 Research question 3

What are the perceptions of entrepreneurs and venture capitalist on the importance of specific deal terms and conditions in a venture capital contract?

3.5 Research question 4

What are public sector venture capitalist perceptions of entrepreneurs acceptance of specific deal terms and conditions?



3.6 Research question 5

Do entrepreneurs appreciate the rationale for venture capitalists imposing specific deal terms and conditions?

3.7 Research question 6

How effective are the terms and conditions prescribed by venture capitalists in managing their investment risk?



CHAPTER 4: RESEARCH METHODOLOGY

4.1 Introduction

This chapter covers in detail the research methods used in this study. It includes information about the research design and the data gathering tools. It also supplies information on the population, the data collection and analysis. Finally, research limitations are identified. All methodology is backed up by literature that specialises on the topic of research.

4.2 Research design

Research design is a master plan specifying the methods and procedures for collecting and analysing the needed information (Zikmund, 2003). The objective of this research was to examine the effectiveness of various contractual provisions that are typically included in venture capital contracts in supporting entrepreneurs whilst managing venture capitalist investment risk. Of the main methods of measurement, perception studies can provide the ultimate measure of the effectiveness of venture capital deals terms: that is, the alignment (or divergence) of the views of entrepreneurs and investors. Janashvili (2009) further argued that there is a need for organisations to quantify the findings of perception studies since a qualitative analysis make it difficult to track the evolution of perceptions over time.

In addressing the problem, a mixed method approach of qualitative and a descriptive quantitative approach was therefore undertaken. The latter was considered appropriate since Field (2008) partially identified the ability of



venture capitalists to adequately service entrepreneurs to be a problem in South Africa. The empirical study specifically focused on all entrepreneurs funded by public sector venture capitalists. The qualitative component of the research design focused on all public sector venture capitalist organisations that provide equity funding to start-up businesses. A qualitative design was appropriate in this case since the number of public sector venture capital providers in South Africa is limited to only two entities. The key elements of the proposed research design are described below.

4.2.1 Semi-structured expert Interviews with venture capitalists

To obtain a complete view of how public sector venture capitalist perceive deal terms and conditions from a risk and opportunity perspective, expert interviews with fund managers and key officials representing all public sector VC organisations were conducted. Expert interviews allowed the use of "probes" with a view to clear up vague responses or to ask for elaboration of incomplete answers" (Welman and Kruger, 2005, p. 52). Zikmund (2003) elaborated on probing by giving a number of possible probing tactics, depending on the situation. These include repeating a question when the respondent remains completely silent, giving an expectant look, repeating the respondent's reply or asking a neutral question in order to clarify a word or phrase (Zikmund, 2003). According to Alam (2005), such interviews are appropriate in acquiring fruitful data through a detailed and honest discussion with respondents and researcher.



The semi-structured interview (Appendix C) was complimented by a questionnaire (Appendix B) provided at the interview. Where face to face interviews were impractical or impossible, respondents were interviewed over the telephone. Interviews were considered feasible as there are only two public sector venture capital entities in South Africa including the Industrial Development Corporation VC Fund and the Technology Innovation Agency (TIA).

4.2.2 Secondary data

Internal proprietary documents that addressed some of the questions outlined in the report were examined as supplementary or supporting information including term sheet agreements and deal structure guidelines. The Technology Innovation Agency being one of the largest providers of VC funding in South Africa, was specifically requested to provide detailed information on as many of their portfolio company investments as they were willing to provide. Permission was granted to access and study their term sheet agreements for academic purposes.

4.2.3 Census of entrepreneurs

To understand more about the entrepreneur's perspective of public sector VC deal terms, a self-administered detailed questionnaire was sent via email to directors of all businesses that received funding from a government organisation in the form of venture capital. Some entrepreneur contact information was available in the public domain, but a complete list was requested from the relevant funders. A census was considered appropriate



since the target population was relatively small and public sector VC initiatives were only launched within the last decade.

This aspect of the research method was quantitative in nature by conducting a census since there was a need to verify the level of effectiveness of VC initiatives to adequately support entrepreneurs, which has been partially identified as a problem through qualitative research undertaken by Field (2008). Confidentiality was assured to all respondents due to the lack of anonymity with the email method. The design of the questionnaires are discussed below.

4.3 Data gathering tools

4.3.1 The questionnaire

The questionnaires contained in Appendices A and B was short, simple and comprised four sections, each addressing a unique perception on 14 terms and conditions found in a typical venture capital contract. This limited the number of responses available. The questionnaire also contained clarity on the terminology used in the questionnaire in order to avoid confusion, doubt and survey error.

As both venture capitalists and entrepreneurs were questioned, slight changes were made to each ensuring that they were appropriate for the respondent. Sections A and B in both questionnaires looked at the perceptions of entrepreneurs and venture capitalists regarding the relative importance of typical deal terms and conditions and its frequency of use by the enterprise and the VC investor respectively. Sections C and D in Appendix A captured the



entrepreneur's familiarity with the deal terms and conditions and their appreciation of investors imposing those terms. Sections C and D in Appendix B of the venture capitalist questionnaire aimed to assess venture capitalists perceptions of whether the terms and conditions were effective in managing their investment risk and their understanding of the entrepreneur's level of acceptance of those terms.

Each section contained 14 terms and conditions for assessment where the respondent indicated their level of acceptance on a 5-point Likert scale ranging from 1 (very low) to 5 (very high). A Likert scale is useful when respondents indicate their attitudes by checking how strongly respondents agree or disagree with carefully constructed statements that range from very positive to very negative (Zikmund, 2003). The assignment of nominal values to responses enabled the data to be subjected to frequency analysis. The segmenting of the questions in the various areas ensured that the questions were very specific and created no doubt in the mind of the respondent. In order to use the public sector VC organisation's internal documents alongside primary data obtained in this study, every effort was made to ensure consistency in terms of the contents of the questionnaires by liaising closely with the venture capitalists.

4.3.2 The interview schedule

The interview schedule was specifically targeted at public sector venture capitalists and not the entrepreneurs. The interview schedule (Appendix C) consisted of six discussion points aimed at gaining a deeper understanding of public sector venture capitalist perspectives towards typical VC deal terms in



respect of managing investment risk, entrepreneur acceptance of the terms, their role in setting the terms, and compliance with VC industry norms. The interview schedule also probed respondents on whether the public sector venture capitalists have a higher risk tolerance compared to private sector venture capitalist which may impact the types of terms offered. The last question served as a context for the discussion of the results with the view to make a comparison with similar studies in the private sector.

4.4 Population and size

The study was undertaken on two populations, namely public sector venture capitalists and the entrepreneurs who received or are in receipt of public sector VC funding. The following sub-sections address each of these groups in more detail. It must be emphasised that since a census and not a survey was conducted, sampling was therefore not an issue.

4.4.1 Public sector venture capital organisations

The public sector venture capitalists population were key representatives from all government organisations that offer venture capital in the form of equity or a combination equity and debt funding which includes seed or start-up stage as defined by SAVCA. A complete list of government venture capitalists was uncovered through the SAVCA website and after discussions with industry experts. As discussed in section 2.3, only two public sector entities provide venture capital funding in South Africa bearing in mind the recent merger of the Innovation fund and BRICs into the Technology Innovation Agency. The remaining entity is the Industrial Development Corporation's VC fund.



4.4.2 Entrepreneurs

The entrepreneur population included all entrepreneurs in South Africa who had obtained VC funding at some point from the public sector where the venture capitalist holds or held an equity stake in their business. This is an important distinction. Entrepreneurs, no matter how successful, who had not obtained public sector VC funding in the form of some equity, were not included. Entrepreneurs were identified by asking venture capitalists for a complete list of the entrepreneurs they had funded or were funding at the time where equity was obtained. Up to date information gathered from the Technology Innovation Agency revealed 32 start-up companies that received VC funding from this public sector entity alone (Appendix F).

4.5 Data collection

Respondents were identified using information provided by venture capitalists and information available in the public domain as discussed previously. Once identified, they were contacted by the researcher and briefed about the purpose of the study. Entrepreneur questionnaires were collected by email or fax. Appointments were setup with venture capitalists, and face to face interviews were carried out to obtain the venture capitalist data.

4.6 Data analysis

The data was analysed using a combination of content analysis and frequency distribution. The former analysis was done on data gathered from interviews with public sector venture capitalists.



4.6.1 Content analysis

Since the venture capitalists interview and questionnaire feedback was used in an exploratory manner due to the very small population size, content analysis tools was used to probe the feedback received from venture capitalist. Content analysis is considered the appropriate tool for the analysis of responses to open-ended questions such as interviews (Welman and Kruger, 2005). This involves the reduction of qualitative data, whilst articulating the data's most important themes and characteristics through the identification of core consistencies and meanings. Themes identified in the literature review were used to assist in the identification and clustering of common characteristics under each distinctive theme.

4.6.2 Frequency distribution analysis

The main thrust of the research was a descriptive quantitative analysis of entrepreneur perceptions towards venture capital contracts based around the underlying terms and conditions. The Likert scale was used to evaluate the questionnaires using a frequency analysis. Responses were captured into a spreadsheet package and used to generate figures which identified patterns and trends in the data. This was used to make comparisons with similar published studies done abroad or with private sector data done locally.

4.7 Data validity and reliability

Zikmund (2003) mentioned that there are three major criteria for evaluating measurements including reliability, validity and sensitivity. The manner in which the data was sourced (Appendix D), the nature of the questions being posed



and the design of the scales (Appendix A and B), respectively; ensured that this study met the three major criteria for measurements. The use of an email questionnaire sent to a single person at a time enhanced the validity of the census since it ensured that multiple responses from the same person were kept to a minimum and hence this prevented significant response bias.

The key error in the survey or census research method would be non-response error or non-response bias including those people that do not return questionnaires. Gravetter and Forzano (2003) mentioned that people who are most interested in the survey topic will be most likely to complete and return the questionnaire and this leads to non-response bias that can limit the ability to generalise results, which is a threat to the external validity of the study.

Other errors that could have occurred were survey error where respondents tended to answer questions in a certain direction. With the dominant Likert scale being used, extremity bias which is a response bias that results because some individuals tend to use extremes when responding to questions (Zikmund, 2003), in other words when they just put '5' rankings was also likely.

4.8 Research limitations

The following research limitations were identified:

 Entrepreneur contact details were obtained via the venture capitalists that funded them. This raises the possibility that VC organisations only introduced the researcher to entrepreneurs who they perceive would



provide positive feedback. Every effort was made to ensure that a complete list was obtained in order to conduct a census.

- Due to the nature of the population being targeted, it was difficult to eliminate non-response bias. Several actions were employed to increase the overall response rate for the e-mail census and thereby reduce the bias (Gravetter & Forzano, 2003). These actions outlined in Appendix E were considered during the census.
- Singh (2005) mentioned a multitude of factors which could contribute to
 the variation in term sheets, those that were addressed in this study were
 limited by key factors identified in the literature which may not be
 exhaustive; however, they do possess a strong influence over the
 structure of deal terms.



CHAPTER 5: RESULTS

5.1 Introduction

This chapter presents the results obtained from questionnaires and open-ended interviews with entrepreneurs and venture capitalists respectively. The results are separated into sections with each section representing one or more of the research questions. The results also report on the analysis of proprietary documentation obtained from a large public sector VC entity within TIA.

The entrepreneur questionnaires and cover letters were emailed to 45 entrepreneurs who obtained funding from a public sector venture capitalist. After following-up three times by means of emails, 21 completed questionnaires were returned. The response rate was therefore 47%. The majority of questionnaires were completed by entrepreneurs who were already on the senior management level of the company. Hence, these people were able to respond with confidence to the questions raised in the survey; also, they did not indicate they have had problems understanding the questions. It should be noted that where an entrepreneur obtained finance from more than one public sector venture capitalist, the entrepreneur completed the questionnaire in respect of venture capital obtained from the public venture capitalist that provided the most funds. Interviews were held with three senior public sector venture capital representatives who have an in-depth understanding of VC deal terms used by their respective organisations. The details of all the participants are set out in Appendix F and Appendix G. A full discussion on the results can be found in Chapter 6.



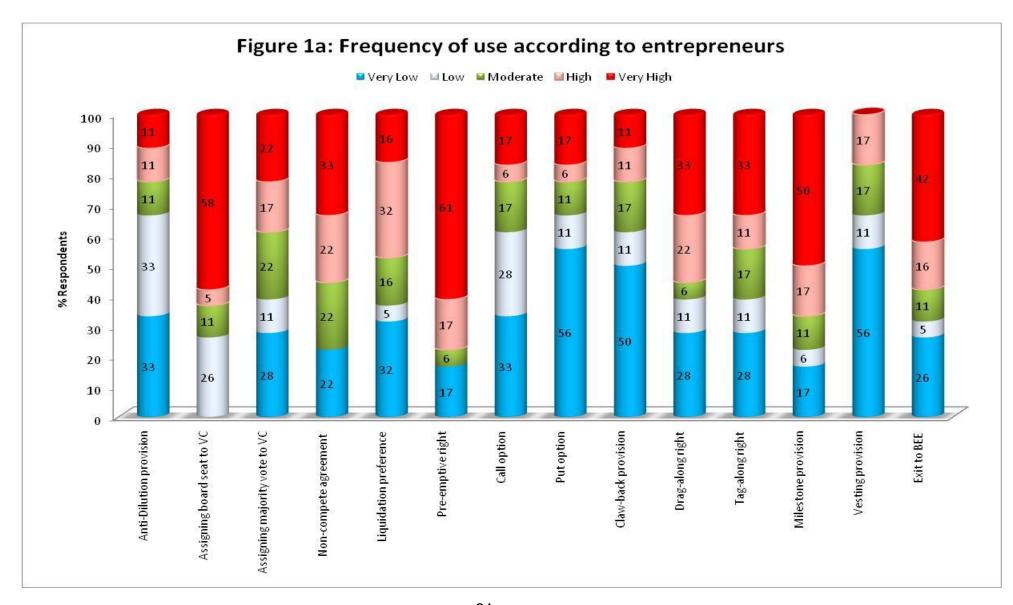
5.2 Level of consensus on deal terms that should be in a VC contract

Is there consensus amongst entrepreneurs and public sector venture capitalists on the key investment terms or conditions that should be included in a typical venture capital contract?

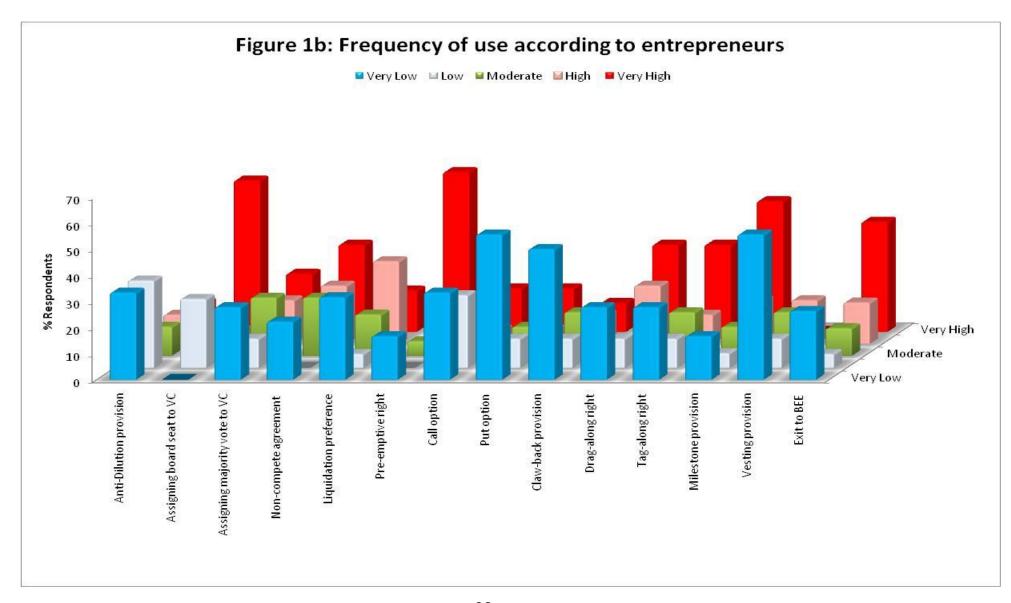
The results from section 2 of the entrepreneur and venture capitalist questionnaire were used to address the above research question. Section 2 of the entrepreneur and venture capitalist questionnaire asked respondents to assign a weighting from one to five (1 = very low, 5 = very high) in relation to the frequency of either using each term in the financial contract or applying it at some point. A high to very high frequency of use for a particular term would suggest that the term should likely be included in a venture capital contract. Figures 1a and 2 plots the overall responses of both entrepreneurs and venture capitalists respectively after ranking responses for each term and condition. Most of the respondents were able to answer the question relating to frequency of use for each term and condition. Three entrepreneurs were unable to provide answers for those terms which they indicated were not applicable in their case. The results from section 2 of the entrepreneur questionnaire have also been combined into an additional graph which maps the frequency of use ranging from very low (front) to very high (back) for each term and condition (Figure 1b).

The results from this section were viewed in the context of the results obtained for research question 3 which also partly addressed the problem of which terms should be included in a typical term sheet agreement. Results for research question 3 are shown in section 5.4 and its detailed comparison with the above research question on frequency of use is discussed later in Chapter 6.

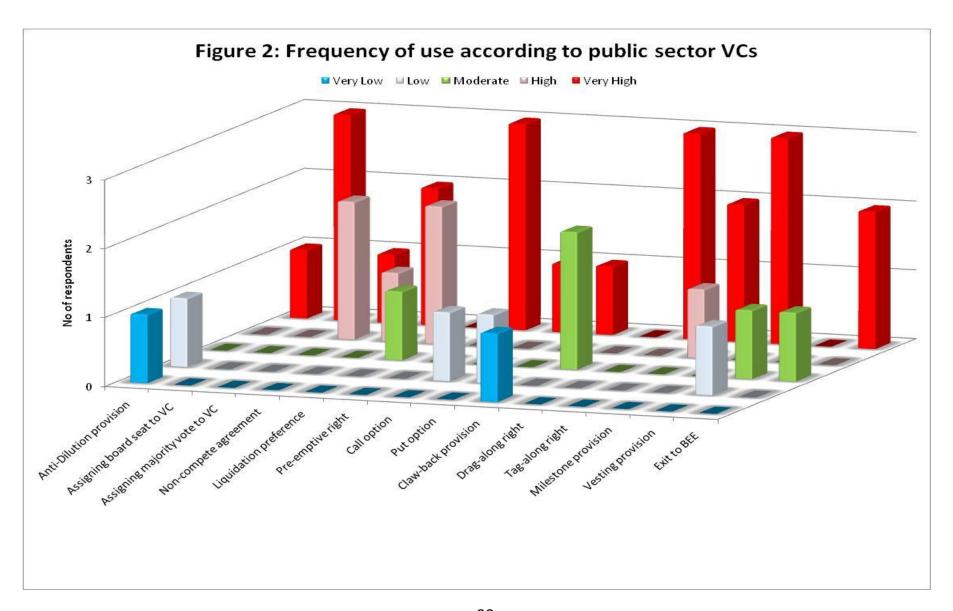














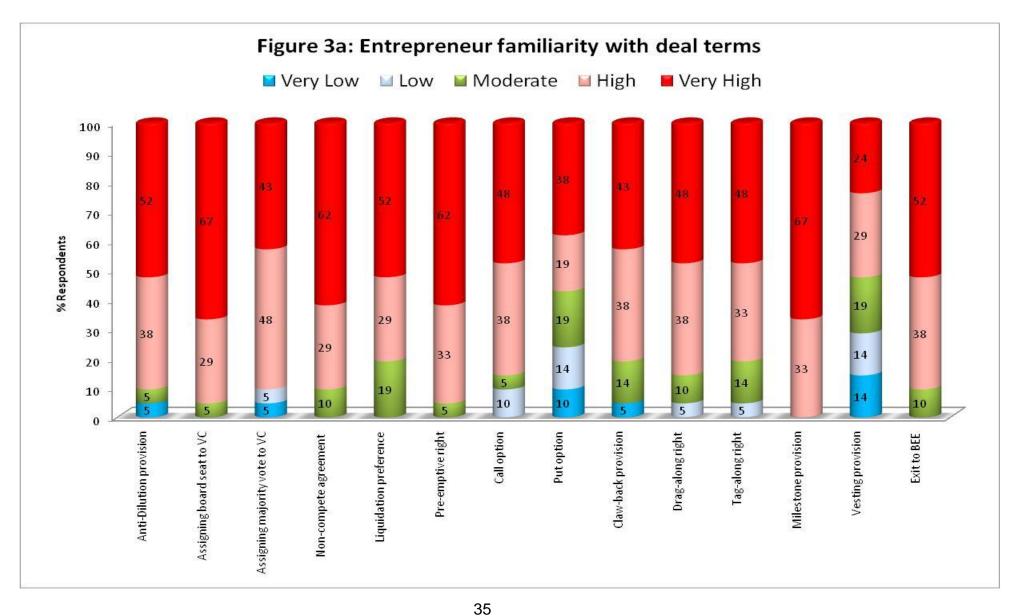
5.3 Entrepreneur familiarity with VC deal terms and conditions

Are entrepreneurs familiar with the terms and conditions stipulated in the term sheet with regards to understanding what the terms mean and its implication on the business?

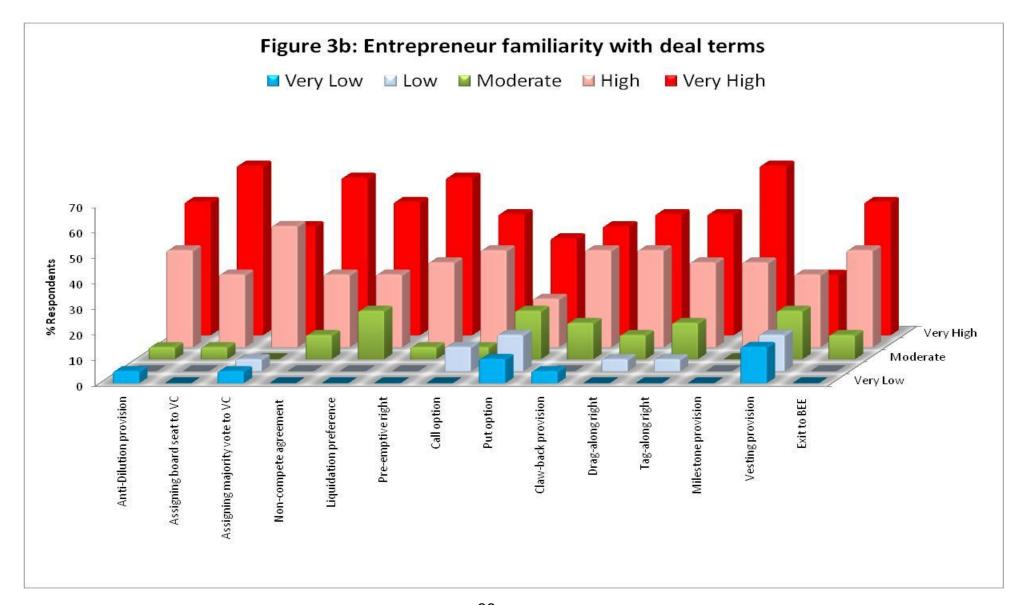
The results from section 3 of the entrepreneur questionnaire were used to address the above research question. Section 3 of the entrepreneur questionnaire asked respondents to assign a weighting from one to five (1 = very low, 5 = very high) in respect of how familiar they are with each term and condition and its implication on the business. The results are presented in a similar format used in the previous section. Figures 3a and 3b plots the overall responses of entrepreneurs after ranking the responses for each term and condition. Both figures reflect the percentage of entrepreneurs who assigned different weightings in regard to their level of familiarity with the different terms or conditions. All respondents were in a position to answer this question for each term under investigation.

Apart from directly addressing the above research question, the results of this section also provided a useful means of assessing whether entrepreneurs have the necessary knowledge to answer some of the other research questions in the study. A low to very low familiarity for a particular term for example would doubt the accuracy of the responses from entrepreneurs for those research questions pertaining to the importance of deal terms to their business and their appreciation of a venture capitalist's rationale for imposing specific terms and conditions. Chapter 6 discusses the implications of the results shown Figure 3 in respect of this issue.











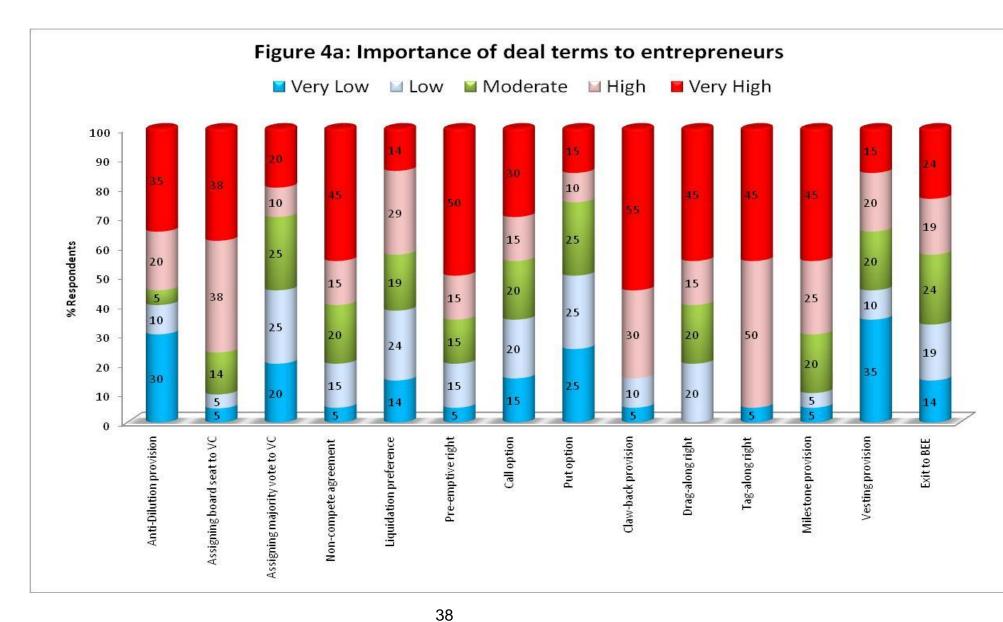
5.4 Relative Importance of VC deal terms and conditions

What are the perceptions of entrepreneurs and venture capitalists on the importance of specific deal terms and conditions in a venture capital contract? The results from section 1 of the entrepreneur and venture capitalist questionnaires were used to address this particular research question. Section 1 of both questionnaires asked respondents to assign a weighting from one to five (1 = very low, 5 = very high) for each term and condition in terms of its importance to the respective parties. Figures 4(a and b) and 5 plots the responses of entrepreneurs and venture capitalists respectively.

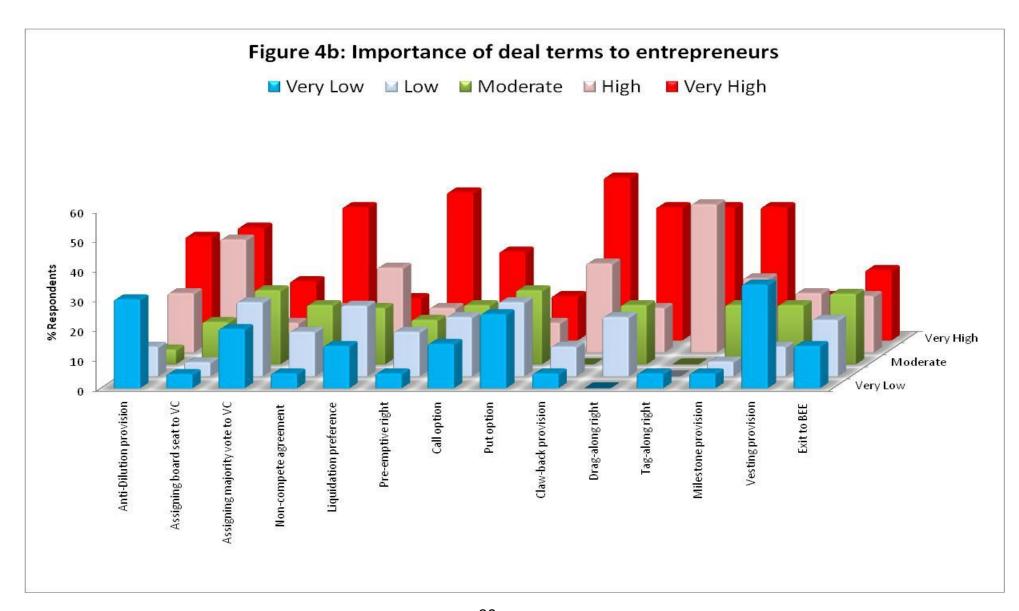
Most of the respondents were able to assess the importance of each deal term. Only one respondent amongst the entrepreneur population was not in a position to assign a ranking for several of these deal terms. Written comments made by the entrepreneur pertaining to the reason for this was that some of these deal terms were not applicable to the individual's venture. This also corresponded to the entrepreneur's inability to complete the section on frequency of use for those terms that were not applicable. The entrepreneur was able to complete the questions concerning his familiarity with the deal terms and his appreciation of the VC's rationale for imposing such terms in a term sheet agreement.

A high to very high importance for a specific term would also suggest that these terms be included in the VC contract as eluded to in section 5.2. The precise implications of the results shown in Figures 4 and 5 are detailed in Chapter 6. Chapter 6 also discusses possible consistencies between these results and results from other related sections.

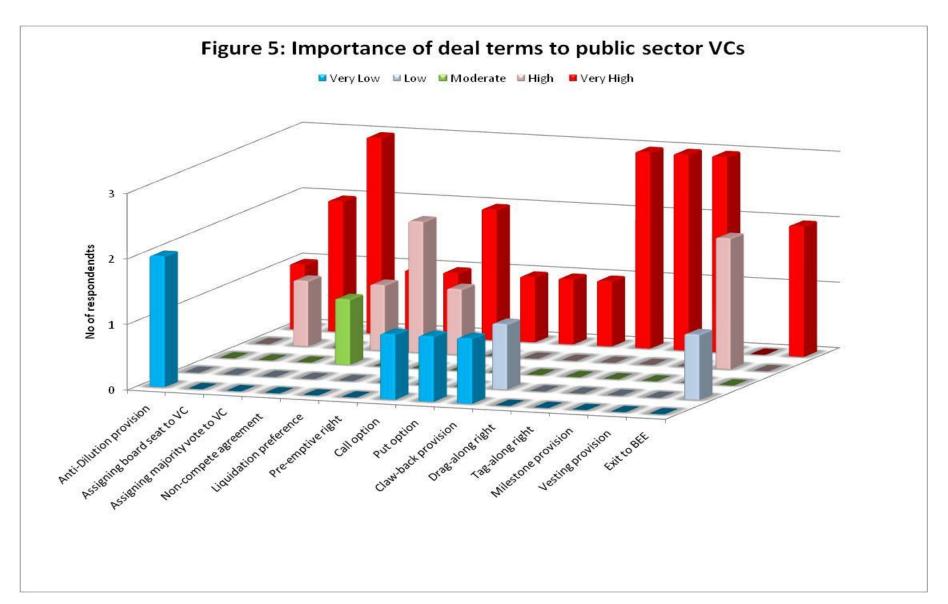














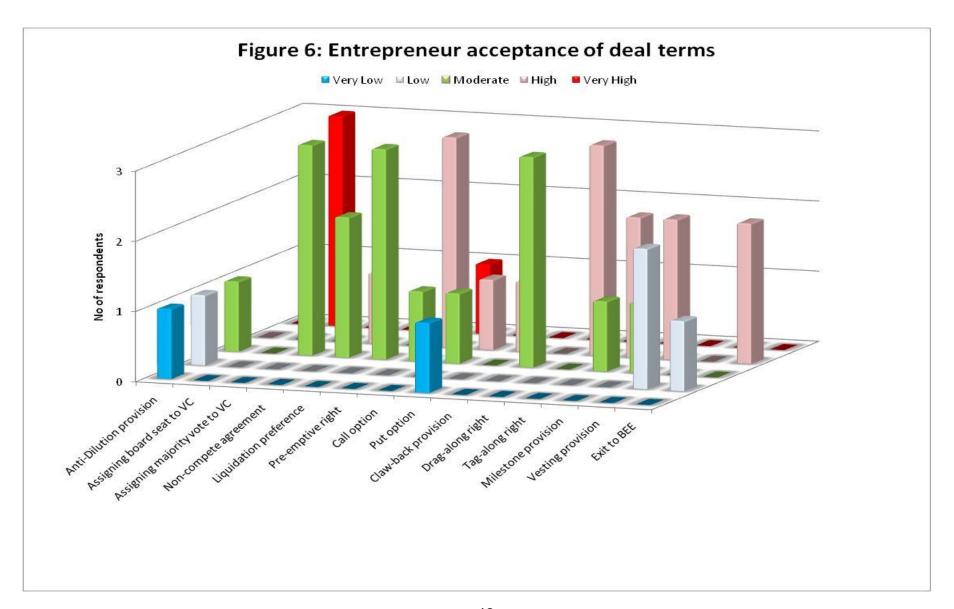
5.5 Entrepreneur acceptance of VC deal terms and conditions

What are public venture capitalist perceptions of entrepreneurs acceptance of specific deal terms and conditions?

The results from section 4 of the venture capitalist questionnaire and question 5 of the venture capitalist interview schedule were both used to address the above research question. Section 4 of the venture capitalist questionnaire asked VCs to assign a weighting from one to five (1 = very low, 5 = very high) for each term and condition in regards to the entrepreneurs level of acceptance. Figure 6 maps the questionnaire responses of all three venture capitalists. A high to very high acceptance from entrepreneurs for a particular term would suggest that venture capitalist would not have much difficulty imposing or negotiating such terms with entrepreneurs. A low to very low acceptance level on the other hand could possibly indicate that such terms are considered deal breakers from the entrepreneur's perspective and venture capitalist need be diligent and meticulous when negotiating or including such provisions in a venture capital contract.

Question 5 of the interview schedule also prompted the venture capitalists to address this issue from a holistic perspective. A TIA representative argued that "acceptance is largely dependent on the business savviness of the entrepreneur and their understanding of the rationale for VCs suggesting or imposing the terms". A comparative discussion in relation to this can be found in Chapter 6. The IDC regarded entrepreneurs within the university environment in particular as complicated investors as they have difficulty in general accepting most deal during terms negotiations **IDC** Venture Capital with the unit.







5.6 Entrepreneur appreciation of VC deal terms and conditions

Do entrepreneurs appreciate the rationale for venture capitalists imposing specific deal terms and conditions?

The results from section 4 of the entrepreneur questionnaire were used to address the above research question. Section 4 of the entrepreneur questionnaire asked respondents to assign a weighting from one to five (1 = very low, 5 = very high) for each term and condition in terms of their appreciation of the rationale for venture capitalists imposing such terms. Figures 7a and 7b plots the responses of entrepreneurs. A high to very high appreciation for specific terms also served to confirm those terms that should possibly be included in a typical term sheet and to clarify the responses for research questions 1 and 2. A high appreciation amongst entrepreneurs for specific terms could support the inclusion of such terms in a term sheet agreement. There was also a need to rule out the possibility that entrepreneurs responded with a low appreciation for the VCs rationale for imposing terms simply because they were not familiar with the deal terms. The results presented here must therefore be viewed in the context of the results obtained in Section 5.3 which looks at the entrepreneur's familiarity with the deal terms.

The rationale for why venture capitalist would impose certain terms and conditions were also uncovered from examination of proprietary investment policies and guidelines from the Innovation Fund (IF) which is a large public sector VC entity which has since merged into TIA. Table 1 shows the rationale for the IF imposing certain terms and conditions based on information extracted from their internal guidelines. In addition to the terms in Table 1, the IF stance

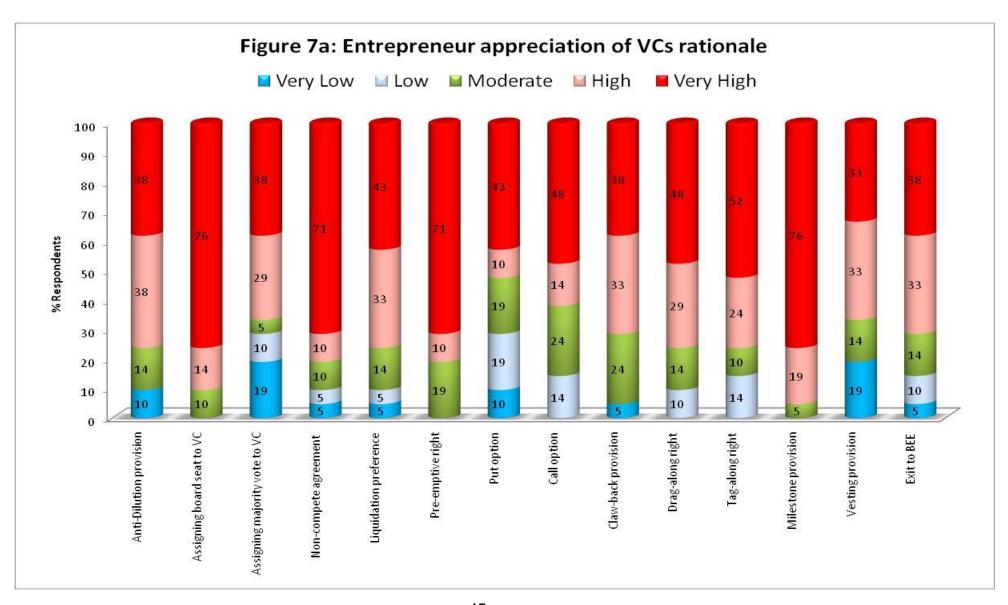


regarding consensus matters and veto rights is that consensus matters varies and in itself can be used to implement a veto right for the investor if threshold is higher than the sum of shareholding of all other shareholders.

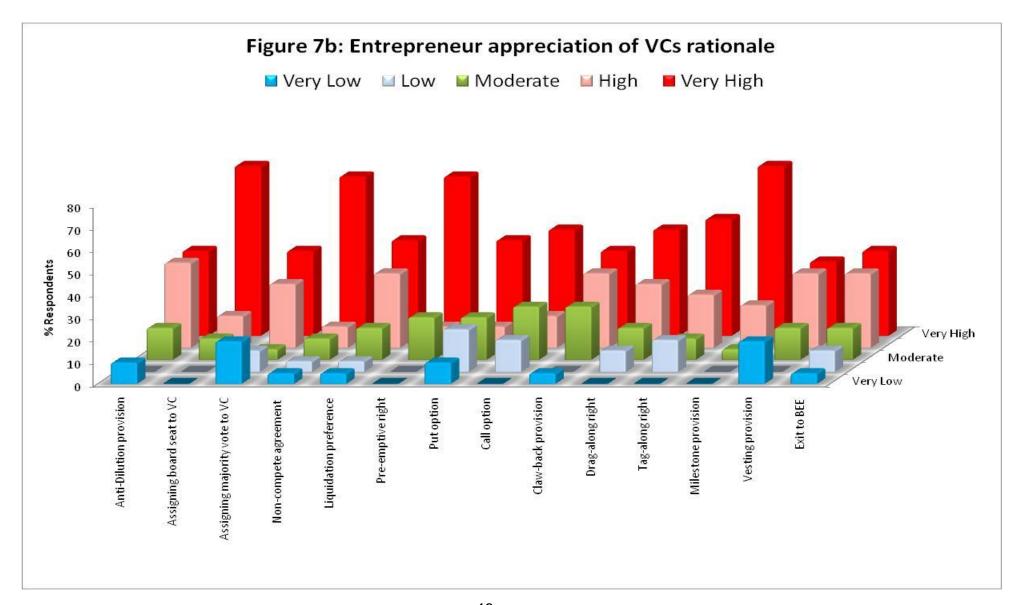
Table 1: Rationale and guidelines for Innovation Fund (IF) deal terms

Term or condition	Innovation Fund (IF) Rationale	
Dilution protection	Used when there is significant risk that equity held by IF	
	would not provide adequate returns. Typically IF does not	
	allow dilution protection for any other shareholders once	
	it has invested.	
Milestone provision	Used to minimise IF exposure to risk if things don't go	
	according to plan	
Claw-back	Used to incentivise management to achieve business	
	plan projections with regards to units of product sold in	
	specific markets and/or sales.	
Call option	Used to offer opportunity for company/management to	
	buy back equity when in position to do so. Can also be	
	used to mediate a valuation difference.	
Put option	Used to give IF an exit option to sell to the company	
	(always subject to applicable regulations & Companies	
	Act)	
Drag-along	The drag along provision prevents a small minority from	
	preventing the future sale of the company to a buyer who	
	wants the whole company.	
Tag-along	The tag along provision prevents a group of shareholders	
	from selling their shares leaving the others behind.	
Exit to BEE	To promote the spirit of black economic empowerment.	
Assigning board	IF typically appoints board members, and attempts to	
seat	structure a board that has an appropriate balance of	
	management, investor and independent representation.	











5.7 Effectiveness of VC deal terms in managing investment risk

How effective are the terms and conditions prescribed by venture capitalists in managing their investment risk?

The results from section 3 of the venture capitalist questionnaire were used to address the above research question. Section 3 of the questionnaire asked VCs to assign a weighting from one to five (1 = very low, 5 = very high) for each term and condition in relation to its effectiveness in managing the VC's investment risk. Figure 8 maps the responses of venture capitalists based on number of responses.

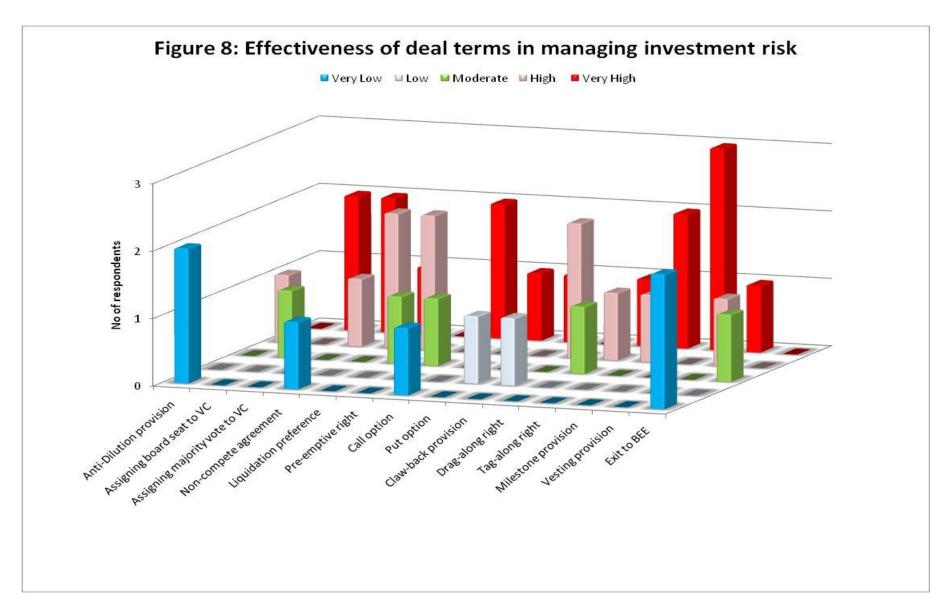
Responses to Questions 3 and 6 of the interview schedule also provided a valuable context on the issue of risk and additional information for interpreting the results from the venture capitalist questionnaire. Question 3 of the interview asked public sector capitalists whether their organisation takes greater risk compared to their contemporaries in the private sector. Both the IDC and TIA representatives were of the strong opinion that their organisation takes greater risk to a large extent. Some of the reasons given by TIA was that VC government entities were established to fill a gap in very early-stage funding which few private sector funders are prepared to play in due to the high risk associated with these ventures. Moreover, the increased risk from TIA is important to meet the development needs of their mandate. The IDC representative was also adamant that private sector VCs are generally reluctant to invest in pre-revenue ventures which both the IDC and TIA are mandated to do. It was also pointed out that this risk often translated into more flexible deal terms. This point prompted the follow-up question as to whether the terms



imposed were effective in managing their investment risk considering that the ventures funded by TIA or IDC appear to be at a very early stage compared to what private sector VCs would normally fund. It was highlighted by one interviewee that the term sheet agreement stipulating specific terms and conditions was not solely intended to manage risk, but was also used to ensure objectives of the venture were met. It was the opinion of the TIA representatives, that the terms imposed by TIA are in general effective in managing their investment risk since their term sheets in most instances contains all the main risk management clauses found in a typical VC financial contract. It was also mentioned by the TIA representative that unlike IDC, TIA is not self-funded and the risk mitigating clauses is less onerous on the entrepreneur. However, in the case of co-funding, the TIA representative made the point that catering for risk using specific deal terms is normally aligned with the co-funder's risk appetite.

The IDC venture capital head's view was that their terms were around 70% effective in managing their investment risk and he admitted that there is room for improvement. The IDC representative also mentioned that the purpose of the term sheet from their perspective is to govern the relationship between the entrepreneur and the venture capitalist.







5.8 Conclusion

The above results showed that there are a number of trends that can be observed based on frequencies and relative proportions for the different Likert rankings. The results also reflect consistencies between responses for closely linked research questions especially with respect to the frequency of using deal terms and their relative importance to entrepreneurs and venture capitalist. An in-depth discussion of the results is found in Chapter 6.



CHAPTER 6: DISCUSSION OF RESULTS

6.1 Introduction

This chapter provides a discussion on the results of the study. The research questions are discussed by first briefly outlining key aspects of the results reported in Chapter 5, followed by any additional information obtained from internal documents and comments given by venture capitalists during expert interviews. These results are then compared to the literature as found in Chapter 2. The discussion pertaining to each research question is mostly focused around those terms where the rankings were significant for the low or high extremities since moderate ratings were regarded as inconclusive.

6.2 Level of consensus on deal terms that should be in a VC contract

Whilst the research assumed at its outset that there was a need in general for greater agreement between venture capitalists and entrepreneurs on the terms and conditions that should typically be included in a VC contract in order to reduce potential conflicts as eluded to by Cumming (2008), it was important to ascertain whether South African public venture capitalists and entrepreneurs had consensus on the terms and provisions required in a typical term sheet agreement. It was also important to assess whether there was consensus amongst entrepreneurs themselves. The results in section 5.2 also provides an important comparison with similar published survey data of venture capital deal terms in the private sector which includes a South African study undertaken by Huyghebaert and Mostert (2008).



Table 2 shows those terms which the majority of entrepreneurs viewed as being highly or very highly used. Terms with a very high frequency of use according to entrepreneurs were pre-emptive rights; assigning a board seat to venture capitalist and milestone provisions.

Table 2: Most frequently used deal terms according to entrepreneurs

Rank	Term and condition	% of respondents
1	Pre-emptive right	78%
2	Milestone provision	67%
3	Assigning board seat to venture capitalist	63%
4	Exit to BEE	58%
5	Founder signing non-compete agreement Drag along right	56 %

Although the high utilisation of the terms shown in Table 2 suggests that these terms should be included in a typical VC contract from an entrepreneur's perspective, it was also important to identify those provisions that are least frequently used according entrepreneurs and to establish whether venture capitalists had similar perceptions in regards to these terms.

Table 3 shows those provisions which entrepreneurs identified as having a low to very low frequency of use. Interestingly, more than half of the entrepreneurs have a very low use for the vesting provision and put option in particular which is a strong signal that these provisions should not necessarily be included in a typical VC contract.



Table 3: Least frequently used deal terms according to entrepreneurs

Rank	Term and condition	Frequency of use
1	Anti-dilution	67%
	Vesting provisions	
	Put option	
2	Claw-back provision	61%
	Call option	

The above results from entrepreneurs are mostly consistent with public sector venture capitalist perceptions who also viewed the above mentioned terms as having a low or very low frequency of use. The remaining discussion addresses all the provisions in Table 3 based on literature findings in order to justify or negate its apparent low frequency of use in public sector VC contracts.

Put provisions are commonly used to strengthen the liquidation rights of the VC investment and could be used as an exit strategy by venture capitalists (Kaplan and Strömberg, 2003). Put options are generally not favored because they do not provide as large rate of return as an acquisition or initial public offering. It is often used as a last resort when there are no other viable alternatives (Fabozzi, 2002). Its low frequency of use and exclusion in a VC contract is justified although Thomsett (2009) believed it has a useful role especially in troubling economic periods where markets are volatile.

The very low use of the vesting provision on the other hand contradicts Huyghebaert and Mostert's (2008) finding which indicated that the vesting



provision is used in more than half (61.25%) of VC contracts in South Africa. It was also reported that in the USA, 41.2% of VC contracts foresee managerial vesting rights (Huyghebaert and Mostert, 2008). One justification for this provision is that special skills that are personified in the management of a start-up venture often cannot be replaced without a huge financial outlay by the enterprise (Huyghebaert and Mostert, 2008). Hence, VC contracts may include a covenant according to which the shares of the management team will vest over a number of years, depending on a stipulated timetable (Kaplan & Strömberg, 2003).

Generally, the vesting of management shares over a period of time should be regarded as a type of deferred compensation, rewarding managers for services previously rendered (Prendergast, 1999). Considering that the objective of this particular covenant is to retain the expertise of the current management, which should benefit the future development of the venture, it is also surprising that entrepreneurs do not see this provision as being very important as discussed in Section 6.4. A possible reason for this perception is that entrepreneurs may see vesting as a way for VCs to control their involvement and their ownership in the venture. Interestingly, although the vesting provision and put option were not frequently used, it was still considered to be of high importance by venture capitalists from the TIA as discussed in Section 6.4. In light of the above and the high application of the vesting provision in private sector VC contracts especially in early stage financing in South Africa suggests that there could be a useful role for incorporating the vesting provision in future VC contracts as an incentive for loyalty and good performance.



Another provision that has a low frequency of use is the anti-dilution provision. Notably, two public sector venture capitalists also felt that the anti-dilution provision was not important from their perspective as discussed in Section 6.4 which could explain its low frequency of use or absence from term sheet agreements. The literature identified that one rationale for imposing this covenant is to protect venture capitalists against the dilution of their financial interest when a portfolio enterprise issues new shares at a significantly lower subscription price than the prevailing market price (Singh, 2005).

In the USA, venture capitalists are protected against the dilution of their financial stake in 94,7% of the cases (Kaplan & Strömberg, 2003). However, Huyghebaert and Mostert's (2008) study revealed that the inclusion of this type of provision only happens in 33,75% of the contracts involving seed and start-up stage investees which is consistent with the public sector data obtained in the current study.

In fact, a detailed examination of internal documentation relating to policy guidelines for the Innovation Fund indicated that the anti-dilution provision is only used when there is significant risk that equity held by the IF would not provide adequate returns. Typically, the Innovation Fund did not allow dilution protection for any other shareholders once it has invested. Singh (2005) also warned that the entrepreneur needs to be aware that, not only is full dilution the worst form of anti-dilution, but it also discourages other potential investors from investing. From this perspective, the low use of the anti-dilution provision and its exclusion from most VC contracts is therefore justified.



The same proportion of entrepreneurs felt that both the claw-back provision and call option were not frequently used in VC contracts. Interestingly, these provisions are similar in the sense that the latter can be used by an investor to enable founder shareholders to buy out the investor, as a means of clawing back equity or an incentive. The claw-back provision in particular is considered very important to the entrepreneur as noted in Section 6.4. There is therefore a strong case for including the claw-back provision as opposed to the call option in a VC contract despite the fact that VCs assigned a low importance to this term. The importance of the claw-back provision as an incentive is discussed in more detail in Section 6.4.

In summary, there was general consensus amongst entrepreneurs and VCs on the terms that should be included in a term sheet based on its frequency of use. Conflicts between VCs and entrepreneurs around terms or provisions that should be included in a VC contract are likely to be minimal in light of this consensus. The results in Section 5.2 must also be examined in the context of the importance of the deal terms to entrepreneurs and VCs respectively since there is a possibility that only terms which were important to VCs were frequently used or included in the contract. In this regard, the low frequency of using the claw-back provision is concerning considering that this term was highly important to entrepreneurs, but not so to VCs. This observation also supports the argument that terms could be dictated to by venture capitalists with little room for entrepreneurs to negotiate. Indeed, one entrepreneur highlighted this point as an addendum to the questionnaire response. The sections to follow addresses some of these issues in more detail.



6.3 Entrepreneur familiarity with VC deal terms and conditions

The results reflected in Section 5.3 revealed that the overwhelming majority of entrepreneurs have a very high familiarity with all 14 terms and conditions which were evaluated in the questionnaire. The only terms for which a significant proportion of entrepreneurs have a low to moderate familiarity are the vesting provision and put option. Notably, the latter is also not frequently used and is considered to be of low importance by entrepreneurs. Nevertheless, there is a strong tendency towards greater familiarity as opposed to very low familiarity with these terms.

The above assessment on the level of entrepreneur familiarity with typical deal terms and conditions has several implications. Firstly, it provides a strong indication that entrepreneurs in general had sufficient knowledge to accurately answer the other research questions relating to these terms, thus partly validating the accuracy of the information obtained in this study. Secondly, the results suggest that lack of familiarity with deal terms was not necessarily an issue that could have hindered the entrepreneur's ability to effectively negotiate favorable deal terms or terms that offer support to the venture. However, the possibility still exist that entrepreneurs may not have had much room for negotiating specific terms with venture capitalists due to reasons other than lack of familiarity with those terms. De Clercq et al (2006) argued that the relationship between venture capitalists and entrepreneurs is generally intense and is often embedded in a context of great uncertainty. De Clercq et al (2006) further insisted that the entrepreneur needs to be fully aware of the rights of the venture capitalists which includes being familiar with the terms and conditions in



a typical VC contract. Being highly familiar with typical VC terms early on is important in order for the entrepreneur to fully understand the implication of having certain provisions in a contract and not to be blind-sided by these provisions at a later stage which could possibly render the contract to be one sided in favor of the venture capitalist.

6.4 Relative importance of VC deal terms and conditions

Table 4 lists those terms and conditions which were considered by most entrepreneurs to be of high or very high importance. The claw back provision and pre-emptive right in particular were both identified as very highly important by a majority of entrepreneurs. The latter term is consistent with its very high frequency of use according entrepreneurs as reported in Section 6.2.

Table 4: Most important deal terms and conditions for entrepreneurs

Rank	Term and condition	% of respondents
1	Tag-along right	95%
2	Claw-back provision	85%
3	Assigning board seat to venture capitalist	76%
4	Milestone provision	70%
5	Pre-emptive right	65%
6	Drag-along right Founder signing non-compete agreement	60%
7	Anti-dilution provision	55%



In general, every condition appears to have some importance to the entrepreneur whether it has a positive or negative impact on the venture. Nevertheless, a significant proportion of entrepreneurs regarded the put option (50%) and assigning majority vote to venture capitalists (45%) to be of low or very low importance to them. These sentiments from entrepreneurs are consistent with Bartlett's (2001) view that despite the widely held notion that board control should be heavily bargained, the business realities of venture investing renders board control relatively less important to the founder entrepreneur. In contrast, he argued that protection against dilution and the milestone provision should not be underestimated by the entrepreneur when drafting and negotiating a venture deal (Bartlett, 2001). The results pertaining to relative importance suggests that the majority of entrepreneurs funded by the public sector ascribe to Bartlett's notion since both the anti-dilution and milestone provisions received a high ranking in terms of importance. Aronson (2009) also felt it is paramount to determine what is most important for the business, existing owners and key personnel and the future, and focus most intently on the terms that drive those items. In this regard, the most relevant provisions in Aronson's (2009) view include drag-along rights, liquidation preference, anti-dilution provisions and milestone provision. The above outlook is entirely consistent with entrepreneur perceptions obtained in this study as shown in Table 4.

It is noteworthy that with the exception of the exit to BEE clause, most of the terms identified in Section 6.2 with a high or very high frequency of use were also considered important by most entrepreneurs. The combined results



therefore serves as a good guide as to which terms should be included in a VC contract from an entrepreneur's perspective rather than looking at frequency alone. There were two provisions that were not frequently used but were very important to entrepreneurs. The very high level of importance ascribed to the claw-back provision by entrepreneurs is striking in this respect. It is noteworthy that internal policy guidelines within the Innovation Fund prescribed claw-backs on achieving 80% of business plan projections as a company friendly provision whereas achieving more than 150% of business plan projections as investor friendly. It could therefore be argued that the precise nature of the claw-back provision would dictate its frequency of use and level of importance to venture capitalists and entrepreneurs. Indeed, two of the venture capitalists interviewed regarded the claw-back provision as being of low or very low importance to them. It is bothersome if these sentiments translate into its exclusion from the venture capital contract since the claw-back provision can be used to incentivise management to achieve business plan projections including units of product sold in specific markets.

Despite the above shortcoming, most public sector venture capitalists considered all the other terms with the exception of the anti-dilution provision to be important from their perspective. Furthermore, interviews with representatives from IDC and TIA provided useful explanations as to how their deal terms in general bring value to the entrepreneur. The TIA representatives believed that their terms infuses a strong business sense amongst entrepreneurs and encourages greater responsibility with the funds that are dispersed to them. The IDC representative's view was that clauses which give



the IDC the right to make strategic decisions is of great value to particularly inexperienced entrepreneurs since they would receive expert advice and valuable management support. This view was corroborated by the high level of acceptance of this condition as discussed in Section 6.5 and by the general perception of entrepreneurs who viewed the presence of venture capitalists on the board of their company to be of very high importance to them. The possibility that some entrepreneurs may have ascribed importance to this term or condition because of potential negative implications on the business is also acknowledged. Nevertheless, the key finding that most of the terms which were important to entrepreneurs were also frequently used, supports the argument that public sector VC terms are generally effective in supporting entrepreneurs despite the lack of a few important incentivising terms such as the claw-back provision.

6.5 Entrepreneur acceptance of VC deal terms and conditions

Table 5 lists those terms and conditions which most VCs perceive to have a high or very high acceptance amongst entrepreneurs.

Table 5: Most accepted deal terms and conditions according to VCs

Rank	Term and condition	Frequency
1	Assigning board seat to venture capitalist	3
	Drag-along rights	
2	Pre-emptive rights	2
	Tag-along right	
	Milestone provision	



There was consensus from all the venture capitalists that drag-along rights and assigning a board seat to venture capitalist had a high to very high level of acceptance amongst entrepreneurs as shown in Table 5. The former provision is particularly interesting as it verifies earlier observations that entrepreneurs also see this provision as highly important to them and is perhaps the reason why it is also frequently used.

However, the main purpose of this research question was to identify those terms that were not readily accepted by entrepreneurs and may require hard negotiations on the part of the venture capitalist to reduce conflict or to justify its inclusion in a term sheet agreement. In this respect, two venture capitalists believed that the anti-dilution and vesting provisions had a low to very low level of acceptance from entrepreneurs (see Table 6) which is probably why both these terms were not frequently used as reported earlier.

Table 6: Least accepted deal terms and conditions according to VCs

Rank	Term and condition	Frequency
1	Anti-dilution provision	2
	Vesting provision	

The anti-dilution provision is commonly required by sophisticated investors to protect themselves in the case of a down round. Aronson (2009) reasoned that entrepreneurs must be aware of the different types of anti-dilution provisions and their potential consequences and must negotiate hard for weighted average anti-dilution which is least onerous for the founders. It is further argued that a



full ratchet anti-dilution should in most instances not be accepted by entrepreneurs unless there is really no other choice (Aronson, 2009). Based on the above sentiments, the low level of acceptance for the anti-dilution provision by entrepreneurs is understandable. The results also provide a strong case for venture capitalists to use broad based weighted average anti-dilution should the anti-dilution provision be considered especially during an economic downturn.

The low acceptance of the vesting provision is interesting from various perspectives. Firstly, entrepreneurs may view it as the venture capitalists way of mitigating their investment risk and not as an incentive or form of delayed compensation for the entrepreneur. The vesting provision is widely used in most venture capital contracts in the private sector according to Huyghebaert & Mostert (2008), but it has a low frequency of use in public sector VC funding as revealed earlier. Due to similarities of this provision with the claw-back provision, it appears that entrepreneurs are more willing to accept the claw-back provision instead, which all three venture capitalists agree has a moderate level of acceptance amongst entrepreneurs. It could also be argued that the vesting provision which is subject to a vesting schedule of typically four years is an extreme form of the claw-back provision and is thus viewed negatively by entrepreneurs. If a founder leaves before the start-up's first anniversary, the founder leaves without any common shares. This may pose a significant risk for entrepreneurs. A low level of acceptance could also be indicative of an entrepreneur's long-term commitment to the start-up venture. For example, those entrepreneurs who have a strong willingness to accept this provision are



possibly more committed to the venture which is what venture capitalist often require from entrepreneurs especially those with special skills.

Interestingly, the assignment of a majority vote to the venture capitalist has a moderate acceptance level from entrepreneurs according to all the venture capitalists. This is consistent with Payne *et al's* (2009) view that transfer of strategic control to venture capitalist especially on budget and management is often difficult for the entrepreneur to accept.

The high acceptance of the terms highlighted in Table 5 could imply that entrepreneurs see these terms as either beneficial to the venture or perhaps they understand the rationale for a venture capitalist imposing these terms. Indeed, most entrepreneurs have a high appreciation of the VCs rationale for the terms shown in Table 5 which is addressed in more detail in the next section. These results also support De Clercq et al's (2006) assertion that entrepreneurs need to respect the expertise and experience of the venture capitalist. Furthermore, the entrepreneur must recognize that the venture capitalist is not just a friendly advisor, but the venture capitalists has significant formal legal power which could impact the acceptance levels of certain terms (De Clercq et al, 2006). It can also be argued that due to the lack of alternative sources of funding for early stage ventures in the private sector, entrepreneurs are more willing to accept the terms or provisions imposed by public sector venture capitalists who are seemingly more willing to take on more risk. The risk appetite of public sector VCs and the effectiveness of deal terms to manage their investment risk is discussed in Section 6.7.



6.6 Entrepreneur appreciation of VC deal terms and conditions

The overwhelming majority of entrepreneurs have a very high appreciation of the rationale for a venture capitalist imposing most of the terms and conditions examined in this study as shown in Table 7.

Table 7: Deal terms and conditions that entrepreneurs most appreciate to have a valid rationale

Rank	Term and condition	% of respondents
1	Milestone provision	95%
2	Assigning board seat to venture capitalist	90%
3	Founder signing non-compete agreement Pre-emptive right	81%
4	Drag-along right Tag-along right Anti-dilution provision Liquidation preference	76%
5	Exit to BEE Claw back provision	71%

It is noteworthy that the terms which entrepreneurs most appreciate include the milestone provision and assigning a board seat to venture capitalist. It is interesting that both these terms were also highlighted by two of the venture capitalists as being very effective in managing a VCs investment risk. The latter is considered a key rationale for imposing these terms from the Innovation Fund according to their internal policy guidelines. The results therefore seem to



suggest that entrepreneurs fully appreciate the venture capitalist's need to have terms that are especially effective in managing their investment risk. Only a small percentage of entrepreneurs (29%) had a low or very low appreciation for VCs rationalising the put option and assigning a majority vote to the venture capitalist. The latter is consistent with its moderate level of acceptance from entrepreneurs as noted Section 5.5. Venture capitalists are generally regarded as supervisors or controllers, and being members of the board of directors they should have an important influence on the strategic decision-making of the portfolio enterprise (Huyghebaert and Mostert, 2008). Overall, this influence is likely to be more beneficial for early stage investees than for later stage portfolio enterprises where the product has already demonstrated market acceptance and the firm has already proven its valuable business concept (Huyghebaert and Mostert, 2008). One would therefore expect that since most entrepreneurs highly appreciate the rationale for assigning a board seat to venture capitalist, the assignment of preferential rights to the venture capitalist would also be viewed favorably.

In relation to voting rights, the contribution of the venture capitalist may be financed by means of equity, which may be either voting equity or non-voting equity. The former appears to be the norm with public sector venture capitalist based on the high frequency of assigning preferential rights to venture capitalists. Voting rights are an indication of the extent of influence that venture capitalists can have on the strategic decisions of portfolio enterprises (Kaplan and Strömberg, 2003). Portfolio enterprises normally do not mind about the voting rights of venture capitalists during the early stage, while they negatively



assess voting rights during the later stage of growth, because they regard themselves capable to control the portfolio enterprise at that point in time (Huyghebaert and Mostert, 2008). In light of the above, it is understandable why a small minority of entrepreneurs have a low appreciation for this provision especially if they feel capable of controlling the business themselves. This difference is consistent with the difference amongst entrepreneurs regarding their perception on the importance of this term to their business. Nevertheless, the vast majority (67%) of entrepreneurs still believed that there was a strong rationale for venture capitalist imposing such a right probably because most of the businesses were at a very early stage and entrepreneurs perhaps felt that there was a great need for the expert advice from venture capitalists.

The put option is another term that some entrepreneurs did not view as having a valid rationale. This is not surprising since the put option is not considered the best exit strategy for venture capitalist as mentioned earlier. In the case of the Innovation Fund, this provision is always subject to applicable regulations and the companies act according to their internal documents.

6.7 Effectiveness of VC terms in managing investment risk

Huyghehbaert and Mostert (2008) asserted that a major cause of risk may arise from possible agency conflicts between venture capitalists and portfolio enterprises, when investors and investees have different objectives in mind once the financial contract has been closed. To limit the venture capitalists exposure to these incentive problems, the financiers may ask for protection through the type of financial contracts that they write with portfolio enterprises.



Terms or conditions which VCs considered to have a high to very high effectiveness in managing investment risk are shown in Table 8.

Table 8: Most effective terms and conditions in managing investment risk

Rank	Term and condition	Hits
1	Assigning majority vote to VC	3
	Founder signing non-compete agreement	
	Tag along right	
	Milestone provision	
2	Assigning board seat to VC	2
	Liquidation preference	
	Pre-emptive right	
	Claw back provision	
	Drag along right	
	Vesting provision	

The milestone provision was highlighted by all public sector venture capitalists as the most effective means of managing investment risk in a term sheet agreement. Indeed, examination of internal investment policy guidelines confirms these sentiments since investment tranching was identified by TIA as a tool to be specifically used to minimise their exposure to risk if things do not go according to plan. It is interesting to note that some of these terms including the claw-back provision are important incentives for entrepreneurs, thus further supporting its inclusion in term sheet agreements.



The least effective terms were the exit to BEE and anti-dilution provisions according to two of the venture capitalists interviewed. The latter is somewhat surprising since internal policy guidelines suggest that this provision can be used when there is significant risk that equity held by the investor would not provide adequate returns. Nevertheless, the results in Table 8 are mostly consistent with Huyghebaert and Mostert's (2008) findings on the main covenants that VCs in the private sector apply in at least half of their financial contracts in order to manage risk during the seed and start-up stages. Their findings included the following, in declining order of importance:

- Assigning a minority of seats on the board of directors to venture capitalist.
- Assigning a majority of votes to venture capitalists to influence important strategic corporate decisions.
- Obliging management to sign non-compete agreement that prohibit them from working in the same kind of industry for a future period of time after leaving the portfolio enterprise.
- 4. Vesting of management's shares over a number of years, in order to discourage management to leave the enterprise.
- 5. Staging of financing in a number of rounds, depending upon attaining specified goals.

In addition to agreeing with most of the above mentioned terms, two public sector venture capitalists revealed that tag along and pre-emptive rights were also very highly effective in managing their investment risk. Most of these terms, with the exception of the claw-back provision, were also frequently used and



were considered highly important by venture capitalist as discussed in earlier sections. It could therefore be argued that the possible reasons for their wide usage is that venture capitalists see these terms as being effective in managing their investment risk. Interviews with venture capitalists also provided further clarity on the issue of effectiveness of deal terms and conditions in managing risk as revealed in Chapter 5. These results suggest that there were no major issues in regards to the effectiveness of the terms used by public sector VCs in general to manage their investment risk and perhaps a stronger emphasis was required on providing more flexibility to support entrepreneurs whilst retaining sufficient levels of effectiveness. In this respect, it was noted that in the case of TIA, the content or the specifics of their terms were not very onerous since TIA is not self-funded as such. The IDC on the other hand is self-funded to a large extent and there is arguably a greater imperative for the IDC venture capital unit to manage their investment risk compared to TIA.

It can be concluded that term sheets used by both the IDC and TIA were generally effective in managing their investment risk although there may be areas that could be improved. The inclusion of the claw-back provision is again highlighted here as something which is lacking and should be used more often. Not only is this term the most important provision from an entrepreneur's perspective as it provides a strong incentive for them, two venture capitalists also considered it to be highly effective in managing their investment risk.



CHAPTER 7: CONCLUSION AND RECOMMENDATIONS

7.1 Summary of main findings

7.1.1 Effectiveness of VC deal terms in supporting entrepreneurs

The results of this study clearly showed that there was general consensus amongst venture capitalists and entrepreneurs on the types of terms and provisions that should be included in a VC contract. This finding was based on both the frequency of using the terms outlined in the questionnaire and its importance to entrepreneurs and VCs respectively. Therefore, the possibility of conflict arising between entrepreneurs and public sector VCs around which terms should be included in the VC contract is likely to be low.

However, this consensus does not necessarily imply that public sector VC contracts had a strong supportive element for entrepreneurs since public sector VCs frequently used provisions in their contracts which would not typically be regarded as enterprise friendly, but would be important for public sector VCs to either fulfil their mandate or manage their investment risk. These provisions included the milestone provision and exit to BEE clause. A plausible reason for the high consensus especially for using the latter provision is that most entrepreneurs appreciated the rationale for VCs imposing this term which was also consistent with its high acceptance by entrepreneurs. Furthermore, the study showed that most entrepreneurs were familiar with all the deal terms in the questionnaire. It can thus be argued that entrepreneurs were unlikely to have been easily misled into agreeing to the terms imposed by VCs due to the entrepreneur's lack of familiarity with the deal terms.



Overall, most of the terms which entrepreneurs considered to be important for the enterprise were also frequently used suggesting that the deal terms that were included in public sector VC contracts were generally effective in catering for the needs of entrepreneurs. These terms included the tag-along right and assigning a board seat to venture capitalist. Considering that the founder entrepreneur is often a minority shareholder in a VC deal, the tag along right is an important provision which would protect their interest in the event that a majority stake of the business is sold to a purchaser. Entrepreneurs also considered the physical presence of the venture capitalist in their business to be of value to the enterprise based on the high importance ascribed to this provision by entrepreneurs.

In summary, the results suggest that public sector VCs were mindful of supporting the interest of entrepreneurs by prescribing supportive deal terms. This was also confirmed by interviews held with public sector VCs who insisted that their deal terms infuses a strong business sense amongst entrepreneurs and encourages greater responsibility. Nevertheless, there were a couple of terms that entrepreneurs felt were infrequently used, but were important to them which included pre-emptive rights and the claw-back provision. The absence of the claw-back provision is particularly noteworthy since it is a provision that would significantly assist entrepreneurs in regaining their equity on achievement of certain milestones. The moderate use of this provision was highlighted in this study as the only glaring omission from most public sector VC contracts which would negatively impact the effectiveness of public sector VC deal terms in supporting entrepreneurs.



7.1.2 Effectiveness of VC deal terms in managing investment risk

The perception of VCs within the public sector was that their deal terms and provisions were generally effective in managing their investment risk although some VCs admitted that their terms were not optimal in this regard. The infrequent use of the claw-back provision was again highlighted as the only major cause for concern that would negatively impact the effectiveness of the VC contract to manage risk. Not only was this term the most important provision from an entrepreneur's perspective, it was also considered highly effective in managing the VCs investment risk. Nevertheless, the milestone provision was used very frequently and was also identified by all public sector VCs as the most effective means of managing their investment risk.

The results were mostly consistent with similar findings in the private sector in that public sector VCs appeared to use most of the main provisions that VCs in the private sector applied in at least half of their financial contracts in order to manage risk during the seed and start-up stages. In general, there were no major concerns in regards to the effectiveness of the terms used by public sector VCs to manage their investment risk. This could be attributed to the finding that public sector VCs frequently used those terms which are particularly regarded as effective in managing their investment risk although VCs admittedly did not consider the term sheet to be used solely as a risk management instrument. In summary, the insight from the research findings suggests that a stronger emphasis should be placed on providing incentivising and flexible terms to support entrepreneurs whilst retaining existing levels of effectiveness. The nature or content of the terms would be very important in this regard.



7.2 Recommendations to stakeholders

7.2.1 Recommendations to South African public sector VCs

The research revealed that whilst South African public sector VC deal terms were generally effective in supporting entrepreneurs, there is still room for public sector VCs to provide more incentives to entrepreneurs in their term sheet agreements. It is recommended that terms including the claw-back and tag-along provisions in particular should be highly considered in future VC contracts as they are under utilised according to the results of this study. A business friendly claw-back is specifically recommended which could entail that the entrepreneur achieve at least 80% of business plan projections before clawing back equity given up to venture capitalists. This provision was also considered by most VCs to be highly effective in managing investment risk.

Although it was acknowledged that the purpose of imposing various terms and conditions is not to manage investment risk alone, its effectiveness in managing investment risk was still considered vitally important. In this respect, current level of effectiveness appears to be acceptable relative to private sector VCs albeit not optimal especially at those public sector VC organisations that are self-funded. It is recommended that self-funded public sector VCs consider using provisions such as the claw-back and vesting provisions more often which could improve existing levels of effectiveness in managing their investment risk whilst potentially incentivising entrepreneurs. Lastly, it is recommended that public sector VCs always justify the inclusion of all their terms during negotiations in order to reduce potential conflicts of interests especially around those terms that entrepreneurs did not easily accept as identified in this study.



7.2.2 Recommendations to South African entrepreneurs

Entrepreneurs should fully understand the business implications of having various terms and provisions in the VC contract even if it means obtaining expert legal advise. This will enable them to insist that those provisions which provide particular value to the enterprise should be considered in the VC contract during term sheet negotiations. Furthermore, if entrepreneurs are highly familiar with typical deal terms prior to negotiations, the likelihood of a one sided contract where VCs simply impose terms in their favor would be low since entrepreneurs would be in a strong position to negotiate a fair deal. This would ultimately preserve a cordial relationship between the venture capitalist and the entrepreneur in the long run although negotiations may not be easy.

In light of the above and the findings of this research, it is recommended that those entrepreneurs who were not familiar with important deal terms and provisions, especially those intending to acquire further VC funding, must familiarise themselves with typical VC deal terms before negotiating with VCs in order not to be blind-sided by the implications of having these provisions in the contract at a later stage. A high familiarity would also enable these entrepreneurs to better appreciate or question the rationale for VCs imposing various provisions, thus reducing misconceived perceptions about VCs which could sour future relationships. Lastly, this research identified terms which were most important to the business and the entrepreneur. It is recommended that entrepreneurs focus most intently on those terms during negotiations and try to heavily bargain for incentivising provisions which may or may not be important from the VCs perspective.



7.3 Recommendations for future research

This study is the first attempt to investigate the effectiveness of South African public sector venture capital deal team terms to support entrepreneurs whilst effectively managing investment risk. The research was limited to 14 deal terms and provisions which the literature identified as being commonly found in typical VC contracts. The terms studied in this research are not exhaustive although they do possess a strong influence over the structure of deal terms. Moreover, Singh (2005) mentioned a multitude of factors which could contribute to the variation in venture capital term sheets including emotional climate of the investing community, availability of VC funding, desperation of the management team, the integrity of the VC organisation, the philosophy of the fund, the stage of the fund and the personal view of the investor. It would be useful if a future researcher considers these and other factors in a term sheet. This consideration would result in a more comprehensive understanding of the influence of the term sheet agreement on entrepreneurial support and investment risk.

This study focused on various aspects of VC deal terms including frequency of use, importance to stakeholders, effectiveness in managing risk, entrepreneur acceptance and familiarity. The precise nature of the terms was beyond the scope of the study and it would be very useful to study the detailed content of the deal terms. For example, the structure of the vesting provision varies quite a bit depending on the nature of the vesting schedule, so questions relating to how long it would take for the founding entrepreneur to get back their shares would be interesting. Such a survey could be limited to those terms that this study revealed were frequently used in public sector VC contracts.



7.4 Conclusion

The term sheet agreement between the entrepreneur and venture capitalist needs to be ideally balanced to offer sufficient support and flexibility to the entrepreneur whilst managing investment risk from the venture capitalist. To address these conflicts of interest, the VC must seek provisions that align their interests with those of the entrepreneur. This research suggest that there is some room for improvement for all public sector VCs to incorporate terms that offer more incentives for entrepreneurs since existing terms appears to be generally effective in managing their investment risk. The recommendation made in this research provides advice on specific terms that should be used more often or to ensure that the nature of the terms are not overwhelmingly onerous on entrepreneurs. The latter is recommended as a topic for future research.



REFERENCE LIST

- Alam, I. (2005). Fieldwork and data collection in qualitative marketing research. *Qualitative Market Research*, 8(1), 97-112.
- Aronson, D.H. (2009). Obtaining Venture Financing and Negotiating Terms in Distressed Markets. *INSIGHTS: The Corporate & Securities Law Advisor*, 23(10), 11.
- Bartlett, J. (2001, November 05). Negotiating the best valuation and terms for early-stage investment. *Euromoney Institutional Investor PLC*. Retrieved from ://www.altassets.com/private-equity-knowledge-bank/leading-edge/article/nz2423.html
- Ben-Ari, G., and Vonortas, N.S. (2007). Risk Financing for Knowledge Based Enterprises: Mechanisms and Policy Options. *Science and Public Policy*, 34(7) 475-488.
- Cameron, K. (2005). Organizational effectiveness. *Blackwell Encyclopedic Dictionary of Organizational Behavior*, 1-1.
- Cape Venture Partners. (2009). *Investors*. Retrieved from http://www.cvp.co.za/investors.htm
- Carter, S., & Wilton, W. (2006). Don't blame the entrepreneur, blame government: The centrality of the government in enterprise development; lessons from enterprise failure in Zimbabwe. *Journal of Enterprising Culture*, *14*(1), 65-84.



- Conor, D., & Pui-wing. (2010). Start-ups chase cash as funds trickle back. *Wall Street Journal Eastern Edition*, 255(75), B1-B2.
- Crovitz, L. G. (2009). Too risky for venture capitalists. *Wall Street Journal Eastern Edition*, 253(49), A13.
- Cumming, D. (2006). Corporate venture capital contracts. *Journal of Alternative Investments*, 9(3), 40-53.
- De Clercq, D., Fried, V., Lehtonen, O., & Sapienza, H.J. (2006). An Entrepreneur's Guide to the Venture Capital Galaxy. *Academy of Management Perspectives*, *20*, 90-112.
- Department of Science and Technology (2010). Technology Innovation Agency migaration. Retrieved from http://www.dst.gov.za/news-board/technology-innovation-agency-migration
- De Bettignies, J., & Brander, J. A. (2007). Financing entrepreneurship: Bank finance versus venture capital. *Journal of Business Venturing*, 22(6), 808-832. doi:10.1016/j.jbusvent.2006.07.005
- Fabozzi, F.J. (2002). *The Handbook of Financial Instrumnets*. Harboken, New Jersey: John Wiley and Sons.
- Field, G. (2008). The Ability of Venture Capitalists to Adequately Service

 Entrepreneurs in South Africa (Unpublished master's thesis). University of Pretoria, Pretoria.



- Florida, S., and Smith, R. (1993). Keep the Government Out of Venture Capital.

 Issues in Science and Technology, 9(4): 61-68.
- Graham, P. (2005) *How to fund a startup.* Retrieved April 31, 2010, from PaulGraham.com: www.paulgraham.com/startupfunding.html
- Gravetter, F.J., & Forzano, L.B. (2003). Research Methods for the Behavioral Sciences. Belmont, USA: Thomson Wadsworth.
- Gries, T., & Naudé, W. (2009). Entrepreneurship and regional economic growth:

 Towards a general theory of start-ups. *Innovation: The European Journal of Social Sciences*, 22(3), 309-328. doi:10.1080/13511610903354877
- Herman, R. D., & Renz, D. O. (2008). Advancing nonprofit organizational effectiveness research and theory: Nine theses. *Nonprofit Management & Leadership*, *18*(4), 399-415. doi:10.1002/nml.195
- Herrington, M., Kew, J., & P, Kew. (2008). *Global Entrepreneurship Monitor:*2008 South African Report. Graduate School of Business, University of Cape Town. Retrieved from

 ://www.gsb.uct.ac.za/gsbwebb/default.asp?intPageNR=228
- Huyghebaert, N., & Mostert, F. J. (2008). Rationale of securities and covenants in venture capital contracts: An application to South Africa. *Corporate Ownership & Control*, *5*(4), 15-25.
- Janashvili, L. (2009, August). Make the perception study count. *IR alert*; 1-4.

 Retrieved from
 - ://levjanashvili.com/publications/B.%20IR%20Alert%20Article.pdf



- Kaplan, S. N., & Strömberg, P. (2003). Financial contracting theory meets the real world: An empirical analysis of venture capital contracts. *Review of Economic Studies*, 70(243), 281-315. doi:10.1111/1467-937X.00245
- Lerner, J., & Watson, B. (2008). The public venture capital challenge: The Australian case. *Venture Capital, 10*(1), 1-20. doi:10.1080/13691060701605538
- Macko, A., & Tyszka, T. (2009). Entrepreneurship and risk taking. *Applied Psychology: An International Review, 58*(3), 469-487. doi:10.1111/j.1464-0597.2009.00402.x
- Mars, M. M., & Rios-Aguilar, C. (2010). Academic entrepreneurship (re)defined: Significance and implications for the scholarship of higher education.

 Higher Education, 59(4), 441-460. doi:10.1007/s10734-009-9258-1
- Payne, G.T., Davis, J.L., Moore, C.B., & Bell, R.G. (2009). The Deal Structuring Stage of the Venture Capitalist Decision-Making Process: Exploring Confidence and Control. *Journal of Small Business Management*, *47*(2), 154-179.
- Prendergast, C. (1999). The provision of incentives in firms. *Journal of Economic Literature*, *37*(1), 7.
- Pui-Wing, T. A. M. (2008). Entrepreneurs feel squeeze as venture capital gets scarce. *Wall Street Journal Eastern Edition*, *252*(94), C2.



- Rayna, T., & Striukova, L. (2009). Public venture capital: Missing link or weakest link? *International Journal of Entrepreneurship and Innovation Management*. 9 (4), 453-465. doi:10.1504/IJEIM.2009.024590
- Rubin, J. S. (2009). Developmental venture capital: Conceptualizing the field.

 Venture Capital, 11(4), 335-360. doi:10.1080/13691060903184829
- Scarborough, N.M., and Zimmerer, T.W. (2003). *Effective Small business management* (7th Edition). Upper Sadle River: Prentice Hall.
- Singh, S. (2005). Structuring venture capital deals (Unpublished master's thesis). Cass Business School, London.
- South African Venture Capital Association: Venture Capital Subcomittee (2008).

 Venture Capital Development in South Africa. Discussion paper.
- South African Venture Capital Association. (2009). The Economic Impact of Venture Capital and Private Equity in South Africa. Retrieved from ://www.savca.co.za/downloads/SAVCA-DBSA2009ecoImpactStudy.pdf
- Taulli, T. (2008). How to negotiate a term sheet, part I. *BusinessWeek Online*, 15-15.
- Timmons, J.A., and Spinelli, S. (2003). *New Venture Creation: Entrepreneurship* for the 21st Century. New York: McGraw Hill.
- Thomsett, M.C. (2009, September 19). Introduction to Put Option Strategies. *The Financial Times.*



- Tykvová, T. (2007). What do economists tell us about venture capital contracts? *Journal of Economic Surveys*, *21*(1), 65-89. doi:10.1111/j.1467-6419.2007.00272.x
- Walton, E. J., & Dawson, S. (2001). Managers' perceptions of criteria of organizational effectiveness. *Journal of Management Studies*, 38(2), 173-199.
- Welman, J., and Kruger, S. (2005). *Research Methodology* (Vol. 2nd Edition). Cape Town: Oxford University Press.
- Yitshaki, R. (2008). Venture Capitalist-Entrepreneur Conflicts: An Exploratory Study of Determinants and Possible Resolutions. *International Journal of Conflict Management*, 19(3),262–292.
- Zikmund, W.G. (2003). *Business Research Methods*. 7th ed. Ohio: South-Western.



Appendix A: Covering Letter and Entrepreneur Questionnaire



UNIVERSITY OF PRETORIA GORDON INSTITUE OF BUSINESS SCIENCE BACKGROUND INFORMATION DOCUMENT AND INFORMED CONSENT FORM

My name is Muhammed Sayed and I am currently studying for a Masters of Business Administration (MBA) degree at the Gordon Institute of Business Science with the University of Pretoria. I need to complete a research project as a partial requirement for the degree, and I have chosen to study venture capital deal terms in South Africa. I am specifically investigating the perceptions of public sector venture capitalists and entrepreneurs towards various deal terms and conditions in relation to their effectiveness in managing investment risk and providing value to the entrepreneur.

I would appreciate your participation in this study. It should take you no longer than 10 minutes to complete the questions. I undertake to keep all information received strictly confidential at a company level. However, I will supply a consolidated summary of the results to all respondents in which confidentiality at company level is maintained. The findings of this study could be of significant value to your organisation and may provide possible ways to reduce conflict when negotiating a term sheet. Your participation is voluntary and you can withdraw at any time without penalty.

Kindly complete the attached questionnaire at your earliest convenience. The completed questionnaire can be e-mailed to Muhammed.Sayed@tia.org.za or faxed to (012) 686 8269. You may contact me on 072 145 2944 or (012) 686 8248. By completing the survey, you indicate that you voluntarily participated in this research. If you have any concerns, please contact me or my supervisor, Thea Pieterse on 011 490 0916 or thea.pieterse@afrox.linde.com

Thank you for taking time to complete this questionnaire.

Yours sincerely Muhammed Sayed



The following questions are in respect of the deal terms and conditions stipulated in the contract with the public sector venture capitalist where you obtained funding.

Rank the following Terms and Conditions from 1 to 5 in regards to relative importance to the enterprise (Section 1), frequency of use (Section 2), familiarity (Section 3) and appreciation of venture capitalist rationale (Section 4).

1 = Very Low; 2 = Low; 3 = Moderate; 4 = High and 5 = Very High

Term or condition	Section 1 Importance to start-up	Section 2 Frequency of use	Section 3 Familiarity with concept	Section 4 Appreciation of rationale
1. Anti-dilution provision ¹				
2. Assigning board seat to venture capitalist				
3. Assigning majority votes and/or preferential rights to venture capitalist to influence important strategic decisions				

¹ Protects a shareholder from dilution resulting from later issues of shares, it takes many forms and could be limited to protection where shares are issued at a lower price than the investor originally paid. Also known as an "anti-dilution clause".



4. Founder signing non compete agreement ²		
5. Liquidation preference ³		
6. Pre-emptive right ⁴		
7. Call option ⁵		
8. Put option ⁶		
9. Claw-back provision ⁷		
10. Drag-along right ⁸		

² Clause that prohibit management of start-up from working in the same kind of industry for a future period of time after leaving the portfolio enterprise.

³ A term used in venture capital contracts to specify the order in which shareholders are paid any claims they may have against the business, and how much they get paid in the event of a liquidity event such as the sale of the company.

⁴ Pre-emptive rights are the rights of shareholders to be offered any shares being sold by another shareholder, or any new issue of shares before the shares are offered to non-shareholders. Also known as "pre-emption rights".

⁵ An agreement that gives any shareholder, or even outside party, the right (but not the obligation) to buy shares of another shareholder at a specified price within a specific time period. This is sometimes used by an investor to enable founder shareholders to buy out the investor, should the business succeed, as a means of clawing back equity

⁶ An option contract giving one or more shareholders the obligation, to sell a specified amount of shares at a specified price at a specified time. This is sometimes used by investors to force other shareholders to purchase their shares, thus allowing them to exit their investment.

⁷ The right, typically afforded to the founding shareholders, to regain equity given up to venture capitalists, typically on achievement certain milestones. This is used to balance out differences on the view of the valuation of the business at time of investment by the venture capitalist.

⁸ A right that enables a majority shareholder to force a minority shareholder to join in the sale of a company. The majority owner doing the dragging must give the minority shareholder the same price, terms, and conditions as any other seller.



11. Tag-along right ⁹		
12. Milestone provision ¹⁰		
13. Vesting provision ¹¹		
14. Exit to BEE ¹²		

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⁹ A contractual obligation used to protect a minority shareholder in a venture capital deal. If one or more shareholder(s) have agreed to sell a majority stake in the business, then the minority shareholder has the right to join the transaction and sell his or her minority stake in the company, on the same terms as the majority shareholder(s). The purchaser is thus obliged to make the minority shareholder the same offer as accepted by other shareholders.

¹⁰ Staging of financing in a number of rounds, depending upon attaining specified goals. Also known as tranche financing.

¹¹ A term imposed on founders of seed and early stage deals in which the founder ownership is subject to a vesting schedule with nothing up front vesting (linear or other mechanism) over a period of time. The vesting period is the period of time before the shares are owned unconditionally by the founders.

¹² Investor has a preferential right to sell their equity to bona fide BEE investors without invoking pre-emptive rights of other shareholders. This provision is typically used by South African investors.



Appendix B: Covering Letter and Venture Capitalist Questionnaire



UNIVERSITY OF PRETORIA GORDON INSTITUE OF BUSINESS SCIENCE BACKGROUND INFORMATION DOCUMENT AND INFORMED CONSENT FORM

My name is Muhammed Sayed and I am currently studying for a Masters of Business Administration (MBA) degree at the Gordon Institute of Business Science with the University of Pretoria. I need to complete a research project as a partial requirement for the degree, and I have chosen to study venture capital deal terms in South Africa. I am specifically investigating the perceptions of public sector venture capitalists and entrepreneurs towards various deal terms and conditions in relation to their effectiveness in managing investment risk and providing value to the entrepreneur.

I would appreciate your participation in this study. It should take you no longer than 10 minutes to complete the questions. I undertake to keep all information received strictly confidential at a company level. However, I will supply a consolidated summary of the results to all respondents in which confidentiality at company level is maintained. The findings of this study could be of significant value to your organisation and may provide possible ways to reduce conflict when negotiating a term sheet. Your participation is voluntary and you can withdraw at any time without penalty.

Kindly complete the attached questionnaire at your earliest convenience. The completed questionnaire can be e-mailed to Muhammed.Sayed@tia.org.za or faxed to (012) 686 8269. You may contact me on 072 145 2944 or (012) 686 8248. By completing the survey, you indicate that you voluntarily participated in this research. If you have any concerns, please contact me or my supervisor, Thea Pieterse on 011 490 0916 or thea.pieterse@afrox.linde.com

Thank you for taking time to complete this questionnaire.

Yours sincerely Muhammed Sayed



The following questions are in respect of the deal terms and conditions stipulated in the contract with the entrepreneur.

Rank the following Terms and conditions from 1 to 5 in regards to importance to the venture capitalist (Section 1), frequency of use (Section 2), effectiveness in managing investment risk (Section 3) and entrepreneur acceptance (Section 4) in a typical term sheet agreement.

1 = Very Low; 2 = Low; 3 = Moderate; 4 = High and 5 = Very High

Term or condition	Section 1 Importance to Venture Capitalist	Section 2 Frequency of use	Section 3 Managing Risk	Section 4 Entrepreneur acceptance
1. Anti-dilution provision ¹³				
2. Assigning board seat to venture capitalist				
3. Assigning majority votes and/or preferential rights to venture capitalist to influence important strategic decisions				

¹³ Protects a shareholder from dilution resulting from later issues of shares, it takes many forms and could be limited to protection where shares are issued at a lower price than the investor originally paid. Also known as an "anti-dilution clause".

4. Founder signing non compete agreement ¹⁴		
5. Liquidation preference ¹⁵		
6. Pre-emptive right ¹⁶		
7. Call option ¹⁷		
8. Put option ¹⁸		
9. Claw-back provision ¹⁹		
10. Drag-along right ²⁰		

¹⁴ Clause that prohibit management of start-up from working in the same kind of industry for a future period of time after leaving the portfolio enterprise.

¹⁵ A term used in venture capital contracts to specify the order in which shareholders are paid any claims they may have against the business, and how much they get paid in the event of a liquidity event such as the sale of the company.

¹⁶ Pre-emptive rights are the rights of shareholders to be offered any shares being sold by another shareholder, or any new issue of shares before the shares are offered to non-shareholders. Also known as "pre-emption rights".

¹⁷ An agreement that gives any shareholder, or even outside party, the right (but not the obligation) to buy shares of another shareholder at a specified price within a specific time period. This is sometimes used by an investor to enable founder shareholders to buy out the investor, should the business succeed, as a means of clawing back equity

¹⁸ An option contract giving one or more shareholders the obligation, to sell a specified amount of shares at a specified price at a specified time. This is sometimes used by investors to force other shareholders to purchase their shares, thus allowing them to exit their investment.

¹⁹ The right, typically afforded to the founding shareholders, to regain equity given up to venture capitalists, typically on achievement certain milestones. This is used to balance out differences on the view of the valuation of the business at time of investment by the venture capitalist.

²⁰ A right that enables a majority shareholder to force a minority shareholder to join in the sale of a company. The majority owner doing the dragging must give the minority shareholder the same price, terms, and conditions as any other seller.



11. Tag-along right ²¹		
12. Milestone provision ²²		
13. Vesting provision ²³		
14. Exit to BEE ²⁴		

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²¹ A contractual obligation used to protect a minority shareholder in a venture capital deal. If one or more shareholder(s) have agreed to sell a majority stake in the business, then the minority shareholder has the right to join the transaction and sell his or her minority stake in the company, on the same terms as the majority shareholder(s). The purchaser is thus obliged to make the minority shareholder the same offer as accepted by other shareholders.

²² Staging of financing in a number of rounds, depending upon attaining specified goals. Also known as tranche financing.

²³ A term imposed on founders of seed and early stage deals in which the founder ownership is subject to a vesting schedule with nothing up front vesting (linear or other mechanism) over a period of time. The vesting period is the period of time before the shares are owned unconditionally by the founders.

²⁴ Investor has a preferential right to sell their equity to bona fide BEE investors without invoking pre-emptive rights of other shareholders. This provision is typically used by South African investors.



Appendix C: Covering Letter and Venture Capitalist Interview Schedule



UNIVERSITY OF PRETORIA GORDON INSTITUE OF BUSINESS SCIENCE BACKGROUND INFORMATION DOCUMENT AND INFORMED CONSENT FORM

I am conducting research on public sector venture capital deal terms, and I'm trying to establish whether Government's intervention in the equity funds market has been delivered effectively in managing investment risk and supporting entrepreneurs based on the use of various investment terms and conditions stipulated in the financial contract. Our interview is expected to last about 45 minutes, and will help us understand the perception of public sector venture capitalists towards various deal terms and conditions and their effectiveness in managing investment risk and providing value to the entrepreneur. Your participation is voluntary and you can withdraw at any time without penalty. The information disclosed by you will be kept confidential and will only be used for **academic purposes**. If you have any concerns, please contact me or my supervisor. Our details are provided below.

Researcher: Muhammed Sayed	Supervisor: Thea Pieterse
Email: <u>Muhammed.Sayed@tia.org.za</u>	Email: thea.pieterse@afrox.linde.com
Phone: (012) 686 82 48	Phone: (011) 490 0916
Signature of participant:	
Date:	
Signature of researcher:	
Date:	



Questions put to Venture Capital Firms

Researcher introduces himself and thanks the interviewee for making time available to meet with the researcher. Brief explanation of the research topic is provided and the purpose of the interview and questionnaire is explained.

- 1. Discuss the role of the venture capitalist firm in drafting a term sheet agreement?
- 2. Do you consider the terms proposed by a public sector venture capitalist to be in line with venture capital industry norms?
- 3. Do you believe that public sector venture capitalists take greater risks compared to venture capitalist in the private sector?
- 4. Explain whether, and how, venture capitalists bring value to the entrepreneur using their terms in a typical venture capital contract?
- 5. In your experience, how are terms offered by the public sector venture capitalist valued or accepted by entrepreneurs?
- 6. Do you consider the terms in a typical agreement to be effective in managing risk?

The interviewee is informed that there are no further questions and is invited to raise any issue pertinent to the research topic that the respondent feels was not discussed. In the absence of any additional issues, the interviewee is asked to complete the questionnaire (Appendix B: Venture Capital Questionnaire).



Appendix D: Data Collection Process

The process of data collection was carried out as follows:

- 1. Week One: Sent out an email to the Venture Capitalist informing them of an upcoming survey of public sector venture capitalist and entrepreneurs in receipt of VC funding. A request was made to provide contact details of all entrepreneurs who received VC funding to date where the public sector funder has an equity stake. An interview date was arranged. The purpose of the email and confidentiality assurances was included.
- Week Two: Sent the survey questionnaire to the email list comprising of the entrepreneur population. Once again, the purpose of the email and confidentiality assurances was included.
- Week Three: Sent out a reminder email one week later to those that did not respond.
- 4. Week Four: A final reminder to complete the questionnaire was sent out. Interviews conducted with venture capitalists.
- 5. As responses were being received, the data was captured on a Microsoft Excel spreadsheet that formed the basis of the analysis.

Note:

- Covering letter and questionnaire located on main body of the email.
- An attached pdf and word format of the covering letter and questionnaire
 was sent with the email in case the personal assistants (PA's) of CEOs
 print out their emails and hence it could be filled out manually and faxed
 back.
- The faxed hardcopy of the questionnaire had the name of the CEO to track traceability.
- It was also assured that email questionnaires were sent to a single person rather than a bulk email to the entire population.



Appendix E: Mitigation of Non-Response Bias

Gravetter and Forzano (2003) state that several actions can increase the overall response rate for e-mail survey and thereby reduce the bias and these include:

- A good cover letter introducing the survey, asking for participation, an explanation of why the topic is important, explanation of the usefulness of the results, stating the importance of each individual response and contact details of the researcher.
- 2. Monetary or material incentives for completing the survey
- By giving participants advance warning of the survey, then providing a
 follow-up reminder after the survey has been received. The pre-warning
 and follow-up would occur one week on either side of the questionnaire
 being sent out.

Considering the nature of the respondents, this study used options 1. and 3. to minimise non-response bias.



Appendix F: SMME Equity Investments made by Public Sector Entities

No	SMME NAME	Public Funder	Contact Details
1	Adept Airmotive (Pty) Ltd	IF	Richard Schoeman
-			Financial Director
			Tel: +27 (0)31 573 2214
			Fax: +27 (0)31 563 1351
			Email: Richard@tanglewood.co.za
			Website: www.adeptairmotive.com
2	Arvir Technolgies (Pty) Ltd	LIFElab	Dave Walwyn
-	7 ii vii 1 comioigies (i ty) Eta	LII LIAD	Chief Executive Officer
			Tel: +27 11 605 9115
			Fax: +27 11 605 9107
			Email: dwalwyn@arvir.co.za
			Website: www.arvir.co.za
3	AD Therapeutics	CBT	Dr Ed Sturrock
	712 Merapeaties	OBI	Managing Director
			Tel: +27 21 406-6312
			Fax: +27 21 406-6470
			Email: Edward.Sturrock@uct.ac.za
4	Altis Biologics (Pty) Ltd	IF	Nicolaas Duneas
"	Aitia Diologica (Fty) Ltu	"	Director
			Tel: +27 12 382-6316
			Fax: +27 12 321-1960
			E-mail: nicipsilon@icon.co.za
			Website: www.altisbiologics.com
5	Biovac	CBT	Mr Selwyn Kahanovitz
5	Biovac	CBI	Chief Executive Officer
			Tel: +27 11 827 9172
			Fax: +27 11 827 8688
			Email: selwynk@biovac.co.za
			Website: www.biovac.co.za
			Website. www.biovac.co.za
			or
			Mr. Patrick Tippoo
			Email: Patrick@biovacinstitute.co.za
6	Blue Cube Systems (Pty)	IF	Mr. Pieter de Waal
	Ltd		Executive Director
			Tel: +27 (0)21 886 7134
			Fax: +27 (0)21 886 6328
			Email: pieter@bluecube.co.za
			Website: www.bluecube.co.za
7	Cape Gourmet Mushroom	PlantBio	Hilary Henderson
	(Pty) Ltd		Managing Director
			Tel: 021 448 6435
			Email: hilary@delifunghi.co.za
8	Capelands Nurseries (Pty)	PlantBio	Rijk Danckwerts
	Ltd		Director
			Tel: +27 (0)44 876 9177
			Email: rijk@capelands.co.za
			Website:www.capelands.co.za
9	CitroGold South Africa	PlantBio	Bruce Cook & Peter Turner
			Executive Directors
			Tel: +27(0)12 8828277
			Fax: +27(0)21 882 8322
			Email: bcook@citrogold.co.za
			Website: www.citrogold.co.za
10	Disa Vascular (Pty) Ltd	CBT	Dr Greg Starke
10	ן טוsa vascular (Pty) Ltd	CRI	Dr Greg Starke



Chief Executive Officer Tei: +27 (0)21 448 0923 Fax: +27 (0)21 474 9200 Fax: +27 (0)21 274 9200 Fax: +27 (0)21 274 9300 Fax: +27 (0)21 474 9300 Fax: +27 (0)21 471 9351. Email: charles marais @wits.ac.za Elisabeth Goyvaerts Elisabeth G		T		Tour (5 % 0///
Fax: +27 (0)21 448 2163				
Email: greq@disavascular.com Website: www.disavascular.com Website: www.disavascular.com Website: www.disavascular.com Website: www.disavascular.com Dr Grant Napier Managing Director Telephone; 427 (0)11 274 9300 Fax: +27 (0)11 717 9351. Email: charles marais@wits.ac.za Eyeborn Shareholder Tel: +27 (0)11 717 9351. Email: charles marais@wits.ac.za Eyeborn Shareholder Gyovaerts Celi: 0827757185 Email: eg. everpix@mweb.co.za Dr. Michelle Mulder Managing Gyorpix@mweb.co.za Dr. Michelle Mulder Managing Director Tel: +27 21 788 2297 Email: Michelle.Mulder Managing Director Tel: +27 (0)11 789 2827 Fax: 011 769 1933 Celi: 082 337 3550 Email: ignatius@gratech.co.za Sipho Moshoane Celi: 0731333729 Email: moshoane Celi: 0731333729 Email: moshoane Celi: 0731333729 Email: moshoane Celi: 0829338632 Email: 0829338				
Mebsite: www.disavascular.com				
Elevation Biotech				Email: greg@disavascular.com
Managing Director Telephone:+ 27 (0)11 274 9300 Fax: +27 (0)11 274 9270 Email: grant.napjer@elevationbiotech.com Website: www.elevationbiotech.com Tel: +27 (0)11 717 9351. Email: charles.marais@wits.ac.za Elisabeth Goyvaerts Cell: 0827/57185 Cell: 0827/57185 Email: eg_ overpix@mweb.co.za Dr. Michelle Mulder Manager Tel: +27 21 788 2297 Email: Michelle. Mulder@mrc.ac.za Website: www.aloxhealth.com Upnatius De Wet Managing Director Tel: 011 769 2627 Fax: 011 769 1933 Cell: 082 337 3550 Email: gnatius@geratech.co.za Sipho Moshoane Cell: 083 337 3550 Email: moshoane@gmail.com Website: http://www.lkhambicare.com Dr. Oliver Preisig Tel: +27 (0)12 343 5829 Cell: 0823038632 Email: Oliver.Preisig@ingababiotec.co.za Website: www.ingababiotec.co.za Website: www.ingababiotec.co.za Cell: 0823504314 Email: cedlin@ithembapharma.com Website: www.ingababiotec.co.za Cell: 0823504314 Email: cedlin@ithembapharma.com Website: www.ithembapharma.com Website: www.ithembapharma.com Cell: 0823504314 Email: cedlin@ithembapharma.com Cell: 0823504314 Email: cedlin@ithembapharm				Website: www.disavascular.com
Managing Director Telephone:+ 27 (0)11 274 9300 Fax: +27 (0)11 274 9270 Email: grant.napjer@elevationbiotech.com Website: www.elevationbiotech.com Tel: +27 (0)11 717 9351. Email: charles.marais@wits.ac.za Elisabeth Goyvaerts Cell: 0827/57185 Cell: 0827/57185 Email: eg_ overpix@mweb.co.za Dr. Michelle Mulder Manager Tel: +27 21 788 2297 Email: Michelle. Mulder@mrc.ac.za Website: www.aloxhealth.com Upnatius De Wet Managing Director Tel: 011 769 2627 Fax: 011 769 1933 Cell: 082 337 3550 Email: gnatius@geratech.co.za Sipho Moshoane Cell: 083 337 3550 Email: moshoane@gmail.com Website: http://www.lkhambicare.com Dr. Oliver Preisig Tel: +27 (0)12 343 5829 Cell: 0823038632 Email: Oliver.Preisig@ingababiotec.co.za Website: www.ingababiotec.co.za Website: www.ingababiotec.co.za Cell: 0823504314 Email: cedlin@ithembapharma.com Website: www.ingababiotec.co.za Cell: 0823504314 Email: cedlin@ithembapharma.com Website: www.ithembapharma.com Website: www.ithembapharma.com Cell: 0823504314 Email: cedlin@ithembapharma.com Cell: 0823504314 Email: cedlin@ithembapharm	11	Elevation Biotech	LIFElab	Dr Grant Napier
Telephone+ 27 (0)11 274 9300 Fax: +27 (0)11 274 9270 Email: grant.napier@elevationbiotech.com Website: www.elevationbiotech.com Website: www.elevationbiotech.com Website: www.elevationbiotech.com Website: www.elevationbiotech.com Tel: +27 (0)11 717 9351. Email: gyeborn Shareholder Tel: +27 (0)11 717 9351. Email: gyeborn Shareholder Tel: +27 (0)11 717 9351. Email: gyeverpix@mweb.co.za 14 Ferox Pharm (Pty) Ltd LIFElab Dr. Michelle Mulder Manager Tel: +27 21 788 2297 Email: Michelle Mulder Manager Tel: +27 21 788 2297 Email: Michelle Mulder Manager Tel: +27 21 788 2297 Email: Michelle Mulder Manager Tel: +27 21 788 2297 Email: Michelle Mulder Manager Tel: +27 21 788 2297 Email: Michelle Mulder Manager Tel: +27 21 788 2297 Email: Michelle Mulder Manager Tel: +27 21 788 2297 Email: Michelle Mulder Manager Tel: +27 333 3355 Email: ignatius @geratech.co.za Website: www.aloxhealth.com 16 iKhambi Healthcare Biopad Biopad Dr. Oliver Preisig Tel: +27 (0)12 343 5829 Cell: 0829338632 Email: Oliver.Preisig@ingababiotec.co.za Website: www.inqababiotec.co.za Website: www.inqababiotec.co.za Website: www.inqababiotec.co.za Website: www.inqababiotec.co.za Website: www.inqababiotec.co.za Tel: 11 for Se61 Cell: 082754814 Email: cedlin@ithembapharma.com Website: www.ithembapharma.com Website: www.apabiosystems.com Website: www.apabiosystems.com Website: www.apabiosystems.com Website: www.apabiosystems.com Website: www.apabiosystems.com	' '			
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Email: charles.marais@wits.ac.za				Tel: +27 (0)11 717 9351.
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IF				Email: Michelle.Mulder@mrc.ac.za
IF				Website: www.aloxhealth.com
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Appendix G: List of Public Sector Venture Capitalist Interviewed

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