

**Gordon Institute  
of Business Science**  
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# The supply and demand of innovation finance in South Africa

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## ABSTRACT

A strong relationship exists between innovation and access to finance in the economic development of a country, and constraints to either of these would limit progress in its developmental stage. In studying the demand for innovation finance and the supply thereof in South Africa, an understanding of these synergies and important factors required to improve the overall development stage of the country were gained.

According to the World Economic Forum's Global Competitiveness Report 2016-2017, South Africa was one of the highest ranked for financial market development and its capacity for innovation was ranked in the top quartile, but for some reason these two rankings are not aligning for the country to be shifted towards an innovation-driven development stage.

The majority of research suggests that a lack of access to finance constrain an increase in the number of innovative businesses, but others suggest that there aren't enough innovative businesses demanding finance to grow the overall innovation sector.

By interviewing entrepreneurs and innovation financiers and understanding the demand and supply strategies, this study identifies important factors that should be focussed on in order to improve a co-existence and improve innovation levels in South Africa.

**Keywords:** finance, innovation, entrepreneurs, financing constraints

## 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.

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Date: 6 November 2017

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## 1. INTRODUCTION TO RESEARCH PROBLEM

This study aims to determine whether South Africa's innovation development is constrained by providers of finance for innovation (supply) or development of innovative investment opportunities (demand), and what can be done to reduce the mismatch.

### 1.1. Background to research problem

On 14 March 2017, South Africa's Deputy President Cyril Ramaphosa addressed the Global Entrepreneurship Congress (GEC 2017) held in Sandton, Johannesburg. A quote from his speech strengthened the need for this research: "Where others see problems, entrepreneurs see opportunities. That is why our continent need more innovative entrepreneurs, so that we may better respond to our developmental challenges." (South African government, 2017)

In identifying the need for innovative entrepreneurs, the deputy president recognises the importance of innovation especially as a method of increasing competitiveness of the country.

In the Global Competitiveness Report 2016-2017 published by the World Economic Forum, South Africa (SA) ranked 47<sup>th</sup> out of 138 participating countries, up from 49<sup>th</sup> in the previous year (Schwab, 2016). The report's Global Competitiveness Index found South Africa to be leading sub-Saharan Africa in four pillars, namely Financial market development, Technological readiness, Business sophistication, and Innovation. South Africa's ranking for innovation in the entire report population is 35<sup>th</sup>. The report however still classifies South Africa as being at an efficiency-driven development stage as opposed to being at an innovation-driven development stage or even transitioning between the two stages (Schwab, 2016).

Inspiring data from this report is the ranking of South Africa's Financial market development in the entire report population, at 11<sup>th</sup> place (Schwab, 2016).

Although increasing, a paucity of literature about innovative South African entrepreneurs raising finance for rapid growth are published.

## 1.2. Rationale for research

The study of innovation and barriers to it have received much attention and recently, increasingly so. Five barriers and contributors to innovation as an initiator of economic growth have been identified as financial, knowledge, demand, market and regulation (Coad, Pellegrino & Savona, 2016).

The element with highest impact and also the most researched is undoubtedly finance and its effect on innovation development (Coad, Pellegrino & Savona, 2016). In gathering literature on the topic, it became clear to the researcher that a significant majority of research is done in and on developed economies (Mazzucato, 2013; Henreksen, 2013; Mina, Lahr & Hughes, 2013). The majority of which are also quantitative research, building models from numeric rationalisations or financial performances. The researcher found very few published research papers which collected data through personal interactions with the two particular parties involved in the innovation process, the providers of finance and the innovators requiring finance to increase the impact.

The question of where the constraint really lies is also not explicitly asked which might suggest that there is an assumption that either party would refer to the other as the constraint, but should those perceptions not change as economic scenarios and conditions evolve?

Bruton, Khavul, Siegel and Wright (2015) highlight the need for further study in understanding the availability of finance throughout the various stages of growth of a business in developing economies. As needs arise for specific finance in developed countries innovative investment alternatives are developed, but these solutions aren't all available in developing economies due to poor regulatory environment or dominating traditional financing (Bruton et al., 2015).

### 1.2.1. Financing innovation supports growth

A key factor of increasing levels of innovation is availability of finance and this strong connection was first drawn by Joseph Schumpeter in 1912 in his book, *The theory of economic Development*. His theory was centred around the entrepreneur, an assertive individual whose actions start change in economic life and then filters through to the rest of the economy. In a following book published for the first time in 1943, Schumpeter refers to financiers and bankers as intermediaries in moving between entrepreneurial



venture and mere current administration of an inherent domain. He argued that enterprise can be started by borrowing other people's savings which is collated at banks, and made available to entrepreneurs (Schumpeter, 1943).

The importance of innovation in driving companies' and countries' growth have been well supported by research since Schumpeter referred to "creative destruction" (Mazzucato, 2013; Nanda & Rhodes-Kropf, 2016; Mina, Lahr & Hughes, 2013). Levine (2005) provided research confirming that financial intermediaries and markets matter for growth. This was further expanded to determine through which channels this finance will matter. Studying the 1990's research and development (R&D) boom, financing R&D as a critical input to innovation was confirmed as an important factor that impacts endogenous growth due to the knowledge spillovers it creates, but it is also difficult to finance (Brown, Fazzari, Petersen, 2009).

In their study of financing risk in relation to innovation, Nanda and Rhodes-Kropf (2016) found that it is not a revolution in innovation that drives the availability of finance but rather financial markets that drive innovative activity. Given the competitive position of South Africa's financial markets, should the country then not perform better in its competitiveness on innovation?

Clusters of innovation have been modelled on Silicon Valley and tested in 13 case studies globally by Engel (2015). Silicon Valley is regarded as an effective innovation cluster with a well-functioning ecosystem from which a framework was derived for Engel (2015)'s research. The regions in which these case studies were developed were Europe, Middle East, Asia and Latin America (no regions in Africa), with the geographically closest country to South Africa being Israel. The three largest components in the innovation engine of clusters of innovation are depicted as entrepreneurs, venture capital investors and other sources of finance, and these have been found to stimulate economic growth in all regions (Engel, 2015).

### 1.2.2. Financiers and innovators in South Africa

Investors in innovation include seed funders, angel investors, crowd funders, corporate venture capital (CVC), independent venture capital (VC) and to a lesser extent private equity (PE) (Bruton, Khavul, Siegel & Wright, 2015; Chemmanur, Loutskina & Tian, 2014). The most notable differences between the investors are risk appetite, term of investments and size of investments. In understanding the drivers and motivation behind

investment decisions of these investors, entrepreneurs could better position their innovative venture to attract more or more appropriate finance.

Previous research on South African financial resources for start-ups indicated that the Industrial Development Corporation (IDC) was the major funder for this early stage capital but few firms were able to get access to this and even less had access to the very small venture capital market in South Africa (Tuomi & De Castro Neto, 2013). Bank loans are also not a viable option for most since the banks require substantial collateral.

Southern African Venture Capital and Private Equity Association (SAVCA) promotes the venture capital and private equity profession in Southern Africa and stimulates investments throughout Southern Africa. In their June 2016 members' directory, chairman Dave Stadler noted a continued growth in membership which is an indication of more investors entering the market and more funds available for investing in innovation (SAVCA, 2016).

The relevance of crowdfunding for South African ventures became apparent in March 2017 when Chrome Cherry Design Studios in Cape Town raised more than R22-million for their product Nimuno Loops. The funds were raised using crowdfunding from a US platform called Indiegogo, which is still relatively unknown in South Africa (Matos, 2017). In April 2017 Takealot received a R960-million investment from Naspers, the largest company listed on the Johannesburg Stock Exchange and an investor in innovation through Naspers Ventures, one of very few corporate venture capital investors in South Africa (Naspers, 2017).

These are not only examples of growing entrepreneurial activity in South Africa, but also signs that the market is maturing by making use of more alternative investment options available.

### 1.2.3. Constraints to providing innovation finance

The benefits of investing in innovative ventures are well studied and supported but numerous reasons also exist for investors not to invest in them. Financing risk is one such detractor. Investors face the risk that the initial investment made is not sufficient to support the venture during multiple stages of development, or the venture cannot raise additional funds at a later stage from different investors due to negative changes in the financial market (Nanda & Rhodes-Kropf, 2016).

The inherent risk involved in innovation is in itself a reason for uncertainty and investors have to understand this uncertain character when deciding on investment strategies (Mazzucato, 2013).

Innovation finance itself had to innovate to provide financing alternatives to innovative entrepreneurs who find it difficult to obtain financial support. Imbalances in the supply of and demand for finance, as well as the improvement in technology have driven the creation of new alternatives for early stage funding such as crowdfunding (Bruton, Khavul, Siegel & Wright, 2015).

A recent study by Mina, Lahr and Hughes (2013) analysing how likely it is that innovative ventures would seek external finance and how likely it is that they would receive it, explored an interesting relationship between finance and innovation. Within the study's parameters it was found that the problem in financing innovation came from demand for finance rather than supply thereof.

Kasabov (2015) noted that the quality of the founders as defined by their experience, knowledge and education, has an immense impact on their success in raising funding. With a significant focus placed on the quality of the start-up team, a shortage of human capital and skills in developing countries is a constraint to more finance being made available for the purpose of growing innovative businesses (Kasabov, 2015).

The physical distance between investor and entrepreneur was noted as a factor in the success of investors providing innovation capital (Lin & Viswanathan, 2015). This relates strongly to research on clusters done by Engel (2015) in their attempt to find commonalities between the Silicon Valley and other clusters. Whether there is a valuable cluster starting to be shaped in Cape Town is something that can be delved into.

#### 1.2.4. Constraints to acquiring innovation finance

Similarly, reasons exist for the innovators not to approach or find risk investors.

The benefit of belonging to a network of interorganisational relationships has been well studied and supported however, sharing innovative information too early with a network of investors may have drawbacks due to competitive exposure (Pahnke, McDonald, Wang & Hallen, 2015). The investment intermediaries share this innovation to the benefit of their portfolio which is often to the detriment of the innovator's market differentiation (Pahnke, McDonald, Wang & Hallen, 2015).

Mazzucato (2013) refer to the risk of the financial sector being rewarded for value extraction over value creation activities. Investment funds are incentivised to extract the most value for its investors which is extensively studied under stakeholder theory research.

Larsen and Lewis (2007) identify misaligned motivations between investors and investees as a constraint to acquiring innovation finance, as well as the unwillingness of entrepreneurs to lose shares or control in their businesses. Entrepreneurs would rather not except external funding if their vision for the business is unattainable due to an investor whose mandate incentivises an alternative outcome.

The researcher studied the constraints identified above in the South African context to get a big-picture understanding of the environment within which innovation finance is supplied and demanded, where the constraints are more significant, and why the constraints exist.

Understanding how these different parts influence each other and how the innovative entrepreneurship engine runs, made it possible to focus on the most influential factors and recommend bespoke improvements to the overall innovation finance ecosystem.

## 2. LITERATURE REVIEW

The literature reviewed afforded the researcher the opportunity to explore the relationship between finance, innovation and entrepreneurship, who the current suppliers and demanders of innovation finance are, and what motivate or constrain an active interest in providing or obtaining innovation finance.

### 2.1. Relationship between finance and innovation

#### 2.1.1. Innovation

“Clayton Christensen is the architect of and the world’s foremost authority on disruptive innovation” and has been recognised as the most influential business thinker in the world (Christensen, n.d.). Two important learnings from an increasing interest in research on innovation, and particularly disruptive innovation, has firstly identified that the change in businesses strategy is profoundly influenced by changing interests of their customers. The result of which relies significantly on innovation becoming a fundamental part of the businesses. The second insight is that this focus on innovation is aimed at the largest part of customers and as a result it becomes increasingly difficult to allocate human and financial resources to disruptive innovation which focusses on customers or potential customers which initially makes up a smaller target market (Christensen, Raynor & McDonald, 2015).

King and Baartartogtokh (2015) dispute this heavy reliance on disruptive innovation as the most important consideration for business strategy. They suggest that business owners should continue to consider factors such as competition and profitability of a market, leveraging off core competencies, and collaborating with other players in the value chain of the market being served.

Innovation has traditionally been measured by ways such as increase in patent registration or spending on research and development. The European Union and OECD are driving a broader and more comprehensive measurement which will include activities such as organisational and marketing innovations as well as collaboration (Henreksen, 2013).

### 2.1.2. Innovation through entrepreneurship

2006 Nobel Laureate (Economics), Edmund Phelps, studied the prosperity of nations over the last two centuries and argues that the ideas generated at the start of the nineteenth century (and even before, during the Enlightenment period) was imperative to the growth, both material and personal, that the world has seen since those revolutions (Phelps, 2013). Phelps (2013) refers to the ‘flourishing’ of individuals as solving problems, being engaged, enjoying self-expression and personal growth, and that this provides meaning to life which cannot only be achieved through consumption. People therefore don’t only care about outcomes but also enjoy the process of reaching those outcomes and the innovation required in developing solutions. The source of prosperity then lies in innovation and the dynamic implementation through entrepreneurship (Phelps, 2013).

In a paper on innovation and entrepreneurship, Henrekson (2014) reviews Phelps’ book and discusses the link between innovation and entrepreneurship, and he highlights the social value that can be realised through entrepreneurship and innovation. He refers to the importance of innovation as an “ultimate source of growth” but stresses that innovation per se is insufficient if not leveraged through entrepreneurship.

Innovation has lately been marketed as the solution to all problems but the social value of innovation is only realised through high-impact entrepreneurship, where the innovation makes a substantial positive difference in the lives of the entrepreneur and those affected by it (Henrekson, 2014). The value of this innovation to the particular entrepreneurial business implementing it, depreciates when these innovative activities are easily replicated or that knowledge and/or skill is not unique to the entrepreneur and his team (Henrekson, 2014).

Innovation, and the resultant growth, was largely impacted by an individualist culture characterised by rationalising, experimenting and being competitive. This individualism, through most measures, has a very significant positive effect on innovation (Phelps, 2013) (Henrekson, 2014). Henrekson (2014) however also notes that collectivism may also be essential in encouraging innovation, and that cooperation in networks is of utmost importance in a truly well-functioning, innovative economy.

Phelps (2013) suggests that the culture of a country is the main contributor to innovation and producing innovative entrepreneurs, but Henrekson (2014) notes that a host of

studies ignored by Phelps support the idea that institutions are more prominent in explaining the innovativeness of a country.

Stephens and Partridge (2011) found evidence in their study on entrepreneurs in lagging US regions that points to the different impact on the growth of a region as a result of opportunity entrepreneurship (innovative and creative entrepreneurs exploiting an opportunity) as opposed to necessity entrepreneurship (forced to be self-employed because of employment circumstances). They do however conclude that ultimately the key to supporting growth is to have more people enter the challenging entrepreneurship environment and start a venture.

This study is elaborated on by Stephens, Partridge and Faggian (2013) who found that in this lagging Appalachian region, employment growth (measured in wages and salaries) was less reactive to knowledge-based approaches and innovation in general, but more reactive to proprietorship and entrepreneurship.

### 2.1.3. Innovation finance

Innovation finance is funding resources available for driving or scaling innovation and innovative ventures. Innovation finance itself has to change or adapt and providers of innovation finance have to innovate as the need for this finance develops or the application of it diffuses from an initial different purpose or geographic region (Bruton, Khavul, Siegel & Wright, 2015).

Referring to this as *entrepreneurial finance*, Bruton et al. (2015) identify finance available for early stage businesses as venture capital funding, crowdfunding, peer-to-peer lending, angel investors, microfinance and the very popular source; friends and family. Two more sources can be added to this list; a third “F” to friends and family, being ‘fools’, as well as initial public offerings (IPOs) (Short, Ketchen, McKenny, Allison & Ireland, 2017).

Short et al. (2017) researched crowdfunding (which has been an active alternative for many years with a famous example dating back to 1885) in some detail and provide insight into the investment alternative by reviewing five recent articles. The impact of this innovation finance alternative is enormous when considering statistics such as the existence of an approximate 2000 crowdfunding platforms today which could account for a collective \$300 billion worth of transactions by 2025 (Short et al., 2017).

#### 2.1.4. Importance of innovation finance for economic growth

The importance of innovation as a factor to grow economies, is emphasised by Engel (2015) in research that focused on clusters of innovation – in particular, Silicon Valley. Three components are identified as important for invention, creation and early development in a cluster of innovation; these are universities, government and entrepreneurs.

A further four components drive evolution, growth and scaling, and these are identified as venture capital, mature corporations, industrial research centres and professional service providers. The three central or key components in the cluster of innovation however are entrepreneurs, venture capital investors and other sources of finance such as major corporations and strategic investors (Engel, 2015).

Venture capital firms and the way they invest, influence behaviour in Silicon Valley which “drive startups to rapid value creation, scaling” and ensure early divestment via initial public offerings (IPOs) or other methods which is also rewarded in the VC’s fund structure. Mature corporations recognise the benefits of collaboration with these early stage businesses and can benefit from them via contractual agreements (such as supply contracts), partnerships (on temporary projects), and investment (either direct or via a corporate venture capital structure) (Engel, 2015).

These clusters of innovation have benefits that go beyond the cluster (spillovers), and one of the most prominent benefits relate to collaboration across sectors, industries, and geographies. On the negative side, however, Kasabov (2015) suggests that successful clusters established in developed markets are often emulated by governments in developing or emerging economies without the required experience, knowledge and resources.

In studying the difficulties experienced by IT start-ups in peripheral clusters in developing economies (Vietnam in this case), the usual crucial resources; finance, human resources and knowledge was identified. The more interesting finding was that the more prominent drivers of muted growth were risk aversion and passivity, as well as the overreliance on public sector support or solutions (Kasabov, 2015).

Caiani, Godin and Lucarelli (2014) studied innovation and finance and developed a model for multiple economic sectors to analyse economic cycles in which the change was initiated by a change in technology. They highlight the connection between finance



and innovation and in this study, focus on debt and initial public offerings (IPOs) of innovative businesses as a way of raising finance.

Three phases are identified as innovation makes an impact on markets, starting with the introduction of the innovative entrepreneurs where demand for products in that particular sector increase together with increase of money supply which is awarded to the entrepreneurs; the entry of these businesses onto the stock market (through IPOs); and the exit of traditional businesses due to an inability to compete, as well as a drop in capitalists' wealth as a result of the new entrants not entirely able to service the heaps of debt anymore (Caiani, Godin & Lucarelli, 2014).

The importance for innovative entrepreneurs and relevant finance providers to meet has in itself created a market for businesses to act as intermediaries, introducers and mentors. These venture development organisations (VDO) are usually represented in the form of incubators and accelerators. Plummer, Allison and Connelly (2016) found the chance of start-ups being able to find investors increase from 4% to 25% just by getting involved with a VDO. Three more different ways of signalling the market that the venture is eligible for investment are moving into commercial property (increase chance 10x); introducing a new product (increase chance 15x); and being founded by an experienced entrepreneur (increase chance 18x) (Plummer, Allison & Connelly, 2016).

## 2.2. Suppliers of Innovation finance

### 2.2.1. Who are the suppliers of innovation finance?

With the recent surge in entrepreneurial activity, Weiblen and Chesbrough (2015) refer to an entire system of supporting institutions that seem ready to assist in meeting demand for innovation finance. Angel investors and venture capitalists are thriving again, and so too are start-up incubators (Weiblen & Chesbrough, 2015).

As with any industry, innovation also plays a role in the alternatives of suppliers of innovation finance. Early stage innovation suppliers such as angel investors and venture capital has been joined by crowdfunding, microfinance and peer-to-peer lending (Bruton, Khavul, Siegel & Wright, 2015). Bruton et al. (2015) notes that the initial location of a financing alternative may have been in one part of the world but quickly spread across the globe, like in the case of microfinance that was used to address the lack of capital for entrepreneurs living in poverty in developing economies and is more recently also

offered to entrepreneurs in developed economies where smaller loans weren't readily available.

The lack of opportunities for smaller, usually individual, investors to also participate in the supply of finance to early stage businesses with high growth potential, led to crowdfunding which leverages off platforms where these smaller sources of funding are aggregated and pooled together (Bruton et al., 2015).

Crowdfunding is relatively new to the South African market and a South African company has very recently proven how it can be a valuable source of innovation finance when they ran their crowdfunding campaign on a US crowdfunding platform called Indiegogo. They raised over \$1.6 million after starting with a goal to raise only \$8,000 (Matos, 2017). When this project was brought to South Africa with a more charitable goal on the local Thundafund platform, only R8,730 was raised of the anticipated half a million rand.

During the early 1990's venture capital was booming and corporates realised the benefit of making external equity investments in entrepreneurial start-ups with high potential for growth and the benefit of an additional source for R&D. Corporate venture capital grew rapidly from less than a dozen units to around 350 by 2000, but the recession in the second half of 2000 caused a significant collapse to equity markets and venture capital. The tangible benefit of identifying new ideas and disruptive advances was still very much appreciated by corporates through using this vehicle and it eventually recovered (Gaba & Bhattacharya, 2012).

Chemmanur, Loutskina and Tian (2014) studied the impact on innovation from corporate venture capital and found CVCs to have more innovation output than VCs. Two possible reasons for this have been found to be a better technological fit between the entrepreneur and the CVC, and VCs have less tolerance for failure which would result in earlier divestment by the VC (Chemmanur, Loutskina & Tian, 2014).

Another investment vehicle very actively involved in SA according to SAVCA's membership, but not commonly known for early stage or innovation investments, are private equity asset managers (SAVCA, 2016).

To understand how or why innovation finance alternatives originated, the institutional context should also be taken in account (Bruton et al., 2015). Bruton et al. (2015) refer specifically to the original purpose of financial mechanisms such as microfinance, crowdfunding and peer-to-peer lending and how the institutional roots of these funding mechanisms are quite different to the new markets they've been utilised in more recently.

Entrepreneurs in emerging markets don't have the same level of access to private capital such as angel or venture capital investors that those in developed markets do, and as a result the government still need to play a very important role in providing finance to early stage businesses either through public or institutional funding (Armanios, Eesley, Li, & Eisenhardt, 2017).

Armanios et al. (2017) researched the effects of science parks in Beijing and across China, set up by emerging market governments to identify promising start-ups, and found that entrepreneurs who attend these science parks and receive quality certification, have better chance of obtaining government funding. Attending the science parks provide a level of validation of the business model but also an introduction that would otherwise have been less likely to take place.

In their research on how firms overcome barriers to innovation, Larson and Lewis (2007) found that 25% of the companies studied considered grant funding from their regional governments.

#### 2.2.2. Motivation to supply innovation finance

##### *Potential for extraordinary return on investment*

Bruton, Khavul, Siegel and Wright (2015) state that the global financial crisis of 2008 caused a rapid expansion of crowdfunding. Savings weren't and still aren't earning palatable interest rates which motivated individuals to participate in alternatives such as crowdfunding and was the most adopted of all new alternatives in 2014 (Bruton et al., 2015).

Entrepreneurs have recently been taking the world by storm, considering the effect that disruptive companies like Facebook, Uber, Tesla and Airbnb have had on business as usual. These so-called unicorn start-ups have not only improved the lives of millions of people, but they've also managed to grow exponentially in value over a relatively short period. This potential for extraordinary return on investment is a very good reason for investors to participate in the financing requirements.

Any identified gap or shortage of innovation finance is a motivation for new financing alternatives to be created. This shortage in both developed and developing economies, together with the improvement in technology, was the principle on which crowdfunding platforms were created (Bruton et al., 2015).

### *Taking risk is penalised in stock markets*

Investment in R&D as a key to innovation is one way of ensuring growth (Brown, Fazzari, Petersen, 2009). Counterproductively, listed corporates who announce R&D projects, either in-house or through acquisitions of start-ups, are being penalised by the stock market through falling stock prices due to the high risk involved in spending significant amounts of reserves for R&D purposes (Mazzucato, 2013). This provides an opportunity for less risk averse investors to potentially earn higher returns from investments in these start-ups.

Corporates found a counter for this financial discrimination and are increasingly creating corporate venture capital funds through which investments can be made whereby the corporates' ring-fenced funds and a few concerns of entrepreneurs such as conflict of interests are also addressed in the process (Chemmanur, Loutskina & Tian, 2014).

Gaba and Bhattacharya (2012) studied the behaviours that influence corporates to overcome the risk of setting up a corporate venture unit and found that firms with a level of innovation that is already far above required or expected levels are less likely to pursue the establishment of such a unit or fund to generate R&D from external sources.

Strangely though, firms with innovation performance far below their aspired goals were found to also be less likely to start a CVC unit, and this might be to avoid taking further risk on an alternative innovation or R&D source which is not very well understood and whose results are rather ambiguous. The drivers for establishing a CVC are linked to a firms' financial performance exceeding goals, institutional pressures and the successes of other CVCs (Gaba & Bhattacharya, 2012).

### *Pay it forward*

In the spirit of paying it forward or contributing to a better good, some investors experience a sense of feel-good in contributing to the growth of entrepreneurs. Entrepreneurs who succeeded in their ventures would use some of those proceeds to invest in other start-ups. This was specifically found by Allison, McKenny and Short (2013) under funders of the Kiva crowdfunding platform where microlenders described getting a "warm glow" in their commitment to support entrepreneurs in need.

In addition, later studies by Allison, Davis, Short and Webb (2015) on that same platform found that referring to a crowdfunding platform as an opportunity to help entrepreneurs was much more successful in raising funding than referring to it as business opportunity to invest in a venture.

### *Clusters and community culture*

Huggins and Thompson (2014) propose entrepreneurship to be the link between culture and development (growth). They find entrepreneurship to be significantly affected by the culture in the community towards entrepreneurship. In a way, this links to the clusters studied by Kasabov (2015) and Engel (2015) since the culture in the community can be a significant contributor to encouraging development of entrepreneurs which will be motivation for innovation financiers to also be more actively involved.

Where localities are more open and socially diverse, it is more likely that the community culture would accept innovation-driven development; and where social rules are highly valued in the community culture or anti-social behaviour not accepted, the culture would most likely promote high rates of well-being (Huggins & Thompson, 2014).

### *Government / tax incentives*

A study on innovation policy done in 2012, noted a South African tax incentive (section 11(d)) which allowed certain incentivising deductions of expenses on research and development (Tuomi & De Castro Neto, 2013). It further recommended more support to be given to the venture capital industry similar to what is provided by the Brazilian government.

What Tuomi and De Castro Neto (2013) did not take in account is the Section 12J income tax incentive provided by the South African Revenue Service which came into effect in 2009. This incentive allows a tax deduction on the contribution made by investors (individual and corporate) in Section 12J venture capital companies. The deduction is equal to the highest percentage rate at which the after-tax money being invested was taxed (SARS, 2017). For example, an individual earning an annual taxable income of R2 million and who invests 10% of that income in a Section 12J venture capital company, will receive a 45% tax credit from SARS worth R90,000.

### 2.2.3. Perceived constraints to supplying innovation finance

#### *Fundamental risk in innovation*

Investing in innovation has a high-risk profile due to there not being any collateral in start-up businesses. It is often an investment in an idea without proof of concept. Most recent innovation has been predominantly in the technology industries where competition is strong and a competitive advantage is not guaranteed for long.

Due to innovation being a complex process frequently ending in failure, patient long-term capital is required (Mazzucato, 2013), which is not something VCs or PEs can afford given they typically hold an investment for a period of between three and five years.

#### *Later stage financing risk*

Financing risk as explained by Nanda and Rhodes-Kropf (2016) is a forecast of limited future funding. It is the risk that a next round of fund raising for a venture in which the fund already invested, will not be financed successfully. The more innovative a firm is, the more vulnerable it is to financing risk, purely based on the amount of times the firm would go to market for fund raising which also exposes the firm to a wider period in which the capital market could be volatile.

When there is low financing risk, i.e. a high probability of obtaining funding in the next stage, investors fund more experimentation and the most innovative ideas are discovered (Nanda & Rhodes-Kropf, 2016).

#### *Shortage of human capital and skills*

Entrepreneurship research on success factors affecting start-ups include receiving finance, and further suggest that the quality of human capital of the founders of these start-ups are linked to the attraction of superior venture capital funding. This is a result of human capital of the founders being associated with early-stage performance, sustainability and alertness (Kasabov, 2015).

#### *Large minimum investment requirements*

Many willing individual investors have historically been left out of the investment value chain due to their attributable amount being relatively small and the investment amount required for a meaningful impact often being rather substantial. This changed with the introduction of crowdfunding through platforms such as Kickstarter and Indiegogo in the US (Short, Ketchen, McKenny, Allison & Ireland, 2017).

#### *Physical distance between investor and entrepreneur*

In studying the dynamics of crowdfunding, Mollick (2014) identified three drivers of crowdfunding success as networks, project quality, and geography. The geography of the innovative individual running the campaign or project, drive the perceived potential for success of this campaign which is associated with other creative projects previously successful in the same geography (Mollick, 2014). Lin and Viswanathan (2015) took the geography study further and discovered that the presence of both parties of peer-to-peer lending in the same geography improved the likelihood of the transaction taking place.

#### *Lagging regulation*

Crowdfunding regulation further influences the effect of this financing alternative and in the US the '2012 Jumpstart our business startups act' allows equity investment through crowdfunding, with further regulation by the US SEC (Securities Exchange Commission) (Short et al., 2017). This type of crowdfunding investment is not yet allowed or regulated in South Africa.

### *Lack of syndication*

Liu and Maula (2016) note two uncertainties that are present when firms consider investments in other countries, as uncertainty about the venture itself and uncertainty about the country in which that venture operates. They suggest that partnering or collaborating with another firm that is local in the country of the venture, reduce both these risks but then researchers ask why partnering doesn't happen if it is such an obvious risk mitigation benefit.

The need to partner with a local VC is increased when venture-level uncertainties are high, but the need for partnering with local firms is reduced when the uncertainties in the origin country of the venture is high (Liu & Maula, 2016). As can be expected, partnering with other (foreign) VCs increases when your own experience in managing uncertainties at venture-level is low but another result that Liu and Maula (2016) expected, that more partnering would occur when higher country-level uncertainties are present, was not supported. High country-level risk was found to be a reason for investors to be less interested in partnering with local VC firms and investing in those ventures.

Some elements of Venture Capital, such as the need for the fund managers to return their investors' money back over a set period (often ten years), as well as the relative fund size, limit the VC investor to invest in very early start-up and seed stages (Ferrary, 2010).

Ferrary (2010) posits that at the seed funding stage of a venture, the lack of formal and historical data means that investors aren't dealing with risk but rather uncertainty. VCs then transfer this uncertainty into risk through collaboration within their own networks.

## 2.3. Ventures demanding innovation finance

### 2.3.1. Who are the demanders for innovation finance?

In their study of successful entrepreneurs, Sarasvathy, Menon and Kuechle (2013) quotes master economist Kenneth Arrow saying that there is no such thing as characteristics that make a successful entrepreneur. The idea of connecting the successes and failures of a firm or venture to that of the entrepreneur is rejected and instead serial entrepreneurs are found to use the success and failures of their own

multiple ventures as learnings in becoming successful, and so exploiting the contagion process of starting new ventures (Sarasvathy, Menon & Kuechle, 2013).

Demanders of innovation finance prefer sources of funding that will not require giving up shareholding and for which the cost of capital is relatively low and for this reason they prefer obtaining external funding last. They therefor self-fund, obtain funding from friends and families, or make use of available non-equity funding in the early stage (Bruton, Khavul, Siegel & Wright, 2015).

Rojas and Huergo (2016) studied the characteristics of entrepreneurs specifically launching new technology based firms, who participate in Spanish financial aid programs and came to a few interesting conclusions. They found that having managerial experience reduced the likelihood of the entrepreneur to join the financial grant program offered by CDTI, a public agency, and this could be because they already have well-established networks to draw from. Entrepreneurs seeking recognition have reduced probability of participating but seeking personal satisfaction and being focussed on growth increased it.

Receiving assistance from technology parks (science parks) or having academics on the entrepreneurial team increase the probability of participating. Finally, an entrepreneurial team that does research and planning of the viability of their idea or product in the market prior to developing the concept has a lower probability of joining the aid program, mainly due to networks discovered and built during the research period (Rojas & Huergo, 2016).

### 2.3.2. Motivation to acquire innovation finance

#### *Perceived oversupply of funding*

For a start, investors are currently very eager to invest again. “The U.S. National Venture Capital Association reported a record \$22.7 billion in venture capital investments for the first half of 2014, which is the highest value since the first half of 2001. The National Business Incubator Association records 1,250 start-up incubators in the U.S.” (Weiblen & Chesbrough, 2015). In South Africa, SAVCA reported an increase in the number of investment funds as well as funds under management (SAVCA, 2016).

The private equity industry reported a new record high in dry powder in 2016, that is capital available from investors in these funds not currently invested. Preqin reports in their March newsletter that more than \$800 billion is currently waiting in private equity funds as dry powder with about 16% of that in venture capital funds (“Private equity and venture capital”, 2017). In a similar report, Bain & Company included a few more private



equity sectors and found global private equity dry powder to be just over \$1.4 trillion with venture capital around 12% of that (MacArthur, 2017).

#### *Funding for various stages of the business*

A perceived oversupply of funds is however simply not a good enough reason for innovative entrepreneurs to make use of these financing facilities. The reasons for these entrepreneurs to obtain finance is linked to various stages in the business and these stages require different structures of funding. The overall challenge of access to finance is highlighted further by Larsen and Lewis (2007) in their attempt to understand how very innovative small and medium enterprises (SMEs) manage barriers to innovation. Finance for innovation was a top-two barrier for six of the eight UK businesses studied and the purpose of this funding varied with the stage in which the business found itself. Motivation for acquiring finance ranged from increased working capital requirements, research and development, to investment in parallel processes and expansion (Larsen & Lewis, 2007).

Bruton et al. (2015) identify a range of research still to be done on “alternative finance” and highlights the importance of the country or economy specific context. Innovation finance options in developed countries are available throughout all stages of a venture’s growth but these options in developing economies are limited and not across the entire growth cycle of a business, which introduces the question of how financing options in these economies evolve to meet the demand (Bruton et al., 2015).

A study by Graebner and Eisenhardt (2004) on the seller’s side of business acquisition concludes that entrepreneurs are likely to consider financing when the firm faces strategic challenges but in the absence of these, they often will ignore even very attractive offers. The adrenalin and self-satisfaction of being responsible for employees and not having a boss is addictive and it would require something as dramatic as market scale or product line expansion to convince the entrepreneur to consider an external (equity) investor. The investor would have to offer long-term fit of organisational environments and cultures (Graebner & Eisenhardt, 2004). Alternative reasons for finding investors were not considered in the study by Graebner and Eisenhardt (2004).

#### *Complimentary benefits to obtaining finance*

VCs and PEs are known for driving operational efficiencies and offer expansion through introduction to other investees in their portfolios. They bring professional managers in where required and when they have a specific sector or industry speciality, they understand the innovation processes very well (Chemmanur, Loutskina & Tian, 2014).

Maula, Autio and Murray (2005) studied both types on venture capital, corporate and independent, to understand the value added to the portfolio companies of each of these investor groups, and found distinct differences in the benefits to their investees.

The benefits that entrepreneurs get from independent venture capital investors are mostly linked to access to later and/or multiple rounds of funding, introduction to professionals required to run and scale the business, as well as corporate governance or professionalising the business. The benefit of having corporate venture capital investors are mainly focussed around two topics; becoming commercially savvy and receiving technological support to grow the business (Maula, Autio & Murray, 2005).

#### *Mentoring*

Entrepreneurship is known to be a very challenging endeavour to commit to (St-Jean, 2012). Entrepreneurs do not always have a consolidated set of skills and is often rapidly forced into a position where they need to apply these skills such as management skills for example. Mentoring programs are designed to build trust and perceived similarity between mentor and mentee (St-Jean, 2012).

#### 2.3.3. Perceived constraints to acquiring innovation finance

With the benefit of obtaining finance from strategic or institutional investors clear, the focus moves to research that present a more sceptical perspective to obtaining innovation finance that entrepreneurs consider in their decision to join the demand curve.

#### *Risk of sharing too much intellectual property upfront*

Innovation is often a secretive process only known to the developers and a close circle of trusted companions. Until any form of intellectual property registration has been confirmed, the innovation is at risk of being implemented at a larger competitor where access to finance is not a constraint (Pahnke, McDonald, Wang & Hallen, 2015). The impact of close networks on innovation in entrepreneurial firms have recently been studied by Pahnke et al. (2015) with a specific focus on the negative side of these early establishment of relationships and its impact on innovation.

#### *Risk of losing competitiveness to fund portfolio*

The research found that VCs more willingly share information obtained from investees with whom earliest relationships were formed, and high-status VCs are especially able and willing to redirect information that harms the innovators. The study refers to this behaviour as competitive leakage (Pahnke et al., 2015). This emphasise the importance

for the entrepreneurs to carefully choose who to work with and find a finance partner who will commit to doing what is best for the company.

#### *Risk of failed future funding rounds*

Financing risk as explained in the suppliers of innovation finance section above is also a concern for the entrepreneur. The risk of not finding a next round investor could be detrimental to the venture and finding a larger fund to invest (who would be able to provide sufficient finance for multiple rounds) would reduce the potential impact of financing risk. Entrepreneurs should also take the financial market in account as the research propose that a positive financial market would allow investors to experiment more which could lead to more interested investors and higher valuations (Nanda & Rhodes-Kropf, 2016).

#### *Fear of losing control*

Relinquishing control of the business or even parting with a minority share, is often a reason provided by entrepreneurs for not accepting specific available financing. The entrepreneur would rather bootstrap, make use of personal finance or rely on being customer funded through initial low volume sales, in an attempt to have full control of the business as long as possible. In this way, entrepreneurs can temporarily overcome the barrier of innovation finance (Larsen & Lewis, 2007).

#### *Misaligned funding partners*

Some participants in the study of Larsen and Lewis (2007) referred to an incompatibility of the available finance such as grant funders focussing on employment as opposed to development, growth and scaling (which should ultimately lead to job creation anyway).

Bruton, Khavul, Siegel and Wright (2015) suggest that the mere perception of entrepreneurs about the supply of innovation finance alternatives will influence their decision about the type of finance to apply for and may even discourage them from applying altogether, as was the case in the perception of debt funding availability after the global financial crisis. This potentially motivates the entrepreneur to approach new alternatives such as crowdfunding.

## 3. RESEARCH QUESTIONS

### 3.1. Overview of research positioning

This study aims to determine whether South Africa's innovation development is constrained by providers of finance for innovation (supply) or delivery of innovative investment opportunities (demand).

In understanding the innovation finance supply and demand environment in SA, where the constraints lie and why those constraints exist, attention could be focussed on those factors to improve the overall innovation development stage of the country through bespoke solutions.

Developments in financing innovation is not reported on often in SA media and the reason behind this perceived low entrepreneurial finance activity deserves to be investigated.

A significant amount of research on the act of financing innovation is available internationally, especially in developed markets like the U.S., but very little research that has a direct impact on South Africa's innovation development is available.

### 3.2. Questions relevant for this research

The following questions will be answered in the research paper:

1. Which of the two groups of parties involved in supply and demand of innovation finance, experience more significant challenges in obtaining a satisfying version of the other?
2. What factors influence investors to make or withhold investments in innovative ventures?
3. What factors influence entrepreneurs to pursue or reject innovation finance?
4. What are the proposed action points that can be implemented to reduce the delta between the supply and demand of innovation finance in South Africa?

## 4. RESEARCH METHODOLOGY

### 4.1. Introduction

This section of the research report defines the method that was used during the study. It reveals why the chosen methodology is appropriate and suitable to the research problem and questions. The golden thread is demonstrated throughout the research approach, design and analysis.

The study assesses the supply of innovation finance as well as demand therefore, where the constraints in matching the two lie, and what can be done to reduce the seemingly mismatched market.

### 4.2. Research design

McCracken (1988) considers the relationship between qualitative and quantitative researched early in his book. Quantitative research finds linear relationships between a limited number of variables and confirms information. Qualitative research discovers information and find patterns in a multitude of variables by asking difficult questions from the participants and then dive deep into the motivation of those answers (McCracken, 1988).

Continuing the metaphor used by Saunders and Lewis (2012) in describing the research project as different routes to decide on when travelling, this research design provides an important road map which was followed through the research journey. Yin (2011) refers to the design as a logical plan or blueprint which lays out the strategies of all the links around the research questions from data collection to analysis. The nature of qualitative studies though does not lend itself to any fixed design steps and variations are always experienced in the way a researcher tailors the design (Yin, 2011).

The fundamental ideas about this research into the supply and demand of innovation finance in South Africa have been built on an interpretivism philosophy which involves a human element and emotions. Understanding the constraints experienced by both investors and entrepreneurs in promoting innovation and the development thereof require a deep understanding of their environments. A qualitative design was used to demystify uncertainties identified in both the academic research and the business

environment, and the researcher anticipated getting a better understanding of the reality by having discussions with the participants as opposed to merely collecting responses. And what an amazing journey it was!

Previous research in this field does not provide sufficient information on whether the constrained innovation development through innovation finance exist within the supply or demand thereof. The information gathered did however deliver sufficient data to propose research questions based on research on various aspects of the research topic. Because this data was available, a deductive frame was applied to the first three research questions.

The final research question attending to suggested solutions that can be applied in South Africa, is very specific to the current environment and required a personal connection with the ecosystem in order to answer. The research about what can be done to narrow the gap between supply and demand for innovation finance in South Africa approached the research from an inductive frame and the responses from participants led this part of the research in a bottom-up approach (Yin, 2011).

McCracken (1988) studied one-on-one individual interviews and describe this as developing an understanding for the influence of culture on the experiences of the interviewee. Four stages are suggested basically referring to a literature review, which was done for this research (chapter two); a review of the researcher's own perceptions of cultural categories, which was provided in the research background (chapter one); cultural categories were discovered through the interviews of multiple participants in multiple disciplines (chapter five); and analytic categories were discovered and presented in the following chapter (chapter six) (McCracken, 1998).

An exploratory study seeks new insight and assess topics in a new light (Saunders & Lewis, 2012). The researcher conducted an exploratory, qualitative type of study which aimed to provide insight into the reasons for the country's weak innovation development in the context of innovation finance. Saunders and Lewis (2012) note the most usual ways of conducting exploratory research are searching the academic literature; interviewing experts in the subject; and conducting interviews. These steps were followed as suggested. Experts in the field of innovation accelerations were interviewed together with innovative entrepreneurs and investors providing finance for innovative businesses to be scaled.

To further strengthen the validity of the study the researcher used two strategies suggested by Yin (2011). By interviewing investors, entrepreneurs and venture development organisations (intermediaries), sources contributing to the research were

triangulated. And by reporting on literature arguing for both cases of where the constraint lies, discrepant evidence was considered (Yin, 2011). Further careful consideration was given to validity of the research by continuously monitoring the five principle factors from Saunders and Lewis (2012); subject selection, history, testing, morality and ambiguity about causal direction where relevant.

Data was collected through interviews with participants in the innovation development space, such as start-up accelerators, entrepreneurs with experience in fund raising, and investors involved in a variety of stages of investment. The data was collected at a single period in time from these multiple groups which define this as a cross-sectional study (Saunders & Lewis, 2012).

Yin (2011) suggest having multiple field settings when collecting data to support interesting and meaningful cross-site findings. For this reason, the researcher conducted interviews in and around Johannesburg and in addition travelled to Cape Town for a few days to conduct interviews with participants in that setting. All of the interviews but one were conducted face-to-face and the one participant who could not be met at his office in Cape Town, was interviewed over a Skype video call.

The research was done with the above design and the researcher believe that constraints in innovation finance and suggestions for narrowing the gap have in this way been identified to offer a platform from which to improve South Africa's innovation development.

#### 4.3. Population and unit of analysis

The population of a study is the complete set of members that belong to a group being researched (Saunders & Lewis, 2012). Researching the supply and demand of innovation finance involves two groups of interest being the **providers** of innovation related finance as well as **innovators who** are in a position to **obtain** and use **investments** from this group of investors. A third group of participants (triangulation purpose) were included in this research to obtain additional relevant information relating to the population. These participants are start-up incubators or accelerators who play a significant role in getting the entrepreneurs ready to present investment opportunities (ventures) to innovation investors.

Their role as early contact (to entrepreneurs and investors in South Africa respectively) and often introducer of opportunities, was vital to this research.

The units of analysis were individuals who are entrepreneurs (business owners) as well as senior investment professionals, and as participating interviewees they formed the units of analysis (Yin, 2011). Confirmation that participants are authorised to disclose the requested information was obtained in the Consent letter which also stressed anonymity of data provided. Anonymity was understandably very important to the participants, more predominantly the investors, who shared very interesting information about themselves and the counter party in their investment processes.

#### 4.4. Sampling method and size

As it was unattainable to consider the entire population for this research, a subgroup was selected. Saunders and Lewis (2012) state that an example of this subgroup can be a subset of organisations, which is what this research's sample was made up of.

Since the researcher have not been able to obtain a list of all innovation financiers and innovative ventures in South Africa, a non-probability sampling technique was used and in the case of this research it was a combination of quota sampling (to prevent any particular type of investor to dominate responses and ensure that a fair amount of venture representatives was also included), purposive sampling (where the researcher used his own judgement to select highly active units of analysis) and snowball sampling (to also identify other members of the population relevant to the research) (Saunders & Lewis, 2012).

Yin (2011) note that in order to include study units that will yield the most relevant data, purposive sampling should be considered. The significance of purposive sampling was relevant in order to have participants who have relevant experience in funding or fund raising and not participants who have not yet or would not take part in this process of connecting finance to the growth of an innovative venture. The importance of including participants who have different views was also highlighted by Yin (2011) and so applied.

McCracken (1988) suggest that no more than eight long interviews will provide sufficient qualitative data but does not provide support for how this number was determined. The researcher intended to interview 15 participants which included investors, entrepreneurs and incubation hubs or intermediaries. One of the interview recordings was corrupted upon downloading it from the device and as a result only 14 units of analysis was analysed but the researcher deemed the collected data sufficient and responses



saturated even without the one lost interview. These 14 interviewees include six investors, six entrepreneurs, and two start-up accelerators.

#### 4.5. Measurement instrument and data collection

Being a qualitative study, data was collected using interviews and since the research have provided some guidance to what information would be required, the researcher conducted semi-structured interviews (Saunders & Lewis, 2012). The interviews were recorded with permission from the participants, using a voice recording device (and in some cases two devices) as is recommended to be used with caution by Yin (2011). A few interviews were held at public social venues and the quality of these recordings (and amount of background noise) made the transcription task slightly more challenging.

As pointed out by Yin (2011), qualitative studies involve some fieldwork in real-world settings and interviews conducted for collection of data in this research was done at premises chosen by the interviewees. Given the fairly flexible nature of the target participants, interview venues ranged from the offices to homes of interviewees and even public social gathering venues (i.e. coffee shop and restaurant).

Each meeting was properly planned to ensure the researcher was prepared with required documents, information and sufficient time slots, especially for the meetings in Cape Town where as many interviews as possible were arranged to make the most of the time there. It was truly an honour to visit the offices of especially the entrepreneurs where it became evident how hard these small innovative teams work to become relevant market players. For instance, in Woodstock, Cape Town, more and more buildings are being equipped with the required technology and special planning for start-ups to thrive amongst each other.

Saunders and Lewis (2012) also recommend a few points that was paid attention to in preparing for the interviews. An example of such a point is finding out as much as possible about the participant. These authors also offer suggestions to how questions should be asked and again these were followed, for example “asking questions carefully and listening attentively to answers given” which ensured quality counter questions to really understand the motivation behind certain answers.

Other guidelines that were taken from Saunders and Lewis (2012) were suggestions on how to conduct interviews face to face as well as interviews using the web to accommodate travelling participants which was helpful for the Skype interview.

McCracken (1988) refers to a questionnaire but the term referred to in this research was a discussion guide, which was used to conduct semi-structured interviews. Three sets of discussion guides were created for the three different groups of participants with four general questions addressed to all participant.

Four general questions were asked of all participants:

1. Please provide a brief overview of your business?
2. What is your role in the business?
3. What is your understanding of this topic of innovation finance?
4. Where do you think the constraint of innovation finance is most significant, supply thereof or demand therefor?

Questions asked specifically from investors (suppliers of innovation finance):

1. How would you describe your fund's risk appetite?
2. Who or what businesses do you typically invest in?
3. What key aspects do you take into consideration regarding the investee?
4. What type of finance do you offer investees?
5. What are the external factors that influence your investment strategy?
6. How many prospects do you meet for every investment you make? (strike rate)
7. What are the more common reasons you don't go through with an investment?
8. Do you find prospective investees to be cautious in sharing information up front?
9. Would you invest in direct industry competitors?
10. Do you share intelligence gained from one investee with another?
11. What are the risks you consider before making an investment and how do you manage these?
12. What do you offer your investees that attract them to accept your investment?
13. How would you describe the current investment industry from an investor point of view?
14. From your experience, do you think South Africa delivers a sufficient amount of innovative business for the current supply of capital?
15. Do you think this level of innovation is enough to move South Africa from an efficiency-driven economy to an innovation-driven economy?
16. What advice can you offer entrepreneurs in order to better innovate and attract finance for their businesses?
17. What important trends in innovation finance do you find globally?

Questions asked specifically from entrepreneurs (demanders of innovation finance):

1. How have you used financing facilities in your business so far?
2. Which type of investors have you previously, or do you currently have in the shareholding/financing structure?
3. How would or do you go about finding investors for your innovative business(es)?
4. Can you explain what your first few meetings with investors were like?
5. What information did or do you prepare before meeting with a prospective investor?
6. What information do you perceive investors to be obsessed about understanding before they would invest in your business?
7. How do you define innovation in your business?
8. Looking at the local South Africa market, do you think there are enough investors to fund the innovative businesses starting to grow in numbers?
9. What important trends in innovation finance do you find globally?

Questions asked specifically from accelerators/intermediaries:

5. How often and how many innovative businesses do you introduce to potential investors?
6. What type of entities are most likely to invest in a young innovative business?
7. What process do you follow to match start-ups with investors?
8. What information do you advise these start-ups to prepare for investors and how often is this readily available?
9. Is there any information you find entrepreneurs not being too keen on sharing with investors early on?
10. What information do you find investors to be absolutely clear about prior to them committing any investment?
11. Where do you find the shortage to be between demand for and supply of innovation finance?
12. What can be added or changed to improve the current position of demand or supply constraints relating to innovation finance?
13. What important trends in innovation finance do you find globally?

#### 4.6. Data analysis

The qualitative data obtained from recordings of interviews with participants in the study was transcribed and word-processed and analysed as word data (Saunders & Lewis, 2012). This process was used to make sense of the data retrieved from the participants.

The transcribed audio recordings were validated for general accuracy and uploaded into a data analysis software program. The pages of data were then deconstructed and codes were identified at a granular level. These codes, which reflected key insights of data collected from interviewees, were collated into larger groups. Codes for the deductive part of the research were generated using the available literature and codes for the inductive part of the research were identified from the data (interview transcripts) (Friese, 2014). Two more phases were then followed in the analysis being interpretation and concluding of analysed data (Yin, 2011) and this is reported on in the following chapter.

Computer-aided qualitative data analysis software (CAQDAS), ATLAS.ti, was used to analyse the data. In the second edition of her book on qualitative data analysis, Friese (2014) share valuable insights in the use of software available for qualitative analysis of research data and ATLAS.ti in particular, by taking the reader “on a tour through a data landscape”. Some of the benefits of using computer software for data analysis processing are searching for or modifying code words and descriptions, counting code occurrences, and retrieve data on various criteria (Friese, 2014).

The data was only analysed after the entire data set was collected, transcribed and coded to ensure a comprehensive view was available.

#### 4.7. Research limitations

Certain limitations were evident in the research. Innovation and financial markets are strongly linked to innovation development of the country as supported by previous research, and this study therefor focussed only on supply and demand of finance for innovation, which consequently excluded other factors to its development such as government policy, education and skills.

Furthermore, the research did not attempt to take values of investments in account but rather only a few participants who were either involved in the financing innovation

process or not, which neglect to understand the impact of different innovation investment sizes.

The study also only included participants in two of the largest economic hubs of South Africa which exclude other cities or regions where either investors or entrepreneurs might not be as active and effective.

## 5. RESULTS

### 5.1. Introduction

In this chapter, the data collected through interviews with investors, entrepreneurs and accelerators in South Africa are reported. Questions asked through semi-structured interviews were aimed at determining whether South Africa's innovation development is constrained by providers of finance for innovation (supply) or delivery of innovative investment opportunities (demand). Suggestions were furthermore obtained from participants as to how investors and entrepreneurs can be brought closer together for innovation to grow faster through entrepreneurial ventures.

### 5.2. Main findings

The main findings of this research were that there exist significant constraints on both the supply and demand side of innovation finance in South Africa. If one considers only the number of participants identifying the constraint to be either on supply or demand side, the result would be that there is an innovation finance demand constraint. To clarify, not enough innovative businesses available to invest in.

The interesting part about a qualitative study is that the results can be investigated further. In doing so, constraints can be qualified and narrowed down to a supply constraint in very early, high-risk, usually pre-revenue stage, business funding opportunities, as well as a demand constraint in terms of the investment readiness or quality of innovative businesses requesting investments.

Some factors that are expected to motivate supply and demand of innovation finance are still relatively weak in South Africa, almost to the point where they are constraining supply and demand, but there seem to be a steady positive improvement.

Suggestions for how to reduce the delta between innovation finance currently being supplied and demanded in South Africa, are largely related to collaboration, corporate involvement, and education for investors, entrepreneurs and aspirants of both.

### 5.3. Table of interviewees

A combination of quota sampling (to prevent any type of investor to dominate and ensure a fair amount of venture representatives was also included), purposive sampling (researcher's own judgement to select highly active units of analysis) and snowball sampling was used to connect with below interviewees.

Table 1: List of interviewees

No.	Interviewee	Role	Organisation	Location
1	E1 Jhb	Founder CEO	Entrepreneurial business	Johannesburg
2	I1 Jhb	CEO	Venture Capital Fund	Johannesburg
3	A1 Jhb	Founder CEO	Accelerator	Johannesburg
4	E2 Jhb	Founder CEO	Entrepreneurial business	Johannesburg
5	E3 Jhb	Founder CEO	Entrepreneurial business	Johannesburg
6	I2 Cpt	Partner	Venture Capital Fund	Cape Town
7	I3 Cpt	Investment professional	Investment Holdings Company	Cape Town
8	I4 Cpt	Partner	Venture Capital Fund	Cape Town
9	I5 Cpt	Partner	Venture Capital Fund	Cape Town
10	E4 Cpt	Co-founder CTO	Entrepreneurial business	Cape Town
11	I6 Jhb	Investment professional	Investment Holdings Company	Johannesburg
12	E5 Jhb	Co-founders	Entrepreneurial business	Johannesburg
13	E6 Cpt	Founder CEO	Entrepreneurial business	Cape Town
14	A2 Jhb	Founder CEO	Accelerator / E coaching	Johannesburg

5.4. Research question 1: Which of the two groups of parties involved in supply and demand of innovation finance, experience more significant challenges in obtaining a satisfying version of the other?

#### 5.4.1. Relationship between finance and innovation

*“... if any country in the world wants to go and not invest in innovation, that is destined for failure.” (I4 Cpt)*

The inherent risk of innovation was expressed by multiple participants. An entrepreneur is left educating the investor on the innovation before a relationship can even be established. Innovation requires higher risk appetite and speculation and there is very little historical data to work from. The relationship between the innovator and the investor is heavily built on chemistry and estimations, rather than facts and scientific proof. This risk of the unproven, is further exacerbated in the commercial environment which further burdens the entrepreneur with challenges in introducing and scaling innovation.

*“So, a start up in Jo'burg is toxic. Cause no one can do business with you. If you say to someone in Jo'burg, I'm a start-up, they all go; that's lovely for you, but I can't do business with you because you're too risky.” (A1 Jhb)*

As innovation occurs more regularly and innovative businesses increase, the opposition and scepticism towards it reduces with every new introduction.

*“... once the first one comes, it's hard, it's slow and it's difficult and then the next two are sort of easier. And after you get three running, it sort of explodes. And that's how innovation works. One sort of validates the path and then the other guys follow quite quickly. So, we are seeing innovation.” (A1 Jhb)*

The innovation environment in South Africa is gaining momentum and the excitement was evident in the interviews with participants. The absolute necessity for innovation to be a relevant focus point came through very clear. One of the investors who has extensive experience in corporate innovation, and in fact founded a very successful logistics business prior to becoming a venture capital investor, noted how effective corporate innovation could be based on the support structure and platform it is built around. He then further argued that the larger the corporates become, the increase in systems and bureaucracy make it difficult for them to innovate which strengthens the case for entrepreneurs to innovate and supply to or partner with corporates.

*“Like, innovation is a process, it's not an event...” (I2 Cpt)*



*“In our tech space it's very, I mean it's crucial, it's like super relevant. But it's getting really interesting ...” (I5 Cpt)*

As one of the investors in Johannesburg so subtly put it: *“We are actually about marrying capital with innovation, that's our business.” (I1 Jhb)*

#### 5.4.2. Suppliers of innovation finance

A few stages of investment have been identified which is also in line with size of investments, type of investors, and business cycle of the entrepreneurial venture. Pre-seed is a stage where incubators get involved with very early start-up entrepreneurs who has an idea. This stage is also often self-funded by the founder(s). In the seed stage, the entrepreneur has developed a product which can be taken to market. The investors are typically accelerators and sometimes angel investors.

Angel investors also get involved in the next early stage round where revenue is earned without evidence of profit. This is usually the stage where venture capital investors start to take part in fund raising. From here, various series funding is obtained (A to C and onwards) from larger venture capital funds which could be followed by an initial public offering in developed markets or private equity investment funds. Corporate investors get involved in a wide range of stages, often not restricted by mandates.

In South Africa, the stages are not very clearly defined or separated by a large number of participants.

*“... in South Africa, we have to assume that we have to do the funding from A to Z.” (I4 Cpt)*

Of course, the suppliers of funding can also be and are often during the early stages of a venture, the entrepreneurs themselves. The accelerator programs offered to entrepreneurs emphasise the need for a lean business and bootstrapping, but stresses that the most important funding early on is obtained from customers.

*“Traction trumps everything, get traction, if you try and raise capital and you've got traction and you can bootstrap up your business for as long as you can before you can raise capital because capital doesn't validate your business model, customers validate your business model.” (I1 Jhb)*

Crowdfunding is still a relatively new funding option in South Africa. This platform can be used to collect donations for projects launched in the form of a crowdfunding campaign or pre-sell a product, which secures revenue as opposed to funding. Being able to secure a substantial number of pre-sales is potentially a method of validating demand for a product. Some interviewees thought that the market size of crowd funders is too small for it to truly prove that a new product being launched through a crowdfunding campaign is a viable concept, but the idea, although not attempted by any participants, was favourable amongst some.

*“... only now I have been thinking about it. But that seems to be quite an interesting way to go about it. I know there are some people that have started crowdfunding platforms in South Africa.” (E2 Jhb)*

*“The problem with crowdfunding is that in South Africa, there’s a lot of restrictions on crowdfunding. So, you can only do crowdfunding for charitable causes in South Africa.” (I6 Jhb)*

*“The crowdsourcing and crowdfunding, again I can’t see that working as a South African platform if you manage to get onto a global platform and scale it from a global perspective, Kickstarter and those, go for it.” (E6 Cpt)*

#### 5.4.3. Demanders of innovation finance

South Africa has a growing entrepreneurial climate where entrepreneurs innovate to improve services and products supplied to customers. This evolution is recognised by both investors and entrepreneurs alike. There is an increase in repeat entrepreneurs or entrepreneurs starting their second or third venture.

*“It’s definitely growing, we are starting to see some exits, we are starting to see some entrepreneurs who are in the second or third businesses, and with that happening you’ll see a lot more entrepreneurs with what I call execution intelligence to take their product and make it a business as opposed to staying as a product.” (I1 Jhb)*

The SA entrepreneurs backed by investors have big visions and a variety of demographics. Start-up founders attracting finance from investors range from young university leavers to middle-aged entrepreneurs with years of corporate experience behind them. A couple of investors identified a particular demographic they find more

investment opportunities to be originating from, as being from the white male profile. One investor narrowed it down further as them being middle-aged. The reason for this links directly to the strong reliability on personal networks that investments are sourced from.

*“So, we are all being accused, rightfully so, of why the majority of the companies we are investing in are typically the white male profile. So, I think what the biggest point is, what the big issue is, I don’t have a network in certain areas ...” (I4 Cpt)*

The experience and academic qualification of the entrepreneurs who were participants in the study were quite extensive, mostly professionals with a tertiary qualification from a well-recognised institution. This quality is highly valued by investors in their screening of investable businesses and investor participants referred to the lack of quality entrepreneurial teams.

*“So, to be honest, our latest investors were amazing with that. In that. I think what almost got us through is the team, but again I’m not going to sound arrogant or anything but I do think we’ve got an incredible team. None of us are good but the team specifically, I mean the CEO studied at MIT engineering, COO has an MBA, the engineers are all top of their classes.” (E4 Cpt)*

Technology plays a big part in most of these innovative businesses but it is emphasised numerous times that the tech is only an enabler to deliver the innovation.

*“Using technology to enable the service that you’re going to do to make it a better service for the company. But our focus is on the customer experience at the end of the day.” (E6 Cpt)*

*“Innovation (is) not only limited to technology, I don’t see innovation as doing technology.” (E2 Jhb).*

#### 5.4.4. Constraints as perceived from both sides

##### *Entrepreneurs / Demanders*

The first reaction of five of the six participating entrepreneurs to the question asking whether the constraint lies with the supply of innovation finance or the demand therefor, was that there isn’t enough supply.

The other entrepreneur’s first reaction was that there were enough entrepreneurs asking for investments but that the quality of those businesses was the problem, which would place the constraint on the demand for finance. This entrepreneur and his team obtained

an investment from a venture capital fund only a couple of weeks prior to the interview after being in a fund-raising process for months. The frustration felt by the entrepreneur was tangible as he further explained: *“I’ve been extremely disappointed in access to finance in terms of raising investments here (in SA); in the lack of risk that especially local players are willing to take.”* (E2 Cpt)

He further elaborated *“Yeah there definitely is money. I think they want to spend it but they want to spend money on a company that 99% is going to win. I mean there is no venture in that.”*

One of the five entrepreneurs mentioned above altered his opinion as the semi-structured interview progressed. An ex investment banker and repeat entrepreneur, the participant came to the conclusion that there are many investor alternatives in addition to investment houses if one also considers corporate investors who are continuously looking for external innovation to be brought into their business.

#### *Investors / Suppliers*

Again, the initial opinion of five of the six participating investors was that there isn’t enough demand to meet the current supply of finance.

*“I think the constraint is more on the demand side of finance. So, just to be clear, more of finding...opportunities. Because actually we’d love to be making more investments than we are, but it’s quite difficult with the narrow insurance tech mandate to build strong investable pipeline and we are looking at different ways of capitalising our kind of investable pipelines instead of just waiting for it. But we’re definitely not short of money and there’s real appetite to deploy capital.”* (I3 Cpt)

The other investor, a very early stage investor compared to the other participants, argued that there is a lot of funding available in SA for larger investment sizes in these innovative businesses but supply of innovation finance in the early stages, pre-revenue funding, is definitely the constraint.

*“Where something that’s got a bit of traction that just needs the money to really scale. There’s not a... where we play there’s not of a lot of money, like there’s, very limited. So, we all play anything like seed series A, like even pre-revenue concept.”* (I5 Cpt)

One of the five investors mentioned above also qualified her position by expressing that there aren't enough fundable businesses available and then continued with; *"It's a bit of a chicken and egg, and maybe there would be more fundable business if there was more funding available because what we do see a lot in South Africa is a lot of the talent still sits in corporates."* (I6 Jhb)

#### *Venture development / Accelerators*

Even the two venture development organisations, business accelerators, have a difference of opinion going by their first response to the question of where the constraint lies.

*"There's no risk capital in this country."* (A1 Jhb)

*"So, I think there's just a massive shortage of people who do not know what they are doing...I think the decent entrepreneurs have no issue raising money in this country."* (A2 Jhb)

#### *Constraint summary*

At first glance, there seem to be opposite views of where the constraint is more significant, although leaning more towards a constraint in demand for innovation finance. However, when analysed a little bit closer the perceived constraints can be narrowed down to two positions.

1. The constraint in supply of innovation finance is not in the entire industry but rather availability of finance for high-risk, very early stage ventures.
2. The constraint in demand for innovation finance is not in the quantity of entrepreneurs requiring finance but rather in the quality and "investability" as referred to by investors.

*"I think the constraint really is not the ideas, not the products, there are lots of great ideas of products in South Africa but what the answer is, is what I call execution intelligence. There are lots of million-dollar ideas but there are not a lot of million dollar entrepreneurs who can take the idea and build a huge business."* (I1 Jhb)

*"There is vaguely enough money but we can do with more money, but there is enough money and there are enough entrepreneurs. The mismatch is what we call the packaging crises. So, as a fund manager, I am not an angel, I have to*

*invest according to a mandate and I have to make sure the money goes into a company that can handle the money. I have to do the due diligence, I have to make sure that certain things are checked and that's edging the point. So, when it comes to entrepreneurs who come with an idea, with a business, and a lot of times what they have doesn't fit into what I have to offer, what I can do." (I4 Cpt)*

*"And I think that to anyone who says that there isn't; funding available in South Africa, that's just wrong. We're enough second time entrepreneurs who made a bit of money, there are enough high net-worth's, there are enough corporates who want to be seen to be doing innovative stuff. There's enough, sort of, even though they might not be the most sophisticated, venture funds of sorts. And then there're enough later stage funding...There is enough funding, it's just a very asymmetric funding environment." (I3 Cpt)*

*"...angel investors who are sort of tinkering around and we don't have seed investors, we don't have series A investors, and then things start to get interesting around series B and series C, people start coming back into the space." (I6 Jhb)*

In general, the participating entrepreneurs seemed to be getting to this realisation of an unbalanced finance availability across the various entrepreneurial funding stages, sooner than the participating investors. Investors had to be quizzed slightly more granular for the same investment stage constraint to be identified.

Participating entrepreneurs with years of executive management and consulting experience, who were fund raising with a developed concept which was at pre-revenue generation stage, said: *"So like I don't know how many people were looking for the same type of funding we were at the time we were looking for it, but what we know for sure is that there is definitely a supply problem and it's not like we had a 100 people we could call... But again, we are a very unique team with very unique track record and network and for us not to know where to start is quite scary" (E5 Jhb)*

*"...if you're looking for 50-100 million or a 100 million plus, I think your options are a lot more than if you are looking for less than 20 million." (E5 Jhb)*

*"...when you have proven a little bit of concept and you are looking to raise money, there's very few people (investors). They talk the talk, but when it comes to putting pen to paper, they don't." (E6 Cpt)*

*"...in South Africa, I'd say the funding gap for that transition from innovative idea to actual small prototypes / business ready for the attention of a slightly more important funder, is exceptionally low." (E1 Jhb)*

## 5.5. Research question 2: What factors influence investors to make or withhold investments in innovative ventures?

### 5.5.1. Motivating factors for investing in innovative ventures

#### *Return on investment*

Venture Capital investors are positive about their prospect to raise larger funds and the number of individuals still willing to invest in these funds.

*“It was easy to raise, we’ll raise a hell of a lot more...” (I1 Jhb)*

Return on investments from traditional investment asset classes are not attractive for investors or fund managers who need to deliver better returns for their clients. Interest rates are very low which reduce the return on cash and bonds and in order to improve the overall portfolio returns, more funds are allocated to alternative investment classes such as private equity, which include venture capital.

*“... investors are looking for yield. Globally not only in South Africa. And yield is not presenting itself in traditional asset classes. So, it’s not presenting itself in this equity...bonds and property yields are low, commodities ’re all over the place so people are looking for yield...People with money are looking for a place to earn a super normal return and there is a lot of liquidity.” (I2 Cpt)*

*“... very low interest rates and very rich listed equity valuation in the developed markets which is seeing a kind of push into alternative asset classes by large institutional investors in a kind of search for yield.” (I3 Cpt)*

Investors in innovative businesses have very high investee growth targets which, should it realise, provide return on investments at a significant premium over the less risky assets in traditional investment portfolios.

*“I want a 10x return, ten times my money, I put in a 10 million in I want a 100 million back in 5 years so I need the top, top entrepreneurs...” (I1 Jhb)*

*“Some guys are speaking about 25%, 30% return...Over five years” (E3 Jhb)*

*“If a company cannot see that I can make 10 times my money within 5 years, then I rather have a look at a different field...” (I4 Cpt)*

### *Pay it forward*

Successful entrepreneurs who sold their businesses or a stake therein for a considerably large acquisition price, are starting to use some of those proceeds to invest in new ventures founded by other, often young entrepreneurs. This builds momentum for a culture of entrepreneurial businesses to be established. This is already occurring very regularly in the United States and it is starting to find traction in South Africa.

Successful rich families form part of this group committed to help the next generation of entrepreneurs succeed.

*“There’s a few players that are out there that have made lots of money and they’re backing ventures. Big families.” (I2 Cpt)*

*“... a place like Silicon Valley, there’s a very strong culture of pay it forward. So, if you are a successful tech investor and you get a big exit, there’s a very strong culture of you then invest in the next generation of entrepreneurs and become very involved.” (I6 Jhb)*

*“Look at what Mark (Shuttleworth) did, he went and set up Here Be Dragons, which became Knife and now Keet and those guys have been involved in the ecosystem, and all of the impact with one exit.” (A2 Jhb)*

*“... actually, what Keith is doing is one of the better ideas. Is get successful tech entrepreneurs to get involved in programs to build a bit of a community.” (A2 Jhb)*

### *Clusters and community culture*

In general, participants expressed concerns regarding a significantly underdeveloped ecosystem for the development of innovative businesses in South Africa. This ecosystem is important for both entrepreneur and investor as well as aspirant entrepreneurs and investors.

Investors are unable to find the quality of entrepreneurs that they describe as being investable and don’t have a process for filtering through the potential investment opportunities. There are also very few platforms serving as intermediaries that can introduce parties to each other. Stages, and investors in these different stages of investment, are not clearly defined in South Africa which creates more uncertainty in terms of the entrance and exit points for investors.



*“We spoke to a lot of people with money that can’t find investments, we talked to a lot of people with ideas that can’t find founders so there is a structural problem with connecting supply and demand.” (E5 Jhb)*

*“We don’t have a big enough entrepreneurial ecosystem in South Africa. Guys have been there, done that, exited and now are starting the second, third or fourth business like you find in the US, I don’t think we have enough of that.” (I1 Jhb)*

*“... there need to be a bit more angel, because if you look at why some of the biggest and the best entrepreneurial ecosystems is where there is a big angel community.” (I1 Jhb)*

*“It’s a dysfunction ecosystem... what’s important is, you get deals flowing if you know what I mean. So, we try to do the match but also, we’ve been trying to figure out the whole ecosystem, to see what’s working.” (A1 Jhb)*

*“... so, the first thing was, and it was one of the things that I noticed coming in to this space is our eco-system is very broken.” (I6 Jhb)*

Entrepreneurs need mentoring to help them through the process. Some entrepreneurs who have been through the process of early stage business development and fund raising would like to offer their knowledge to new entrants but don’t know where they can be introduced to them.

*“There is good people (current entrepreneurs) to sit in front of entrepreneurs and say, this is what to think about. We are the guys to do it, and even if you wanted to, where do I go?” (E5 Jhb)*

Observers of the industries, aspirant entrepreneurs and investors, are unable to see the work being done and the progress made in developing innovative businesses and earning good return on investments.

*“I guess, just building a system where firstly the entrepreneurship is seen as an aspirational endeavour by young people.” (I2 Cpt)*

What currently serve as motivation for investors, is Cape Town’s entrepreneurial ecosystem which is admired by many participants. Investors notice a growing presence of accelerators and angel investors in Cape Town. The scenic geographic location and relatively low cost of living are attracting investors to settle there. There is also a growing technological skillset developing under entrepreneurs which improve the quality of

technology based products developed in Cape Town. The local government's involvement has also been mentioned as a positive contributor to a favourable environment.

*“There’s that middle ground where somebody who’s not networked, who’s looking for funding, has built something which has merit and substance, and it’s that thing that’s started to formalise with things like TechStars as an example.” (I2 Cpt)*

*“I think we’ve got a phenomenal ecosystem in Cape Town. We’ve got a centre of excellence there, I mean the tech skills that are sitting in Cape Town...and you’ve got a bit of an ecosystem that’s becoming a self-fulfilling prophecy there. You are getting some really good business coming out there, who are getting some significant traction that can compete globally and I think one of the areas that we can actually really compete on is Fintech... So, if you look at Cape Town, you look at Stellenbosch I think those are some serious IP generating hubs.” (I6 Jhb)*

*“The thing is that why things are going well over here, there’s a bit of a seed developing and people, tech people which it all pivots around, it’s all some form of tech, like they want to live in nice places like San Francisco and Silicon Valley. It’s got all the same attributes. It’s got all, it’s got the universities, it’s nice to live here and also it’s relatively, compared to the rest of the world, cheap...” (I5 Cpt)*

*“You got the guys who have made money in South Africa, are all sitting down in Cape Town and Stellenbosch and then they are meeting with the entrepreneurs, so you’ve got the starting of an eco-system. We don’t have that here (in Jhb).” (I6 Jhb)*

*“... where I was like; Joburg ecosystem is up and coming, I remember reading a Ventureburn article and they listed all the exits and there was something like 22 exits, one was from Joburg all the rest were from Cape town.” (A2 Jhb)*

Two entrepreneurs in particular did not share this sentiment. They were fairly content about any benefit that could exist by being based in Cape Town as opposed to Johannesburg.

The first entrepreneurship is based in Johannesburg and had a tough time raising funding for their pre-revenue venture which was eventually obtained from a corporate investor based in Stellenbosch. They highlighted the fact that the two cities are a mere two hours’ flight apart but eventually agreed that being physically close to early stage investors may be a benefit for young start-ups.

The second entrepreneur, based in Cape Town and has recently raised venture capital funding from a VC in Johannesburg, admitted to only being in Cape Town because of the favoured natural environment and explained that the nature of his business allows for him to not be dependent on having a physical presence in any specific location.

The way in which the community or country culture reacts to success or failure of entrepreneurs or investors differ, and some participants referred to the way in which failure in particular is punished in South Africa. In a country like the United States the attempt at entrepreneurship or investing in start-ups is celebrated and a next attempt encouraged.

*“There’s the blame-base culture and there’s the shame-base culture. We are a shame-base culture in South Africa. America is... And what that mean is: A blame base culture is a better base culture because it means... I had a go, I tried, and I’m not embarrassed. So, in America there’s a blame base culture, which is basically; I spent some money and everyone goes; oh well done for trying. In South Africa, all of the angels have emerged (but) we have a shame based culture. You can only talk about it once it’s successful, because they don’t want to be seen to be idiots, they don’t want to be seen to be fools.” (A1 Jhb)*

*“As a whole on South Africa, and it’s true for us too, we’re likely to be more risk averse invested.” (I3 Cpt)*

*“The fall down in South Africa often happens is that South Africans are risk averse by very much nature, they are looking for reasons not to do something.” (E6 Cpt)*

#### *Tax incentives*

The introduction of Section 12J company tax incentives have largely been welcomed by venture capital fund managers. This initiative by government to provide tax incentives to investors in venture capital funds have caused an increase in company registration of venture capital fund managers. These managers are also positive about the prospect of finding more investors.

*“... 12J is fantastic, which is promulgated by SARS in 2009. Growvest...was the first company, there is now about 50 Section 12J companies but it’s a very, very nice tax incentive.” (I1 Jhb)*

*“...you’ve got some innovative stuff like 12J, which is, I think, the intent is right, the structures not exactly right, but they can modify every year and can introduce amendments and improvements.” (I2 Cpt)*

*“I mean I think the 12J is a nice attempt, it still needs to be fine-tuned. So, they have the core values but I think it’s better to have it than not to have it and there’s definitely created some interest.” (I4 Cpt)*

Some criticism was also received in terms of limitations to what these fund mandates can include but the general opinion was that the Section 12J regulation is a good start. There are some concerns that the section 12J tax incentives are still not utilised by many individuals who have the potential to gain from it.

*“But those guys with the million rand bonuses are not the guys that are the investors. They’re the guys that are running around as angels are the guys with really big cheque books that have made that kind of exit. So, most of the income guys aren’t playing.” (A1 Jhb)*

#### 5.5.2. Constraining factors for investing in innovative ventures

##### *Innovation is inherently risky*

One of the reasons investors are cautious to invest funds in innovative businesses is that innovation, by its design, contains high risk for failure due to the unpredictability of its success. Historic information to base forecasting of revenue on does not exist for start-ups and in cases where the start-up is extremely innovative, the commercial value of the innovative product or business model is not yet validated which increases the risk for investors.

*“In our business and in like in any other business especially when you come with an innovative idea, what are the projections based on? You know, there is nothing, it’s nonsensical.” (E1 Jhb)*

*“...the sector in which we are involved today is relatively better well known. 5 years ago, 6 years ago, primary health care specifically, everybody thought it was rural clinics, mobile clinics and stuff like that and so... I had to educate the investor about a sector so, already he/she is not particularly interested...” (E1 Jhb)*

*“When you have an innovative business, because you are doing something different, there is no historical reference, to start from. And which obviously then makes it difficult to know from the onset, how big your market is because you don’t know. And secondly, when it comes to projections. What are you projecting?” (E2 Jhb)*

#### *Financing risk*

Investors often recognise the likeliness of a business needing more funding at a later stage which they themselves won’t be able to provide. The result of not following a later funding round could be dilution in equity stake or having to sell its share in the business prematurely and leaving potential returns in the business for the larger investor. This constraint was noticed more at venture capital funds where there is a specific fund size or mandate limiting the size of the exposure to one investment. For investment holding companies this is less of a concern due to a large balance sheet available for investment and no mandate prescribing the exit period.

As one of the venture capital investors noted: *“...in South Africa, we have to assume that we have to do the funding from A to Z.” (I4 Cpt)*

*“Many VC’s don’t have the ability to do follow on funding rounds, so more often what will happen is a business might get funded once, but doesn’t have the ability to get ongoing funding, or at least not easily, or investors will find themselves in the position where actually they end up doing more and more continued funding to avoid watching their kind of initial investment dry out, whereas actually that’s not appropriate for their risk profile.” (I3 Cpt)*

Investment holding companies have a more flexible position: *“I think where we are fortunate is, because we invest off quite a large group balance sheet, if something is successful, we can quite comfortably fund it through multiple funding...” (I3 Cpt)*

#### *Low quality entrepreneurial teams*

Most investors claim that the entrepreneurial team is the most important consideration for them. A good team reduces the risk an investor takes in an innovative business. Investors have a few characteristics they’d like to witness such as honesty, integrity, balance of skills amongst the founders, as well as experience in the industry or as entrepreneurs. There should also be a sort of chemistry between the investor and

entrepreneurs which improves the quality of relationship they will have over the next few years.

From the number of good quotes, one can tell this was a very thoroughly discussed topic that investors have many opinions on.

*“Team is very important so we will look for kind of strong founding teams...it might be their first entrepreneurial business, but if it is then some kind of deep sector expertise or some kind of track record in that field” (I3 Cpt)*

*“That’s probably the thing we look at the most, is the strength of the team. That’s most important for us.” (I6 Jhb)*

*“I mean I know everyone says that, but the team is the most important thing. We have walked away from great investment opportunities, simply because the team wasn’t trust worthy. Integrity is kind of the key thing.” (I4 Cpt)*

*“There’s enough that can go wrong in business so you don’t need a dishonest person to compound your complexities.” (I2 Cpt)*

*“The other thing, you want to look forward to meeting these people, which is an important thing, because inevitably you’re going to be engaging them on difficult issues, because early stage business. All business is hard.” (I2 Cpt)*

*“The bigger guys do look at the teams. And that is why I am telling you, they even tell you “I would like you to work with this engineer, that quantity surveyor and that agent”.” (E3 Jhb)*

*“...we’ve also started now to try and not invest in single partners because it’s really tough.” (I5 Cpt)*

Investors also need the team to be able to have a strong commercial understanding of their business and this is where quite a few South African entrepreneurial businesses don’t convince the investors. Entrepreneurs interviewed who secured investments all have very strong commercial backgrounds and experience in management positions, often internationally. This was however not something investors found to be very common, and a lack of industry knowledge and understanding by the entrepreneurs are one of the more frequent reasons why investors did not commit funding to a start-up.

One of the entrepreneurs pointed out the lack of a marketing personality in the team without which they were still able to expand the business thanks to significant experience the team gained as consultants and business executives. One of the investors mirrored

this opinion that you don't need an extrovert to have a very good business but you need to be able to get the product successfully to the customers.

*"Interviewer: Do you find these tech guys to be quite commercial as well?"*

*Interviewee: No. A lot of them struggle. So, the best teams have a tech and a commercial guy." (I5 Cpt)*

*"...the one piece we don't have it's the markety-smoozhy, your stereotypical king of bull\*\*\*\*t founder. We haven't had that which's been interesting because in a lot of conversations with potential investors you know, a year ago it was okay, who is the sales guy? And I was like we don't have one, we build businesses, we run businesses, we're not here to overpromise and underdeliver." (E5 Jhb)*

*"But you do need sales ability and you find that key abilities that you've got in an entrepreneur...that's sitting in the back room. Who's gonna sell their product and their idea? (I2 Cpt)*

*"I think it's also a bit of a gap in the South African talent pool around running small companies and that's where a lot of the guys that get involved in this kind of space, move from corporate to small business and it's chalk and cheese, it's the transition, it's not a switch." (E5 Jhb)*

*"...we've earned our stripes in terms of working both locally and globally along the team. So, we've got someone who's got a Cambridge MBA, worked 10 years in pharmaceutical world. I'm a CA, I have worked in 30 markets around the world." (E6 Cpt)*

*"What's becoming quite clear is that the guys are often not organised with their own business and their own metrics... You know they don't have a dashboard of any sort on their business. Even if they're spending money, what are you spending, where are you spending." (I2 Cpt)*

*"...one of the things that we found most common, is the guys at the business don't understand the industry, and it goes back to my point that they have often developed an interesting product but they haven't got a business. That's another very common thing" (I6 Jhb)*

### *Investors in funds*

Based on the financing risk that especially venture capital funds experience, the size of investments in innovative ventures with high potential for future growth, are substantial. This limits the majority of individuals to participate in investing in these start-ups directly.

Some investors are very optimistic about the prospect of finding investors for their funds and many have been successful in raising follow-up funds. But not everyone is this confident in the sources for venture funds and would like more participation from institutional investors.

*“So, we're on our second fund right now. First fund was a general tech fund. It had three major, sort of wealthy families investing.” (I5 Cpt)*

*“It was easy to raise, we'll raise a hell of a lot more...” (I1 Jhb)*

*“The issue is; who do you know that invests in VC in South Africa. You (PE) have got almost every (pension) fund in the world sort of giving you money, nobody that's in VC. It's always out of mandates.” (I4 Cpt)*

Due to the limited number of willing investors in early stage investment funds, the sizes of venture capital funds in South Africa are often too small to sustain or afford an experienced investment team and in addition also contribute to the financing risk addressed earlier.

*“The way the fund works is; if you raise a hundred-million-rand fund, there's a 3 % administration fee on the fund ... 3 Million rand. So, I've got to now employ a VC team for 3 million rand per annum to disperse the fund ... Two cheap guys maybe. So, I'll take two guys at a bar each. And I'll take a bit of admin staff at the office, so that's your other bar gone. So, I've got two guys I'm paying eighty thousand rand a month to start a VC. And I've got to disperse a hundred million rand. So, if you got a hundred million rand to disperse, I've got to get it out the door in eighteen months. I can't do the one to two-million-rand tranches; I've got to do eight to nine million (rand) tranches” (A1 Jhb)*

Syndication is one way for investment funds to overcome the constraint that is presented by large investment requirements and is further discussed later in this chapter.

### *Physical distance between investor and entrepreneur*

This topic was discussed under the benefit of a local entrepreneurship culture or clusters developing which motivate further expansion of investments. Some circumstantial



evidence may suggest that very early stage investors are more active in proximity to their own location but it couldn't be confirmed and two entrepreneurs in fact disproved the absolute necessity to be geographically very close to the investors.

#### *Lagging regulation*

Section 12J has been discussed and is mostly acknowledged to be a positive implementation by the South African government with potential for inspiring investment in innovative businesses, but with room for improvement. The act is based on similar legislation implemented in the UK but with some important limitations such as prohibiting 12J venture companies from investing in financial services. Given the strong financial ranking South Africa has in the global competitiveness index and the potential for fintech growth in the country, this limitation is unfortunate.

*“They took the SEIS Act in England, took out all the useful clauses.” (A1 Jhb)*

*“Well they say financial services. ... But you could probably do fintech if it was technology you were selling. ... If you had to have a license, an FSP license of some sort... I think that would be a problem” (I2 Cpt)*

#### *Lack of syndication*

The benefit of syndication has been noted to be a good method for mitigation or sharing of risk between investors as well as sharing of knowledge or expertise. Two of the investors collaborated with venture capital funds in other countries for recent acquisitions and one of the investors engages in syndication locally in South Africa. Another investor felt especially strong about the lack of syndication amongst South African early stage investors.

*“...so obviously a lot of the local guys aren't like massive funds so everyone wants to back something but they realise that's it's going to need more and more funding, so we've got to do it together.” (I5 Cpt)*

*“And this country there's no spread betting happening. So, if you don't spread the bet, you have your risk in too few businesses, you need a business to succeed, you place an onerous burden on capital... You have to succeed.” (A1 Jhb)*

*“So, the big point is who is there to syndicators with.” (I4 Cpt)*

*“...unless I know the people extremely well, I would always want to be the lead investor in something I invested in because I have been in shareholders’ meetings where the shareholders have killed the company because (of) internal fights between shareholders.” (I4 Cpt)*

I4 Cpt’s point about the risk of having multiple shareholders was strengthened in a way by a concern highlighted by the entrepreneurs who do not want to be managing multiple shareholders.

*“...we don’t have to have 5 different shareholders across the table and that becomes a full-time job to manage.” (E5 Jhb)*

Reference was made to the success of this syndication process in the United States and its effectiveness in reducing risk for the investor by making it possible to have exposure to a larger number of innovative businesses.

## 5.6. Research question 3: What factors influence entrepreneurs to pursue or reject innovation finance?

### 5.6.1. Motivating factors for approaching providers of innovation finance

#### *Oversupply of available funding*

This opinion is not shared by many entrepreneurs but as pointed out by the majority of participants, there are at least some investment stages which has an abundance of finance available for innovative businesses to support the scaling process. In particular, the stages where investments of between R8 million and R9 million are made to acquire 20 to 30% of a business which then suggest values of between R26 million and R45 million.

This large amount of available finance should make it more likely for good innovative businesses to find investors willing to commit funding towards the growth of it.

*“I think the decent entrepreneurs have no issue raising money in this country.” (A2 Jhb)*

*“...let me guess; it’s a hundred-million-rand fund and you’ve got to do eight to nine million rand tranches? And then they go; ‘yes’... So that sector is the post-profit, PE investor market. ‘But I’m doing an eight to nine-million-rand investment to take a 20 to 30 % stake in your business.’ And you’ve got three to five years*

*of trading history and you're in 3 to 5 years growth cycle. Great. And that market is well served also.” (A1 Jhb)*

#### *Funding exists for various stages*

Innovation finance is available for businesses throughout the development stages, from developing a product off the base of an idea, to growing or scaling an established small business. As mentioned multiple times by interviewees, there are shortages of investors in the very early stage and investors who do make funding available in that stage can afford to be very selective in their choices for who to back.

*“There's not a... where we play there's not of a lot of money, like there's, very limited. So, we all play anything like seed, series A, like even pre-revenue concept...there's not a lot of people that are prepared to do that. And that's where the blockage lies.*

*Interviewer: So then that means that... you make your pick...*

*Interviewee: Well that's, that's right. So, we get, we are lucky, we don't do any marketing. We don't get to do any, anything really. We don't have, on purpose, we don't have any contact details on our website and we're still getting like most of...we get to see most of the deal flow around in that space. (I5 Cpt)*

Entrepreneurs do not think that there are enough investors to motivate them to apply for finance early on in their businesses though, which lead to them applying a technique called bootstrapping which is basically running operations of the business with as little cash requirements as possible.

*“I'd advise any entrepreneurs to bootstrap as long as they can, get some traction, get some referenceable clients, start showing growth and then you go to a VC for growth capital, not for Angel Capital and seed capital, that's a very different asset class.” (I1 Jhb)*

*“Interviewer: How long have you been bootstrapping there?”*

*Interviewee: 3 and a half years but sorry within that process one of our staff members put some money in himself, like an internal raise” (E4 Cpt)*

*“...that was self-funded, that was bootstrapped from day 1. I have been fortunate in that obviously, myself and my partner at the time, we managed to save a little bit of tin given our levels and we were single at that time and didn't have responsibilities, at that time and that kind of stuff, which is very key” (E6 Cpt)*

### *Complimentary benefits to obtaining finance*

In addition to obtaining financial resources from investors, entrepreneurs also get the benefit of becoming part of an elaborate network of business connections and knowledge sharing.

*“Number 2 is relationship capital, so they need us to open doors and open up in a bank or whatever it might be, the networks, that’s number 2 which I call relationship or social capital.” (I1 Jhb)*

*“What we do is we get all our guys to collaborate between themselves so we go away for a camp, for a weekend and everyone presents their business.” (I5 Cpt)*

These networks offer commercial benefits as well as access to more funding for later stage growth. When the time comes for the entrepreneurial team to be strengthened, the investor networks also offer opportunities to obtain the required talent.

*“Just access to networks I think, and expertise and strategic insight.... I think apart from immediately finance or sort of in terms of later investments opening doors.” (E4 Cpt)*

*“We bring in a scenery exec as a, kind of, minority shareholder that we want to spend time in the new business, that has a good industry network.” (I3 Cpt)*

Three of the investors that participated as interviewees and both the accelerators, currently are or have been entrepreneurs prior to taking up these investor roles. Having been in similar positions as the entrepreneurs they invest in, these investors offer a more congruent value in their advice which the entrepreneurs relate to.

*“...we’re a bit different to other VC’s as we are all entrepreneurs like we’re not finance guys or corporate guys...” (I5 Cpt)*

Other entrepreneurs find a deeper purpose from their investors such as making an impact in the lives of others.

*“...it was a development bank and what made sense, why it makes sense for me to go with them is that they are development focused. So, they were not looking necessarily to take value out of the business and pretty much leave me to do what I want to do, but what gave them appetite for this is because it helps them reach their development objectives, so in-terms of house care, but also employment in communities.” (E2 Jhb)*

The big challenge for entrepreneurs is that you also need to be connected to a network to find an investor.

*“93 percent of all deals are done through network. SAVCA did a survey in 2014 where they asked, so 93 percent of all deals come through network. I have done one deal ever through e-mail and everything else has been through networks or referrals.” (I4 Cpt)*

#### *Receiving mentoring*

Mentoring links back to the point made above about the investors who empathise with the position the entrepreneurs find themselves in.

*“So, the mentorship capital thing really is, we mentor them. We’ve got 200 years of experience in our board (of directors) so we spend, they need advice, they need mentoring we mentor them, very, very, important for these young entrepreneurs who haven’t been there, who don’t know what they don’t know and then you mentor them through the guidance and coaching” (I1 Jhb)*

But not all investors offer this mentoring benefit and not all entrepreneurs interviewed anticipated a need for it. The maturity of the entrepreneur has a lot to do with this. Some investors prefer investing in an innovative business led by someone who gained significant previous corporate experience and these entrepreneurs prefer not having their hand held through strategy and operations. For these entrepreneurs, the value offered by the investor lies more in access to their networks than being mentored.

*“We tend to prefer to find the entrepreneurs who don’t need a lot of hand holding as opposed to sort of manage them.” (I3 Cpt)*

*“I think...can we trust the person sitting across the table is extremely important on who you do business with. And in terms of, you know, skills and that type of thing, I think it was more about what networks can open up for us, is there other networks that we can tap into because we are partnering with you. But I don’t think there was a specific skillset, that we need some operation expertise...” (E5 Jhb)*

The younger start-up entrepreneurs benefit most from having mentoring investors and it is reflected in them expecting more than just access to larger networks from the investors.

*“...access to networks I think, and expertise and strategic insight.” (E4 Cpt)*

There is a level of over-confidence, almost arrogance, that prevent entrepreneurs from learning faster.

*“I don’t know if it’s true for young entrepreneurs all over, but there’s certainly... even in the businesses we’ve invested in, there’s certainly at the amount of hubris and overconfident you know. I think that the willingness to just learn and the willingness to put yourself out there and ask for help...” (I3 Cpt)*

#### 5.6.2. Constraining factors for approaching providers of innovation finance

##### *Losing intellectual property (IP)*

Many investors testify that overly cautious entrepreneurs cause considerable frustrations. Investors are requested to sign a non-disclosure agreement (NDA) before entrepreneurs are willing to share detail of the innovative offering. In general, this is not something the investors even consider adhering to.

*“Yeah everyone asks us to sign NDA’s and all that kind of stuff, yeah, we don’t sign NDA’s. If we signed any we wouldn’t be able to talk to anyone. And we...we’re professionals I mean, you know. We’ve got no... We’re not, we don’t go and steal people’s ideas and go and build them for ourselves.” (I5 Cpt)*

Sharing too much information is a valid concern for many entrepreneurs who believe in their idea especially when it is very early stage and there is a risk that a large competitor with more financial resources could have an offering to the market before this entrepreneur. Some entrepreneurs would review the current investment portfolio of investment funds to find out if there are any direct competitors to their offering already in that portfolio.

*“I think guys are sensitive to... And I can understand it as well. We’re asking people to reveal everything and they don’t know if you’re serious or you know. We often say to people okay listen, in the first round, don’t send us everything...” (I2 Cpt)*

*“I look at what the investment portfolio is. So, if they have got something playing in the same space or could easily adapt and work, then I get a little bit more reserved in terms of what I am sharing but other than that the investors don’t have time to execute.” (E6 Cpt)*

Proving the point, but to overcome the risk of losing intellectual property, an entrepreneur in the property sector was arranging a public launch of his innovative design for residential property estates. During fund raising the team did not want to provide all the information because: “...we were trying to protect the idea.” (E3 Jhb)

*“...we decide to do the launch...I invite some of the colleagues, some of the potential investors that I know from my own network and I show this is what the company is about. More like a market launch. Then the project is on the market and then they cannot steal it.” (E3 Jhb)*

#### *Losing competitiveness through portfolio collaboration*

Most participating investors have a dedicated industry target in which investments take place which means that the investees in their portfolios have some similar elements. This is what was referred to by E6 Cpt above, but it's not something that seemed to be of great concern to all entrepreneurs whose priority was rather on firstly securing an investor.

*“...I tried knocking on every single door, institutional door that I could think of. What I didn't do correctly is identify what the corporates were interested in.” (E1 Jhb)*

*“A lot of it (finding investors) was literally like (using) Google, and we didn't have a specific strategy to be honest.” (E4 Cpt)*

Investors were rather clear in debunking this idea of losing competitiveness to other investees in their portfolio. Although fund managers have to maximise return for their investors, the best outcome for their investees is very important. Collaboration within businesses in the portfolio is also encouraged.

A reply by one of the investors based in Johannesburg on whether they will invest in competitors, serve as a good representative summary.

*“We typically wouldn't because we don't want to back one and not the other one, but I mean if there was some logic or they could work with each other, one and one equals 11, we would actually look at it. We are there to make our shareholders money. So, if it makes business sense and we could get the synergies out of both of them, not competing but collaborating, then absolutely.” (I1 Jhb)*

### *Failing to obtain follow-on funding*

Similar to investors understanding that they may lose shareholding percentage, control or their investment completely due to insufficient funds for follow-on funding, some entrepreneurs also understand and consider this when fund raising. But again, it is not an immediate concern for all entrepreneurs.

Entrepreneurs who attract corporate investors or investment holding companies feel most comfortable about these investors' ability to support them in further rounds of fund raising.

*"We definitely wanted someone long term for the reason that we don't want to be spending our time capital raising... They are really full sweet and they got really, have deep pockets so whether it's third round, fourth round, fifth round we can go back..." (E5 Jhb)*

*"...I mean we've got... (a few) billion. It's very unlikely that these things are going to get too big for us." (I6 Jhb)*

### *Losing control of the business*

Some investors are taking advantage of entrepreneurs, offering funding in return for a significant and sometimes controlling share in the venture. Even when the entrepreneur agrees to losing shareholdings, losing control means they become employees which is something most entrepreneurs will not agree to.

*"Most VC investors in South Africa will start taking at like 40% equity. Between 40 and 60%, which is punishing to an entrepreneur and very counter culture to like a Silicon Valley." (I3 Cpt)*

*"...a lot of funding, you see, is premised on equity and strategic control. And the person who has got the idea, the entrepreneur, needs to be the driver of the strategy. There needs to be controls, but... that control can't translate into loss or restriction in terms of how the business can grow." (E2 Jhb)*

Investors usually need representation on the board of directors for monitoring, advisory and control purpose and this is usually welcomed by the entrepreneurs. The benefit of gaining access to talented management team members through the investor's network mentioned earlier, can be to the detriment of the entrepreneur's need to stay in control of the business.



*“The issue that we had with private developers, is that they want to see your track record and they want to bring their own people. Sometimes we are afraid of losing the handle of the project.” (E3 Jhb)*

Corporate investors do not have a good reputation amongst the majority of the participants. They do offer competition to venture capital investors through various stages which is a good thing however, there is an increased risk for an entrepreneur to eventually become absorbed into the corporate completely which would just result in the entrepreneurs being employees.

*“A start-up sees corporate as like the necessary evil but also like the devil because they realise that they just kill start-ups.” (I5 Cpt)*

*“...they’ll be like well this is a really good tech and we want to become a client of yours but if we are going to do that than we are going to invest in you and we are going to buy you. And then you are young start-up and you go well “what do I do now?”.” (I6 Jhb)*

The terms with which corporate investors agree acquisitions with entrepreneurs can be tedious and restrictive.

*“So, when I said the VCs were here prohibitive in their terms, corporate was another level. It was very clearly a play to kind of buy into us and then essentially or eventually get us bought into their corporate.” (E4 Cpt)*

Entrepreneurs whose goal it is to sell their stake in the business at a very high multiple after a few years of hard work and exponential growth, is less likely to realise this goal by selling to a corporate investor.

*“I’ve heard a couple of stories about people raising from corporate investors without realising the long-term impact in terms of being eventually absorbed into the corporate and potentially not seeing the value from like an exit perspective that you’d like.” (E4 Cpt)*

*“So, it’s like we’ll take a stake in your business but ultimately they want to own the whole thing. So, they take a small stake, get there...It’s like an early exit, part exit. So, it’s sort of, it’s not so good for the entrepreneur sometimes depends on the entrepreneur, if they want to make this very disruptive kind of thing.” (I5 Cpt)*

Corporate venture capital (CVC) is potentially a solution to this risk of the entrepreneur being absorbed in the corporate’s business and culture, but this has not been well established in South Africa or shown much success.

### *Entrepreneur and investor interests not aligned*

Some entrepreneurs have visions for their innovative ventures other than, or in addition to, profit-making. Impact investing has its own niche space within the investment industry and only one of the participating investors mentioned the impact the business has on society as a screening criteria.

*“...venture company investing in tech entrepreneurs solving African problems.”  
(I1 Jhb)*

When one of the entrepreneurs, who’s making a very large positive impact on society with her business, was asked what investors expect from their investment she answered without hesitation: *“Returns, fast returns. That’s another thing, is not just about returns, is about how quick the returns come. So, in this business there is huge returns. Patient, it’s patient. And not a lot of... I haven’t come across a lot of patient investors in this country.” (E2 Jhb)*

There are also situations where entrepreneurs adjust their business plan and theory to fit the investment thesis and mandate of that an investor require of the investees.

*“It has to have relevance to our group and to kind of group companies and group strategies.” (I3 Cpt)*

*“...and then I twisted our business in such a way that would, like a round peg in a square hole, squeeze itself in a way that looked reasonably attractive.” (E1 Jhb)*

There are cases where grant funding has been approached by entrepreneurs in South Africa with the intent of building a sustainable community business. The rational of one of the participating entrepreneurs was that the company can expand as revenue and profits increase, but the grant funder’s goal was to have immediate employment for a larger number of employees.

*“What is running is a leather facility that we tried to fund from the black empowerment fund and the black industry fund, but it did not fly... I think they are requesting us to comply with certain labour levels and those facilities are technologically driven. So, I do not think we are going to match.” (E3 Jhb)*

Entrepreneurs who have a long-term goal for their business or who understand that the business model will only generate material returns in a few years, are looking for longer term investors. Fund mandates determining fund life and the period in which fund managers need to deliver returns to their investors, are often seen as a constraint.

Investment holding companies, corporate investors and development funds have a significant advantage in this regard as it is not bound by short-term mandates.

*“...they are long term investors, they don’t only have 5-year mandate because they are dealing with someone’s funds and secondly they have the ability to continue and invest if we do proof concept, and lastly they are the people we believed we would enjoy working with.” (E5 Jhb)*

*“...as a venture capital, the way we make money for our shareholders is we buy, we build and we flip companies. If the entrepreneur doesn’t want to flip the company, he wants to hand over the company to the children or keep it in the family, it’s obviously not a company for us...” (I1 Jhb)*

Alignment on valuation of businesses was another very popular discussion point, especially amongst the investors. Valuations brought forward by the entrepreneurs are often based on unrealistic forecasting assumptions or even multiples based on acquisitions in different markets like to US. Investors mitigate the valuations by going through the assumptions with entrepreneurs but not always successfully.

#### 5.7. Research question 4: What are the proposed action points that can be implemented to reduce the delta between the supply and demand of innovation finance in South Africa?

To reduce the perceived missing connectedness, both sides of the innovation finance spectrum studied in this research need to move closer to a position where parties can meet. All participants were asked to provide advice to what can produce this result and below are the responses.

##### 5.7.1. Proposed action points for innovation finance suppliers and demanders

###### *More collaboration*

South Africans are very competitive and this particular trait is not criticised, but it is at a point where entrepreneurs and investors are too careful to share or ask for information which could actually benefit all parties. Mature entrepreneurs seem to be open to collaboration and some very successful investors are quick to recommend an entrepreneur to another investor, if the other investor’s mandate is more fitting or expertise more in line to maximise growth for the venture.

*“You get a lot more advantages as an entrepreneur if you are open and you share and you talk about where the weaknesses are and you invite people in to see where they can help.” (I3 Cpt)*

*“I think there is a whole lot more collaboration happening and you see it with the more mature entrepreneurs, there is still quite a competitive mindset in this country like a fight as opposed to let’s work together to make this happen.” (A2 Jhb)*

*“I think that some of the most successful businesses in the world are led by some of the most generous people in the world.” (I3 Cpt)*

#### *Develop investment ready ventures for clearly defined funding stages*

The ecosystem for entrepreneurs and investment in their innovative businesses is underdeveloped in South Africa.

To improve this, entrepreneurs and investors need to be able to recognise various investment stages more clearly. Entrepreneurs must be able to find incubators/accelerators to develop a more commercialised business after which more angel investors need to be clearly defined and available to provide seed and/or pre-revenue funding. Taking over from angel investors, venture capital (corporate or independent) investors need to be available for various funding stages together with investment holding companies. Exits from these investments should be available through private equity investors, initial public offerings, or strategic investors / corporates.

What this require is more of every stage investor and more transparency so entrepreneurs can identify and connect with the relevant investors.

*“We spoke to a lot of people with money that can’t find investments, we talked to a lot of people with ideas that can’t find founders so there is a structural problem with connecting supply and demand” (E5 Jhb)*

*“...much clearer stages and much clearer investors so you have very strong angel investors and you’ve got very strong seed investors, then series A, then series B, then series C, and you’ve got a pool of investors who focus on that particular series and that particular stage and its very clear where you pass over comes along...” (I6 Jhb)*

*“...there’s probably a bit of a missing accelerator market in this country...” (A2 Jhb)*

*“...there need to be a bit more angel, because if you look at why some of the biggest and the best entrepreneurial ecosystems is where there is a big angel community. (I1 Jhb)*

*“There is no series A, series B, series C, because PE guys will never come to the party. So, we have to assume that we have to do the full funding...” (I4 Cpt)*

*“...the corporates are definitely not coming to the party, it is getting better but by far, they are not coming.” (I4 Cpt)*

Investors require the entrepreneurial venture to be investment ready for that particular stage of investment and if the investability of the business can be validated, that instils more confidence for the investor to participate.

*“The problem is that businesses are not investable.” (A1 Jhb)*

In addition to clearer stages, there need to be more support from government, in terms of supportive regulation, and institutions such as universities, in terms of developing and preparing the entrepreneurs.

*“...so, when you finish your MBA, you’ve got an option to extend it for a year where you can start a business. So that’s the LBS (London Business School) incubator, so there’s actually funding from the business school which you can apply for and you can start...” (I6 Jhb)*

#### *Establish a networking platform*

Availability of networks through which entrepreneurs and investors can be connected was one of the most discussed topics by all participants and some advice was provided for how entrepreneurs can get introduced to investors. Investors are, in a way, really enjoying the excitement of hunting for innovative business, but the creation of a platform where parties can be screened and introduced was suggested to overcome the current randomness of finding innovative businesses or innovation finance.

*“...we are currently not proactively going there and saying we want to do a deal... and we go start hunting. I want to go and change this because of our limitations but at the moment that’s part of the fun part of being here, you get an email, you get a phone call...” (I4 Cpt)*

*“I suppose the opportunity is to make it into more formulated, to develop methodology. A system for getting leads, a methodology for filtering. So, I’m quite excited about the opportunity to bring science into a formative industry.” (I2 Cpt)*

#### *Benchmark globally by keeping up with investment industry trends*

A few of the entrepreneurs, when asked about current trends they witness in entrepreneurship and finance, couldn't provide a succinct answer since they weren't keeping track of trends. Being highly informed of the investment industry and the industry investing in, raises the bar for quality of investments being made. This was the experience one of the participating investors had while dealing with international co-investors.

*"...they do a lot more research. So, for example they understand, they do a lot more sort of international benchmarking, local benchmarking. They do very deep analysis, they are very current. So, they sort of stay abreast of... I've found we are very guilty of falling in to this trap as well where you can become very localised very quickly." (16 Jhb)*

#### 5.7.2. Proposed action points for innovation finance suppliers

##### *Investment syndication*

Entrepreneurs and some accelerators expect investors be less risk averse and make use of the dry powder available for investments. What should be understood is that investors, other than angel investors, usually have a responsibility towards their own investors to provide a return that justifies the risk being taken.

A way in which more innovative entrepreneurs can get access to finance is if investors apply a method called spread betting (or shotgun approach) which involves investing smaller amounts in a larger number of ventures. This method allows the investor to take more risk on ventures that would otherwise be too risky to invest in.

The challenges with this is that the smaller amount is often not significant enough to make a material impact for the entrepreneur and should the investor raise the investment value to truly make a material impact for the entrepreneur, the total amount exposed to spread betting is too large for the fund investors to be comfortable with this investment approach.

The proposed solution to this links to collaboration and is called syndication.

Syndication allows investors to pool smaller amounts from each fund or investment company and this pooled / syndication investment value is large enough to be significant

to the entrepreneur, whilst the investors still have the lower value exposure to the spread betting methodology.

*“I think one of the sort of big trends is that spread investing.” (A2 Jhb)*

*“If you look at Silicon Valley typical profile, company X got seed funding, then you go and see if they can have 5 investors in there and every investor has put in 100 thousand dollars that makes 500 thousand dollars, everybody has got a little in there and goes; right if this company makes it they go and put more money in. So, it’s syndicated, it’s a tiny little amount and know the guys have to now go and show that can go and make it.” (I4 Cpt)*

#### *Corporates becoming more involved*

Corporate investors need to be more actively involved with funding for entrepreneurs in various ways. Corporates realise the need to collaborate with innovative entrepreneurs to avoid being disrupted by technology developed externally. Corporates realise that they do not have the expertise to manage early stage investments themselves so they either get better at it by employing professionals to do mergers and acquisitions or manage a corporate venture capital (CVC) fund setup by the corporate.

*“I go to all these conferences around the world, like all these tech conferences, and the corporates are becoming quite open to realising that they are not good at it but they're getting better now.” (I5 Cpt)*

A CVC allows the investment to take place outside of the corporate’s balance sheet so entrepreneurs are exposed to less risk of being absorbed by the corporate and its culture.

*“We are too vulnerable at the moment to (be) taking up the culture of our host.” (E2 Jhb)*

Corporates are able to offer higher valuations to entrepreneurs than independent venture capital funds can, due to a longer-term view and direct industry expertise which can be applied in the related innovative venture.

*“I think they give quite good valuations and the, yeah price, and they've got deep pockets and it's also like good security for those guys. For some entrepreneurs, it's like being a hybrid between being an entrepreneur and working for a company. They see a bit of security.” (I5 Cpt)*

The alternative is to be more open in their procurement processes and allow innovative entrepreneurs to be part of their value chain.

*“(In the) FinTech and Telco space at the moment, there is big FOMO. They all know that they are being disrupted and so now at the moment they are looking at entrepreneurs, but they are not taking them really serious and if you look at the typical procurement process, and nobody ever gets fired for buying IBM.” (14 Cpt)*

*“...meet...a corporate VC guy and was flippin’ interesting because he said, he admitted as well, once again, “We are the best”, corporates now, “at messing up start-ups”. So, what he does now is he says, “I’m not going to give you money. I don’t want to give you money, but I’ll give you an opportunity to build the new technology tyre or the new whatever. And I’ll give you an order if it works.” Instead of funding.” (15 Cpt)*

#### *Investment funds should be increasing by finding more investors*

With specific reference to Section 12J venture capital fund manager companies, A1 Jhb made a profound observation relating to the investors or rather non-investors in these funds. Currently the investors in venture capital funds are individuals who are either angel investors themselves or have made an already substantial amount of money in their lives. The funding sources could be expanded if income (salary) earners were educated by the significant tax benefit available to them. According to him the high-income earners are rather buying a holiday home or going on a skiing trip as opposed to investing in a vehicle that offers high return for high risk.

*“But those guys with the million rand bonuses are not the guys that are the investors...” (A1 Jhb)*

#### *Investors build own deal pipeline*

Half of the investors interviewed was simultaneously involved in their main investment portfolio as well as a process that developed potential investees (earlier stage investments). This secondary process could lead to the potential investees either becoming investees in the main investment portfolio or provide complimentary services to the investees in the main portfolio.

The benefits of building their own pipelines are that the businesses will already be investable when the time comes for that investment to be made, and the entrepreneurs in that pipeline also receive funding or development which they otherwise would not have



received. This improves the low strike rate of converting introduction meetings to signed investment agreements.

At the risk of identifying the investors, the quotes are only available from the transcripts.

### 5.7.3. Proposed action points for innovation finance demanders

#### *Entrepreneurs self-funding the very early stage*

Entrepreneurs are encouraged to run lean businesses with low operating costs and income which gets prioritised for expenditure on other income generating activities. Every step taken towards growing the business adds value to the business, and raising finance too soon could lead to potential loss of proceeds for the entrepreneur when a stake of the business is acquired by an investor.

Raising capital should be substantiated by a specific need for the funding. Investors do not want to provide funding to the businesses so that the entrepreneur can withdraw a larger salary, they want to grow the business and in effect their own investment value.

Entrepreneurs who have self-funded the business for a period of time and who are willing to invest more funds of their own, are encouraging signs to investors who prefer entrepreneurs to have 'skin in the game'.

*"I'd advise any entrepreneurs to bootstrap as long as they can, get some traction, get some referenceable clients, start showing growth and then you go to a VC for growth capital..." (I1 Jhb)*

*"I think the first misconstrue is the perception that I need to go out and raise money." (E6 Cpt)*

*"Very positive for us is if they have put their own money or if they are prepared to put their own money in. It's just a good indicator." (I3 Cpt)*

#### *Commercial sales deals*

Entrepreneurs are encouraged to find customers, not only to validate their businesses but also to fund their businesses during the early stages due to the dysfunctional ecosystem in South Africa which doesn't provide very early stage investor options.

This is another sector where large corporates are heavily relied on due to their power in allowing innovative businesses to share in their procurement processes and provide them with new, smarter products or alternatives.

Something very important to consider, as pointed out by a very innovative entrepreneur who recently received venture capital funding, is that South Africa is both a 1<sup>st</sup> world and 3<sup>rd</sup> world in one system which has an impact on the size of the potential market you are serving as an entrepreneur.

*“We are not a 50 million people market, we are a 5 million people market...” (E6 Cpt)*

*“...we do introductions (to investors) if relevant but the whole idea is that they have to come up with a repeatable way to get customers because if you can’t get that, you are never going to build.” (A2 Jhb)*

*“...get 5 pilot customers before we build anything...” (A2 Jhb)*

*“I think, in the South African context, it’s massively important, still, to leverage off big companies in some way. It can be that you’re a part of them and they invest in you. It can be that they become your first... One of them become your first big customer.” (I2 Cpt)*

#### *Entrepreneurs and potential entrepreneurs should get out of their comfort zones*

Investors mitigate their risk when making investments and finding entrepreneurs with traction in their businesses is a sure way of doing this. Entrepreneurial businesses with a few years history of profitable trading is high in demand but often these entrepreneurs are too comfortable with the position their businesses are in, and they don’t want to disrupt the peace by scaling and taking on a new fast growth stage.

*“Then we have the companies that get to 20 or 30 people and make enough that the guy can have a good living. So, that you can consider and say; “okay now I am doing okay, to scale means getting out of that comfort zone again”.” (I4 Cpt)*

Another set of entrepreneurs have huge potential, skill, talent and knowledge, but they are comfortable in corporate employment. Running a business and being an employee are far apart, but a solution to this could be a partnership between an experienced entrepreneur and an individual with skill and deep sector knowledge.

*“...what we do see a lot in South Africa is a lot of the talent still sits in corporates.” (I6 Jhb)*

*“I think the gap in the market probably would be the guy who wants to take three months off to take a crack at a business idea. So, there’s probably a bit of a missing accelerator market in this country, whereas in the States, there is now a lot of programs where you can go to and get a little bit of cash to take a crack for 3 months.” (A2 Jhb)*

*“Innovation, is there enough of innovation in South Arica? I think we’ve definitely got entrepreneurial talent. One of the places that I think we have bundles of it is in, that I’m seeing, is in experienced people. Middle aged kind of people that are actually white. It sounds racist, but I think the white middle aged South African male actually, is forced in many respects, to become an innovator and entrepreneur because the corporate doesn’t want them.” (I2 Cpt)*

#### *Focus on the innovative entrepreneurship team*

One of the most important factors for an investor about a potential investee is the team. Investors consider the balance of the teams in terms of ownership, diversity of skills, experience and background, and whether the teams have experience working together or have gone through challenges together. This will reduce the risk of the team splitting up during the first storm the venture must navigate through.

Characteristics like honesty and integrity are of cardinal importance. There is enough that can go wrong in a young, innovative business and the investors need to be able to trust the team captaining the boat.

The two most important roles that should be covered in an innovative venture are the technology specialist and the commercial thinker who can determine strategy and business development. Supporting roles can be hired, such as accountants, but the leaders/executives must be able to comprehend and explain financial concepts, assumptions, valuations and ratios relevant to the forecasting growth of the business.

*“...we’ve also started now to try and not invest in single partners because it’s really tough... You need a sounding board. I think you need the sort of team effort...When a guy is on his own it’s really tough.” (I5 Cpt)*

*“If there’s anything vague, we just leave it. There’s enough that can go wrong in business so you don’t need a dishonest person to compound your complexities.” (I2 Cpt)*

*“you can always buy a finance guy, you can pay him a salary but a good business guy and a good tech guy are two crucial skills.” (I5 Cpt)*

*“...if you don't understand the financials in your business, and you are the CEO, find a different CEO.” (I6 Jhb)*

#### *Entrepreneurs should understand the investors*

Similar to the way entrepreneurs should understand the needs of their customer, so the potential investors should be understood. Entrepreneurs should consider the needs of the investors, their offerings and their limitations. Understanding this will provide insight in who, how and when to approach. Participating entrepreneurs noted that the most important consideration for investors in South Africa, is earning good returns. Investors on the other hand suggested that the entrepreneurial team is their most important consideration.

Investors conform to specific mandates which lay out their strategies. It specifies which industry the investor will focus on, the range of investment sizes, the stage of ventures that will be considered, and the length of the investment period.

Investors want to know that the entrepreneurs understand the industry they operate in very well, who the competitors already in the industry are, how their business plan will generate returns for all parties, and that comprehensive systems exist for recording transactions and extracting relevant information for better decision-making.

*“So firstly, they really need to understand investment mandates.” (I4 Cpt)*

*“...so, some of them had specific mandates...” (E4 Cpt)*

*“Returns, returns, returns” (E2 Jhb)*

*“I want a 10x return, ten times my money, I put in a 10 million I want a 100 million back in 5 years so I need the top, top entrepreneurs...” (I1 Jhb)*

*“Because we're often investing for strategic reasons too, not purely financial reasons. I think we probably have quite strong risk appetite. We'll invest in something that's a lot of blue sky but for very clear reasons.” (I3 Cpt)*

*“You know, they don't have a dashboard of any sort on their business. Even if they're spending money, what are you spending, where are you spending.” (I2 Cpt)*

*“...please be prepared. It really doesn't help if I'm interested and you tell me “I'm sorry I really don't have all the information”.” (I4 Cpt)*

#### *Entrepreneurship must become an aspiration*

Students leaving school or university as well as potential entrepreneurs stuck in the rat race of corporate employment, need to be made aware of the successful entrepreneurs who started in similar positions as them. The benefits of only having responsibilities to corporates as customers as opposed to employees, or making good money by applying innovative ideas into a business model.

Successful entrepreneurs themselves should be more visible and plough back the knowledge and experience they gained through their first successful venture, applying a 'Pay it forward' model and even invest in start-up ventures.

*“...we need more success stories because when you sit there you see that it's not just one, but more and more people actually start living the great life having whatever because they have done it again and again.” (I4 Cpt)*

*“I guess, just building a system where firstly the entrepreneurship is seen as an aspirational endeavour by young people.” (I2 Cpt)*

*“We don't have a big enough entrepreneurial ecosystem in South Africa. Guys have been there, done that, exited and now are starting the second, third or fourth business like you find in the US, I don't think we have enough of that.” (I1 Jhb)*

*“...what you also get in these very well developed entrepreneurial Eco-systems is like a place like Silicon Valley. There's a very strong culture of pay it forward. So, if you are a successful tech investor and you get a big exit, there's a very strong culture of you then invest in the next generation of entrepreneurs and become very involved” (I6 Jhb)*

## 6. DISCUSSION

### 6.1. Introduction

In chapter five the results of data collected from interviews were presented in terms of research questions. In this chapter, the literature from previous researches are compared to the findings and discussed. This format again, is in terms of research questions.

6.2. Research question 1: Which of the two groups of parties involved in supply and demand of innovation finance, experience more significant challenges in obtaining a satisfying version of the other?

#### 6.2.1. Relationship between finance and innovation

In a recently published review of disruptive innovation, the highly respected researcher Clayton Christensen together with two fellow researchers, highlighted the integration of innovation as a fundamental part of businesses. This is mostly a result of changing business strategies driven by changing customer interests (Christensen, Raynor & McDonald, 2015).

This opinion was echoed by participants with heightened excitement about the prospects of innovation in South Africa in multiple disciplines. Innovation has become an absolute necessity for businesses to stay competitive. A concern raised by participants though, was that large corporates are hindered from incorporating new innovative processes or products due to smothering bureaucracy. This concern strengthens the need for partnering with innovative entrepreneurial ventures which is consistent with what Engel (2015) found.

A change in economic cycles can be initiated by a change in technology. The innovative start-ups that introduce innovation through this technology and that obtain financing to a point where it can list an IPO, are a significant threat to the sustainability of traditional businesses (Caiani, Godin & Lucarelli, 2014).

Henriksen (2014) contributes further to this view and expand on it by emphasising the importance of innovation through entrepreneurship as the vehicle to accelerate growth and improve the lives of the entrepreneurs as well as beneficiaries of the innovation.

Venture capital investors in South Africa see themselves as responsible for amalgamating capital with innovation with the purpose of growing the businesses and realising the potential impact the innovation can have on everyday corporate and social lives.

Engel (2015) identified the three entities mentioned above – entrepreneurs, venture capital investors and strategic investors / corporates – as central components in a cluster of innovation which is key to economic development.

### 6.2.2. Suppliers of innovation finance

Investors that fund entrepreneurial ventures do so for the purpose of driving innovation and scaling the businesses. The investment vehicles through which finance is obtained are evolving to meet changing economic circumstances of geographic regions (Bruton, Khavul, Siegel & Wright, 2015). The migration of different funding vehicles is also evident in South Africa with the latest better-known addition being crowdfunding. The potential power of crowdfunding in South Africa has been restrained by the size of the participating market and trailing regulation which limits to use of the funding.

The funding available to innovative entrepreneurs have been identified by the academic literature as crowdfunding, microfinance, peer-to-peer lending, angel investors, venture capital, corporate venture capital, corporations and initial public offerings (Weiblen & Chesbrough, 2015; Bruton, Khavul, Siegel & Wright, 2015; Gaba & Bhattacharya, 2012).

It is worth noting that these sources have been identified from studies in developed economies but most of these are available in South Africa, although crowdfunding, peer-to-peer lending, corporate venture capital and IPO listings are not very common. Regulation in South Africa for crowdfunding does not allow for investments in ventures on this platform, it is used mainly for charitable causes. Corporate venture capital is very hard to find in South Africa with a few multi-national corporates that have or used to have some activity in start-up investments with its own ringfenced investment fund. IPO's are possibly not a popular fund raising option because of the lack of truly sizable ventures large enough to go through the process of listing on the JSE.

### 6.2.3. Demanders of innovation finance

Ventures demanding innovation finance are all the inspirational entrepreneurs who were brave enough to commit to that gap they identified in the market. They supply new solutions through innovation, digital disruption, increased efficiency and creativity which lacked in previous products or services on the market. In South Africa, they are products like Nimuno Loops and companies like Takealot.

All but one of the entrepreneur interviewees were first-time entrepreneurs. The trend of repeat entrepreneurs is becoming more apparent to investors who witness the development first-hand but there are still many more that can be encouraged to start another venture before comfort and inertia sets in. The only common characteristics between the entrepreneurs interviewed were the passion and drive they have for entrepreneurship and the big blue-sky vision they have for their businesses.

This lack of identifiable characteristics that make a successful entrepreneur was also reflected in the literature review (2.3.1.) but what was mentioned was that successful repeat entrepreneurs learn from the success and failures of their own multiple ventures and this satisfaction gained from learning also encourages the continuation of starting new ventures (Sarasvathy, Menon & Kuechle, 2013). The repeat entrepreneur in the interview sample was very blunt about the mistakes made and lessons learned and advise beginner entrepreneurs about them when he has a chance.

Due to the very diverse ethnic cultures present in South Africa, something that is quite interesting is the more common demographic of innovative entrepreneurs as identified by investors. Due to reducing employment opportunities for white males, especially middle-aged, as a result of black economic empowerment policies in South Africa, they become necessity entrepreneurs. However, due to extensive experience through their previous employment they are able to position themselves with certain competencies in high demand under investors. This is in a way a transition from necessity entrepreneurship to opportunity entrepreneurship as identified by Stephens and Partridge (2011).

Because the sourcing of deals still relies so heavily on networks, and while networks typically include individuals similar to the investor and who the investor most relate with, a lot of deal flow still find white male entrepreneurs. Incidentally, the researcher only interviewed white South African investors and the question arise whether that is because of the particular extended network the researcher has access to, or whether there is a serious lack of black South African investors.



#### 6.2.4. Constraints as perceived from both sides

Globally as well as in South Africa, a conflict exists between investors and entrepreneurs in terms of the availability of finance (supply) and investment opportunities (demand). Since the researcher could not find research published in reputable academic journals directly addressing the question of where the constraint lies, constraints identified in the literature review for each of the two groups were reviewed, and the amount of control that each group has over eliminating their constraints were considered. By linking motivations or solutions provided by the research interviewees, to the constraints in the academic literature, the significance of unresolved constraints can be identified.

Financing risk (Nanda & Rhodes-Kropf, 2016) is present for both parties so excluded from the comparison.

##### *Constraints to supplying innovation finance:*

Fundamental risk in innovation (Mazzucato, 2013) and large minimum investment requirements (Short, Ketchen, McKenny, Allison & Ireland, 2017) can be overcome by extended investment periods, spread betting and syndication.

Shortage of human capital (Kasabov, 2015) can be mitigated by building a pipeline to support and develop the entrepreneur in a stage prior to investor's own target investment stage, but the base of a good education and experience need to already be in place.

The physical distance constraint (Lin & Viswanathan, 2015) may be addressed by collaborating with surrounding institutions in creating a cluster or by creating a virtual campus and online networking platform. This can also benefit lack of syndication issues (Liu & Maula, 2016)

Investors can't do much about lagging regulation (Short et al., 2017) other than perhaps innovating on the investment product side.

##### *Constraints to demanding innovation finance:*

To mitigate the risk of losing intellectual property in the fund-raising process and inside an investment portfolio (Pahnke, McDonald, Wang & Hallen, 2015), entrepreneurs need to understand the potential investors being approached, what information they'll require and who the other portfolio companies in the fund or investment holding company are.

To prevent having to sell a controlling stake in the business or start-up during fund raising, entrepreneurs should be self-funded and bootstrapping or making use of non-equity finance for longer (Larsen & Lewis, 2007). This will establish an offering with more value to potential investors and the same size of fund raising can occur for a smaller stake in the business.

The risk of having misaligned funding partners (Larsen & Lewis, 2007) can also be mitigated by understanding the investor, although the lack of funding in the required investment stage may force an entrepreneur to weigh up the options in having to go with a slight misaligned investor.

There are again two material constraints over which the counter party have no or very little control. These are firstly the number of quality entrepreneurs available to be invested in (supply constraint) and secondly the availability of an aligned investor at the appropriate investment stage for the entrepreneur to partner with (demand constraint). The constraint relating to conducive regulation is valid but falls outside of this research paper's scope.

These constraints will be discussed in more detail in the chapter six (6.3. and 6.4).

### 6.3. Research question 2: What factors influence investors to make or withhold investments in innovative ventures?

#### 6.3.1. Motivating factors for investing in innovative ventures

##### *Potential for extraordinary return on investment*

Bruton, Khavul, Siegel and Wright (2015) highlights the lack of income earned as a result of low interest rates after the 2008 global financial crisis (GFC). This apparent increased appetite for riskier assets to compensate for low returns on traditional investments, drove an increased demand for alternative assets.

Even though the effects of the 2008 GFC was slightly delayed in South Africa, participating investor interviewees also recognised this increased demand from especially institutional investors such as pension funds, who needed exposure to higher return assets to balance the portfolio performance. Two of the four venture capital investors interviewed referred to good returns being earned in their funds but the other two have hopes for increasing their investment ten times, therefor providing a multiple of cash (MoC) of 10x in a period of five years.

### *Pay it forward*

South Africa don't have many entrepreneurs who have made large multi-million dollar exits from their ventures, but investors are positive about the future opportunities and potential that lies in the current growing entrepreneurial culture. One of the participants referred specifically to Mark Shuttleworth and the impact his reinvestment into South African start-ups had through a program called There Be Dragons which became venture capital investors, Knife Capital. If one successful entrepreneur, ploughing back funding had such a big impact, just consider what impact ten or fifty such initiatives per year could have on the entrepreneurial culture in South Africa. Of course, this suggests that availability of funding ignites entrepreneurial activity, which is what Nanda and Rhodes-Kropf (2016) also confirmed.

Allison, Davis, Short and Webb (2015) found that there is a willingness under individual investors to contribute to the development of entrepreneurial ventures which is perhaps not solely, but partly based on a feel-good driver. It's essentially helping others while being selfish, what a brilliant concept...

### *Community culture and efficient entrepreneurial ecosystems*

The culture in a community has been found to significantly affect the development of entrepreneurship and is a popular research topic (Huggins & Thompson, 2014; Kasabov, 2015; Engel, 2015). In this instance, a growing culture of entrepreneurship would attract investors to the community and development of innovative ventures would be accelerated.

The entrepreneurial ecosystem in South Africa has been lambasted by participants of this research. Investors and entrepreneurs alike made many suggestions for an improved ecosystem, based on which one could assume that a functional ecosystem is perceived to be a positive motivational factor and would therefore agree with the literature.

The evolution of a notable increased activity in entrepreneurship and venture investment in Cape Town had many interviewees very excited about its prospects and potential. Various investment stages are present and identifiable in a functional ecosystem but this is not the case in South Africa, however the investment stage identified by research participants to have the least amount of available funding (early stage pre-revenue), is seen to be growing in Cape Town.

Some insight from responses provided by participants, suggest that many of these investors might just be in Cape Town and surrounding region for the benefit found in the quality of life, and not necessarily because it is such a strong entrepreneurial ecosystem in which these angel and other very early stage investors want to actively get involved

in. The local government has to be complimented for creating a desirable environment, which is already blessed with natural beauty, and providing a playground for high net worth individuals which have these complimentary, perhaps unintentional, benefits.

### 6.3.2. Constraining factors for investing in innovative ventures

#### *Innovation is inherently risky*

The inherent risk of innovation is still something that a very risk-averse South African corporate culture, especially in a city like Johannesburg, shies away from, which makes the goal of creating partnerships and collaboration with corporates very difficult for start-ups.

It is also difficult for investors to make forecasts and assumptions of the potential for innovative ventures to scale multiple times in a relatively short period. Unlike previous research by Mazzucato (2013) suggesting patient long-term capital is required to unlock the full potential of innovation, venture capital investors in South Africa participating in a range of investment stages from very early (pre-revenue) to more mature growth, are confident that they can deliver the expected high returns on these investments in the relatively short time provision as per their fund mandates.

In contrast, investment holding companies agree with Mazzucato (2013) and campaign that they have a better opportunity to realise the value in innovative businesses because of their more patient long-term investment philosophy. The investment holding companies do not have to offload an investment in a hurry because of poorer than expected initial performance.

#### *Low quality entrepreneurial teams*

Kasabov (2015) notes in his research on start-up difficulties that, in addition to availability of finance as an important factor for a successful venture, quality human capital is very important, especially for attracting capital. What exactly it is that this human capital include is unclear though.

The data gathered refer to three specific qualities that investors want to see in an entrepreneurial team. Note the reference to team, and not just individual as represented by the individualist culture that Phelps (2013) refers to.

These qualities or skills should be in a deep industry understanding (such as a brilliant developer if in the technology space), strong commercial understanding (such as a few years of senior management experience with an MBA), and strong sales ability. One

characteristic which came through very astutely as an absolute necessity by investors, was the need for an entrepreneur with strong integrity.

In terms of the commercial skills that entrepreneurs should have, King and Baartartogtokh (2015) suggest that the business strategy should not have too much weight allocated to disruptive innovation, but rather focus on market competition and profitability, core competencies and collaboration which also connects very well with the action point chapter in 6.5.

#### *Physical distance between investor and entrepreneur*

Unlike suggested in previous research (Mollick, 2014; Lin & Viswanathan, 2015), some participating entrepreneurs, located in both Johannesburg and Cape Town, were not convinced that being located inside the ecosystem developed in Cape Town has much benefit at all.

The argument of entrepreneurs and investors having to be in close proximity in order for them to be more successful was countered by participants who referred to having been in different towns (Johannesburg and Cape Town) than their investors at the time of investment, and they still are.

An online networking platform would remove the need for any physical presence in a particular location and would remove the extremely high barrier to entry entrepreneurs experience when attempting to raise capital.

#### *Lack of syndication*

Investor syndication is used to share some of the risk present in innovative start-ups between multiple investors with complimentary skills and experience being made available to the entrepreneur. The uncertainty of start-up ventures' success drive investors to collaborate within their networks to mitigate the risk (Ferrary, 2010) Research done by Liu and Maula (2016) promoted the use of syndication and studied the reason why it is not used as often as expected. Their study considered syndication between ventures in different market positions and with different sets of expertise and the benefits were confirmed.

South African investors confirm the importance of syndication but some points were raised as motivation not to make use of syndication. Control of the investment become a concern for some investors in South Africa who do not always trust another syndicate investor to lead the syndication's strategy for growing the business invested in. This creates tension and can ultimately cause the demise of the investee.

Another constraint in the use of syndication found in the data, comes from the entrepreneurs who do not want to manage and take advice from a large number of investors and therefore choose not to approach or accept multiple investors.

#### 6.4. Research question 3: What factors influence entrepreneurs to pursue or reject innovation finance?

##### 6.4.1. Motivating factors for approaching providers of innovation finance

###### *Complimentary benefits to obtaining innovation finance*

There are multiple reasons why entrepreneurs approach investors, in addition to obtaining finance. Finance is the common factor provided by all investors but each offer a unique mixture of additional benefits which is what entrepreneurs are especially keen to understand and test congruence with, before accepting a particular investor (Graebner & Eisenhardt, 2004; Maula, Autio & Murray, 2005). Findings in this research absolutely agreed with previous research in this instance.

Chemmanur, Loutskina & Tian (2014) identified a particularly useful benefit offered by investors, as being able to strengthen human resources in ventures by bringing in experienced executives from their large network to provide expertise previously lacking in a certain area of the business.

A benefit not as strongly emphasised in previous research of which the vast majority is done in developed economies, is the access entrepreneurs gain to an extensive network provided by the investors. This is a benefit that entrepreneurs in South Africa consider to be very important and can provide exposure to new commercial prospects, human resources and potentially also participants in future funding rounds.

Most South African investors see mentoring for especially young or new entrepreneurs as a crucial value add they can offer. Many novice entrepreneurs lack a variety of skills when they start and need someone they can trust and relate with to mentor them while they are getting comfortable in the position (St-Jean, 2012). Some investors also have first-hand experience as entrepreneurs which makes it easier for them to connect and empathise with the start-up founders and other entrepreneurs.

###### *Availability of innovation finance for various stages*

Larsen and Lewis (2007) identified the need under entrepreneurs for funding through various stages and for various purposes of the businesses. Having access to finance in each of the stages and clearly knowing what kind of financier to approach is highly

advantageous to entrepreneurs. Bruton, Khavul, Siegel & Wright (2015) found that the availability of finance across the entire growth cycle is not prevalent in developing economies which lead to evolution of financing alternatives.

Entrepreneurs and investors in South Africa recognise these various stages in which financiers operate but don't believe that there are distinctly identified finance providers for each stage. Venture capital investors in South Africa believe that they need to be able to provide funding from the very early stage through to the bigger growth stage

There is a very diverse population of entrepreneurs in South Africa with some self-funding and bootstrapping for as long as possible to avoid having to pursue the very scarce early stage funding, while others are criticised for trying to raise funding too soon in the business life.

#### 6.4.2. Constraining factors for approaching providers of innovation finance

##### *Losing competitive advantage*

Pahnke, McDonald, Wang and Hallen (2015) studied how information is shared between investees within venture capital fund portfolios and found a negative side to entrepreneurs sharing sensitive innovation detail with the investors too soon. They found that the VCs share information within the portfolio which can harm the innovators through a process called competitive leaking.

The value of the innovation depreciates in the innovator's venture when the innovation is also obtained and offered by competitors (Henreksen, 2014).

The data obtained found that this is a serious concern for entrepreneurs in South Africa who very often ask potential investors to sign an NDA before sharing their sensitive information about the business or innovative product. This frustrates investors who usually don't sign these NDA's as a principle until a potential acquisition has made significant progress.

Entrepreneurs who prepare well for a fundraising exercise is able to obtain information about any competing investees in an investor's portfolio and on that basis, they either don't meet with the investor or share information more selectively.

Contrary to this perception, inter-portfolio collaboration is recommended by most investors in South Africa and experience the value in sharing of information to be more than the potential loss in value due to loss of intellectual property. By not collaborating the entrepreneur miss an opportunity to get objective points of view and potential valuable insight.

#### *Failing to obtain follow-on funding*

Some entrepreneurs in South Africa who find fund raising to be very challenging, might not consider longer term effects such as availability of further rounds of funding at the particular investor. Entrepreneurs who do have a longer-term view on their venture, recognise the importance of making sure that follow-on funding will be available should the business need it to sustain growth.

This place large balance sheet investors such as investment holding companies and corporate investors in a favourable position to attract entrepreneurs.

In their research on financing risk, Nanda and Rhodes-Kropf (2016) agree with the risk concept of potentially not being able to acquire funding at a later stage by an innovative venture.

#### *Losing control of the business*

To prevent having to sell a controlling stake in the business or start-up during fund raising, entrepreneurs should be self-funded and bootstrapping or making use of non-equity finance for longer (Larsen & Lewis, 2007).

This sentiment agrees to what most entrepreneurs in South Africa consider to be a constraint in obtaining innovation finance. Entrepreneurs are wary of giving up share percentage in a business but do understand that more funding might be necessary to grow the business to a level where even 5% ownership could have very high value.

Corporate investors were very relevant in the findings on this specific topic. Entrepreneurs perceive corporate investors are a necessary evil. The best result for an entrepreneur would be to have the corporate as a customer but this sometimes come at a cost of offering up some equity in the business.

Corporates have strong industry expertise which can be very valuable to entrepreneurs. They usually also have a longer-term outlook on an investment. The challenge that entrepreneurs face is the risk of eventually being absorbed by the corporate and effectively becoming an employee of the corporate. A possible solution to keeping the benefits and removing the risk of being absorbed by the corporates could be corporate venture capital which will be discussed in 6.5.

#### *Misalignment between entrepreneur and investor*

Entrepreneurs raising finance for their ventures often find that the finance available to them have certain requirements that need to be met by the entrepreneur which don't necessarily fit into the business model or vision (Larsen & Lewis, 2007).



Having a strong opinion or perception about a certain type of funding would influence the entrepreneur's decision in approaching the investor offering it (Bruton, Khavul, Siegel & Wright (2015). The affirmation of this was received in the findings where entrepreneurs particularly approach grant funding and find the mandate of the funder is focussed on generating employment rather than growing a business that can increase sustainable employment as the business grows.

Fund mandates are often the source of misalignment between entrepreneur and investor. Mandates are the boundaries by which investors can invest funds and is in place to protect the investors in those funds. The mandates of, for instance venture capital funds, prescribe the industry in which the investor can find potential investable businesses, the fund life term and the stage of business in which the fund can invest. Fund mandates are usually available for entrepreneurs to peruse prior to approaching the investor for potential funding.

Other factors that can cause misalignment are the goal or vision that the entrepreneur has for the business can be misaligned to the goal of the investor (impact vs returns) and the length over which the entrepreneur wants to be involved in the business (family generation business vs five-year investment period).

#### *Weak networks*

Social capital hasn't been strongly mentioned as a constraint for entrepreneurs in previous research. It has however come through very strongly in this research and findings suggest that entrepreneurs need to have investors in their network. Multiple investors suggested that an entrepreneurial venture must be referred to them by a trusted party before they would commit resources to the introduction and screening. Others were less particular but did mention that the success rate of closing an investment deal is much higher when the investor find the entrepreneur than it is for the inverse.

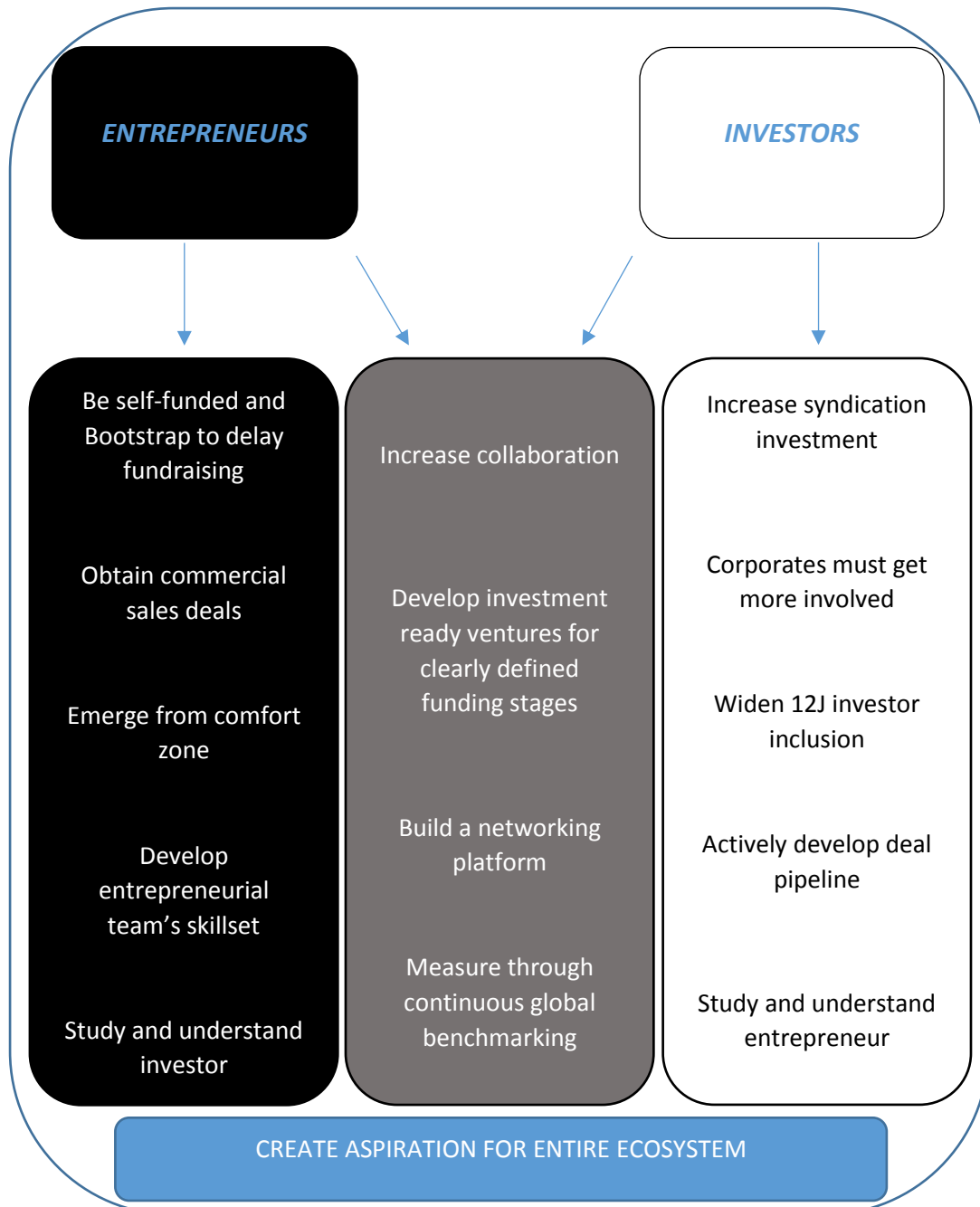
It is then also understandable that South African entrepreneurs' motivation for finding an investor relate strongly to the prospect of leveraging off the investor's extensive networks.

6.5. Research question 4: What are the proposed action points that can be implemented to reduce the delta between the supply and demand of innovation finance in South Africa?

Participants interviewed by the researcher identified action points that can develop the entrepreneurial businesses to present a more investable venture. Participants also identified action points that can improve the investor environment to present more appropriate innovation financing alternatives to entrepreneurial ventures.

Inductive data serving as proposed action points taken from the results chapter (5.7.) has been summarized in a framework in Figure 1 below.

Figure 1: Developing a functional innovation finance ecosystem in SA



## 7. CONCLUSION

This chapter concludes the study on supply and demand of innovation finance in South Africa, by highlighting the main findings according to the research questions in chapter three and making suggestions for future research.

### 7.1. Principle findings

7.1.1. Which of the two groups of parties involved in supply and demand of innovation finance, experience more significant challenges in obtaining a satisfying version of the other?

The research suggests that the significance of an entrepreneur being unable to raise finance and the significance of an investor unable to earn return on investment by acquiring a stake in an innovative venture, is very difficult to measure objectively. The consequences of either happening is at times detrimental and other times of no consequence.

Findings as reported on in chapter five were useful to identify two significant constraints as experienced in the South African innovation finance ecosystem.

1. The constraint in supply of innovation finance is not in the entire industry but rather availability of finance for high-risk, very early stage ventures.
2. The constraint in demand for innovation finance is not in the quantity of entrepreneurs requiring finance but rather in the quality and “investability” as referred to by investors.

Participants identified potential solutions to these main constraints which were discussed in chapter five (5.7.) and collated into a framework presented in chapter six (6.5).

7.1.2. What factors influence investors to make or withhold investments in innovative ventures?

A number of the motivating and constraining factors identified from previous research was mirrored in the data collected during this research.

Some of the identified factors motivating investors to make investments in innovative ventures include a potential for extraordinary return on investment in an investment market dominated by low returns since the 2008 GFC (Bruton, Khavul, Siegel & Wright, 2015) as well as a functional innovation finance ecosystem (Huggins & Thompson, 2014; Kasabov, 2015; Engel, 2015). Overall the ecosystem in South Africa is dysfunctional at best but there are exciting signs of progress in Cape Town.

Identified factors constraining the decision for investors to invest in innovative ventures include parties not being in close physical proximity of each other (Mollick, 2014; Lin & Viswanathan, 2015). Even though the city of Cape Town has been commended for starting to build a more functional ecosystem conducive towards entrepreneurs and investors alike, the research findings suggest that not being in close proximity of an investor does not make it less likely to receive investments. Relocating from Johannesburg to Cape Town for that reason may not deliver the expected outcome.

Another popular discussion point, and in this case proving to be a constraint for investors to provide funding, is the quality of the entrepreneurial teams which is not at a level where investors expect it to be (Kasabov, 2015). Contrary to the observation that Phelps (2013) made about an individualism culture that drove innovative entrepreneurship in the US, it is a collaborative culture that is suggested for entrepreneurs for them to be more successful.

### 7.1.3. What factors influence entrepreneurs to pursue or reject innovation finance?

Various reasons exist for entrepreneurs to approach investors in addition to obtaining finance (Graebner & Eisenhardt, 2004; Maula, Autio & Murray, 2005). The value in additional benefits obtained from investors identified in previous research were confirmed by participants of this research.

The one benefit that entrepreneurs in South Africa expected to gain from investors that received much more weight from the participants in this research compared to previous research in mostly developed markets, was social capital or access to networks. This is an indication of how weak the networks of entrepreneurs are but also how very well connected the investors are.

A constraining factor for entrepreneurs to approach investors for funding relates to a perceived risk of losing intellectual property by sharing too much information too soon (Pahnke, McDonald, Wang & Hallen, 2015). Although investors in South Africa recognise

the risk, they encourage the sharing of information and collaboration as much as possible due to the benefits they perceive to come from collaboration, especially within a fund portfolio with other investees.

7.1.4. What are the proposed action points that can be implemented to reduce the delta between the supply and demand of innovation finance in South Africa?

This part of the research had a more inductive approach due to lack of research on the topic specifically for the South African market, published in reputable journals. Many of the suggestions were however also supported by previous research in this field.

Proposed action points were divided between targeted groups and a few action points are for both participants in the innovation finance ecosystem.

Proposed action points for innovation finance suppliers (investors):

- + Increase syndication investment
- + Corporates must get more involved
- + Widen 12J investor inclusion
- + Actively develop deal pipeline
- + Study and understand entrepreneur

Proposed action points for innovation finance demanders (entrepreneurs):

- + Be self-funded and Bootstrap to delay fundraising
- + Obtain commercial sales deals
- + Emerge from comfort zone
- + Develop entrepreneurial team's skillset
- + Study and understand investor

Proposed action points for both innovation finance suppliers and demanders:

- + Increase collaboration
- + Develop investment ready ventures for clearly defined funding stages
- + Build a networking platform
- + Measure progress through continuous global benchmarking
- + Create aspiration for the entire ecosystem

## 7.2. Limitations of the research

Certain limitations can be identified in the research. Innovation and financial markets are strongly linked to innovation development of the country as supported by previous research, and this study therefore focussed only on supply and demand of finance for innovation, which consequently excluded other factors crucial to its development such as supportive government policy, improved education systems, and an increase relevant skills and experience.

Furthermore, the research did not attempt to take values of investments in account but rather only a few participants who were either involved in the financing innovation process or not, which neglect to understand the impact of different innovation investment sizes.

The study also only included participants in two of the largest economic hubs of South Africa, Johannesburg and Cape Town, which exclude other cities or regions where either investors or entrepreneurs might not be as active and effective.

## 7.3. Suggestions for future research

Considering the amount of dry powder waiting to be utilised by investors worldwide, it would be interesting and important to consider whether competition on price for acquisitions will be rising and whether the excess cash would lead to investors increasing their risk appetite. If true, will an increase in competition for the larger size acquisitions ultimately force investors to strongly consider earlier stage investments?

Something else that the researcher would have wanted to explore in future research, relate to demographics of investors and the influence of particular networks (social capital) in developing entrepreneurs from diverse backgrounds.

An enormous question to ask perhaps is, if so much of what South African investors and entrepreneurs refer to as necessary for innovative entrepreneurs and investors to be aligned, is already known and experienced by the developed markets, why is it that these constraints are still present in South Africa at this magnitude.

On the topic of entrepreneurs and potential entrepreneurs making bolder moves to either get active in the entrepreneurship field or scale a current venture, will corporates be

willing to allow employees aspiring to be entrepreneurs, an opportunity to go on a semi-unpaid leave of absence for three months to build a business or concept?

In closing, the relevance of innovation, linked to entrepreneurship, supported by available funding is extreme in every country or industry. The topic is very interesting to many researchers and the people involved in supply and demand of innovation finance are even more interesting. I wish for as many people as possible to get involved in the process of developing South Africa, for it to reach the amazing potential it has to be a leader in finance, innovation, and combining it all to absolutely enjoy the process.

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## APPENDICES

### APPENDIX ONE: COPYRIGHT DECLARATION FORM

19.1 COPYRIGHT DECLARATION FORM			
<b>Student details</b>			
Surname:		Initials:	
Student number:			
Email:			
Cell :		Landline:	
<b>Course details</b>			
Degree:	MBA	Year completed:	
Department:	GIBS		
Supervisor:			
Supervisor email:			
<b>Confidentiality / Embargo</b>			
Do you need to have your report embargoed? If so, attach a motivation letter. Without a letter this will not be granted.			
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If yes, please indicate period requested			
Two years		**Permanent	
<i>**If permanent, please attach a copy of the letter of permission from the Vice-Principal: Research and Postgraduate Studies. Without a letter this will not be granted.</i>			
<b>Access</b>			
A copy of your research report will be uploaded to UPSpace Can the Information Centre add your email address to the UPSpace web site?			
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If no, please motivate (ignore if report is to be embargoed)			
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I hereby certify that, where appropriate, I have obtained and attached hereto a written permission statement from the owner(s) of each third-party copyrighted matter to be included in my research report ("the work"), allowing distribution as specified below. I certify that the version of the work I submitted is the same as that, which was approved by my examiners and that all the changes to the document, as requested by the examiners, have been included.			
I understand that all rights with regard to intellectual property in the work vest in the University who has the right to reproduce, distribute and/or publish the work in any manner it may deem fit.			
I agree that, a hardcopy of the abovementioned work be placed in the Gordon Institute of Business Science Information Centre and worldwide electronic access be given to the softcopy on UPSpace.			
Signature:		Date:	

## APPENDIX TWO: ETHICAL CLEARANCE APPROVAL

**Gordon  
Institute  
of Business  
Science**  
University  
of Pretoria

20 July 2017

Deon Steyn

Dear Deon,

*Please be advised that your application for Ethical Clearance has been approved.*

*You are therefore allowed to continue collecting your data.*

*We wish you everything of the best for the rest of the project.*

*Kind Regards*

GIBS MBA Research Ethical Clearance Committee