# Industry focused versus conglomerate venture capital in emerging markets of Africa

Submitted to:

**Wits Business School** 

**University of Witwatersrand** 

Johannesburg, South Africa

**Submitted by** 

Student: Yolanda Ntshobane (#487445)

**Master in Finance and Investment (2016)** 

Supervisor: Prof K Ojah

## **Declaration**

I, Yolanda Ntshobane, declare that the research work reported in this dissertation is my own, except where otherwise indicated and acknowledged. It is submitted for the degree of Master of Management in Finance and Investment in the University of the Witwatersrand, Johannesburg. This thesis has not, either in whole or in part, been submitted for a degree or diploma to any other universities.

Yolanda Ntshobane Candidate

#### **Abstract**

Venture Capital (VC) is a financial intermediation that is specifically well suited to finance and support the establishment and development of fledgling entrepreneurial enterprises. This industry is a need for the private sector, and it is the right fit type of PE platform for Africa's developing economies. However, VC development in Africa is still immature and needs the correct strategies to succeed. Decisions that have to do with venture capital stages, products (industries), and geographical scope of investments, constitute some of the fundamental elements of the venture capital industry's overall strategy. This has to do with whether VCs and angel investors specialize or diversify their investments according industry, stages and geography.

This study is designed to investigate whether the investors in the venture capital industry focus on specific industries, regions, stage of venture development or they diversify their investments throughout these categories, in the emerging markets of Africa. Both primary data and systematic review of literature was used to determine what the participants of the market prefer and the reasons for their preferences. Interviews, questionnaires and secondary data were used to gain understanding of the preferences of individual investors and venture capital firms (VCFs).

As much as the data collected was not enough due to the nature of the VC industry, the indication was that the VCFs in Africa do not specifically pursue an industry or stage. But when it comes to geographic areas they prefer the enterprises closer to them. However, the international VCFs that invest in Africa are very specific in terms of what industries, stages and geographical areas to pursue. In conclusion, there is still a lot that needs to be done in Africa, especially in making information available so that further studies can be done to understand and expand this exciting industry.

# **TABLE OF CONTENTS**

1	Intr	odu	ction	1
	1.1	Bac	ckground information	1
	1.2	The	eoretical consideration and problem analysis	4
	1.3	Res	search questions	7
	1.4	Use	eful terminology	8
	1.5	Res	search design and methodology	9
	1.6	Sig	nificance of the study	10
	1.7	Bri	ef orientation of the research	10
2	Lite	eratu	ıre Review	2
	2.1		nture Capital industry in Africa	
	2.1		Brief history on Africa's PE industry	
	2.1	1.2	Current state of Africa's Venture Capital	
	2.2	The	e need for venture capital in Africa	10
	2.3	Inst	titutional venture capital	13
	2.3	3.2	Angel finance	17
	2.4	The	e role of VC industry in creating value	25
	2.5	Str	ategies in the venture capital industry	27
	2.5	5.1	Knowledge and information effect	31
	2.5	5.2	Geographic scope	34
	2.5	5.3	Venture's Development stages	34
	2.5	5.4	Industry Criteria	36
	2.6	Coi	nclusion	42
3	Dat	a ar	nd Methodology	. 43
	3.1		urces of Data	
	3.2	Dat	a collection method	44
	3.2	2.1	Questionnaires	45
	3.2	2.2	Interviews	46
	3.2	2.3	Secondary data	47
	3.2	2.4	Bloomberg	48
	3.3	Dat	a analysis	50
	3.4	Sho	ortfalls	50
	3.5	Res	search Quality	51
	3.6	Eth	ical Considerations	51
4	Res	sear	ch findings	53

	4.1 Inte	rview and Questionnaire Analysis	53	
	4.1.1	Analysis of responses to interview questions	53	
	4.1.2	Summary of responses to questionnaires	60	
	4.2 Part	t 2 (from secondary data)	68	
	4.2.1	Venture Capital for Africa	68	
	4.2.2	What do investors prefer according to Bloomberg data	69	
5	Conclus	sions and Recommendations	73	
6	References75			
7	Append	lices	87	

# List of tables

	46
Table 3-2 Identified questions included in the Interview questionnaire	47
Table 3-3 the relevant variables and their descriptions	49
Table 4-1 summary of interview responses	54
Table 4-2 Summary of section 2 (questionnaire A)	61
Table 4-3 Options or strategies that respondents prefer under section 3	63
Table 4-4 other characteristics of the respondents	65
Table 4-5 preferences indicated by respondents	66
Table 4-6 investors and target company prefernces	70
List of tables and figures	
List of tables and figures	
	7
Figure 2-1 Current and targeted regions	
Figure 2-1 Current and targeted regions  Figure 2-2 Investment per country (2013)	8
Figure 2-1 Current and targeted regions  Figure 2-2 Investment per country (2013)  Figure 2-3 Company life stage focus	8 8
Figure 2-1 Current and targeted regions	8 8
Figure 2-1 Current and targeted regions	8 9
Figure 2-1 Current and targeted regions	8 9 40
Figure 2-1 Current and targeted regions	8 9 40 60
Figure 2-1 Current and targeted regions	8 9 60 61
Figure 2-1 Current and targeted regions	8 9 60 61 65

# List of abbreviations

EAVA East African Venture Capital Association (EAVCA)

AMIC Association Morocco des Investisseurs en Capital

APEA Egyptian Private Equity Association (EPEA)

ATIC Association Tunisienne des Investisseurs en Capital (ATIC)

AVCA African Private Equity & Venture Capital Association

EMPEA Emerging Markets Private Equity Association

PE Private Equity

SAVCA South African Venture Capital & Private Equity Association

SMEs Small and Medium Enterprises

VC Venture Capital

VCs Venture Capitalists

VC4Africa Venture Capital for Africa

VCF Venture Capital Firm

#### 1 INTRODUCTION

# 1.1 Background information

In emerging markets, private equity (PE) vehicle financing is becoming more and more recognized as a basis of value-add financing for emerging enterprises. Venture capital (VC) industry a sub-category of the PE industry together with entrepreneurship, are very crucial facilitators in the growth and development of an economy (Gorman and Sahlam, 1989). VC is a commonly used type of financial intermediation that is specifically well suited to finance and support the establishment and development of fledgling entrepreneurial enterprises (Hellman and Puri, 2000; Chemmanur, Krishnan, and Nandy, 2011). These entrepreneurial enterprises are very innovative, and innovation directly influences economic growth as explained by the endogenous growth model (Frontier Economics, 2013). Innovation improves productivity, which in turn improves competitiveness, and all these aspects are very important drives of economic growth. The VC industry and entrepreneurship not only contribute to the introduction and development of new products, services and technologies, but also improve economic growth through productivity that is accompanied by reduction in costs.

Entrepreneurship in Africa has received significant attention in the empirical literature. This is driven by the fact that small and medium enterprises (SMEs) are rapidly growing in the private sector, and they largely influence the economy's development (Black & Strahan 2002; Djankov 2009; Hause and Du Rietz, 1984; and Klapper, Laeven & Rajan, 2006). Entrepreneurship also forges a greater economic development through poverty reduction and better governance (Klapper, 2010). Entrepreneurs are the lifeblood of Africa in the sense that dynamic opportunities in the future will come from their great and innovative ideas as well as solutions to complex challenges throughout the African continent (Elumelu, 2015). However, entrepreneurs in Africa do face failure at times and some do not even get a chance to operate in the market. Some of the causes include the start-up capital, operating costs, government regulations, human resources, assistance for entrepreneurs, business incubators and start-up accelerators (WB; Elumelu, 2015; Ojah and Mokoteli-Mokoaleli, 2010;).

Entrepreneurial ventures in general are a very risky business, due to their internal characteristics. Stinchcombe (1965) argued that a new organization faces a significant liability of being new. Such liabilities lead to higher failure rate because of the process of

having to form new roles and tasks, which can be costly, time consuming, and inefficient. They also face high levels on of uncertainty concerning their producing capacity, arising from the lack of feasibility and market acceptance (Gruber, 2004). The uncertainty also arises from lack of viability and credibility of their new business models (Dutta and Folta, 2015). Their positively skewed distribution of returns, accompanied by high probabilities of weak to negative returns, and the lower probabilities of extremely high returns also contributes to their uncertainties (Stinchcombe, 1990).

Some other challenges mentioned by Stinchcombe (1965,1990) have to do with the entrepreneur's insufficient abilities in terms of talent, skill, ingenuity, leadership experience, talents and so on. Additional challenges have to do with forming solid exchange relationships due to the lack of reputation; or the lack of experience of established firms; human resource skills, lower skills diversity, and the disadvantage of competing with larger firms for employees (Gruber 2004). There are many other factors, but these are primarily why start-up enterprises face difficulties in obtaining finance from traditional sources such as banks, private/public debt market, and public stock market (Fairchild, 2011); this is where VC comes into play.

VC is a subcategory of the Private Equity (PE) industry and is a highly recommended source of funds for filling the financial gap (the gap between firm's own funds and the total need for funds) for Africa's growing private sector. VC has also been highly credited with encouraging job creation, innovation, and economic growth (Kortum and Lerner, 2000). VC has also been highly credited with encouraging job creation, innovation, and economic growth (Kortum and Lerner, 2000). Even though VC is a subcategory of the PE industry, venture capitalists (VCs) have different risk preferences as compared to other PE platforms, in the sense that they offer funding at different phases of a venture's development (Gompers, 1995). The reason for this is that the risk varies throughout the venture's development stages, the early stage being the riskier more than the later stage: hence, the effort and time put in the VC in industry is more intense.

The VC industry does play a major role in the economy and it is a powerful instrument in motivating economic growth. There are two groups of venture capital that are of an interest to this study: the first being the venture capitalists (VCs) which refers to organized providers of finance for successful but risky businesses (SF, Garuke, and Karanja, 2012) that pull

investments funds and take a stake in a venture firm. The other group is known as angel investors composed of informal investors who invest directly into the venture firms (SF et al., 2012). The VC industry does more than just financing these ventures, it also prides itself in adding value through helping these ventures shape their strategies, providing commercial advice, technical support, as well as attract key employees (Byers, 1997; Bygrave & Timmons, 1992; Hellmann, 1988; Gorman & Sahlman 1989; Sapienza 1992; Schilit 1997). Economic development needs to be regarded as a business firm in order for it to have real impact, also applying this concept to all locations of the economy, including the rural locations. Some entrepreneurs develop assets with their own efforts, but there are still those who need to be stimulated to make any effort. This is where VC can play an important role. For example, the agricultural industry cannot handle high cost of too much debt, and the African agriculture requires all stimuli relevant to the success of any business venture (Henry, 1971).

Looking into the African economies which are characterized by inadequate institutional infrastructures embodied by the lack of well-functioning capital markets, Ojah (2009) argues that VC platforms are the right kind of platforms that support enterprise creation and are the right fit for the African market. Empirically the African economies are currently considering more of other PE platforms instead of the VC industry, and this indicates a mismatch. Typically, ventures in Africa are still at their early stages of their business cycles and tend to be the riskiest enterprises in the entrepreneurial industry. As reflected in the study done by AVCA (2014) growth capital dominates the PE industry at most. Growth capital targets the later stages of venture capital and non-venture type of businesses. Even if there are VC platforms in Africa, most funds are invested in the late stage ventures. The angel market is quite difficult to detect due to lack of available data.

This research will try to investigate the motivation behind the African VC industry's choice for the type of developmental stages they finance, the industries and the geographical scope. Questions such as, what makes the VC industry choose a certain type of venture; What strategy between specialization and diversification is mostly used in making those investment decisions, and why; is the type of strategy used efficient and effective for the African economies; will assist in finding answers for this investigation. After the investigation the aim of this study will be to compare and contrast these two strategies, understand their nature

and their role in improving the efficiencies and effectiveness of the VC industry in the African continent. The perception is that VC industry in Africa is still quite immature, which implies that they might be venture stages, industries and geographic areas that are not yet penetrated.

#### 1.2 Theoretical consideration and problem analysis

According to Biekpe (2004), during the process of assessing a venture in which VCs are about to invest, aspects such as the business plan, quality of the management team, financial prospects and competitive position are scrutinized. As a result, on average only about 1% of these proposals presented are taken by VCs. After this selection, VCs then play their significant role. Tyebjee and Bruno (1984b) also add that VCs receive thousands of applications and these applications go through a very tough scrutiny. Questions that arise are that if new ventures are subject to such scrutiny under VCs, are the VCs playing their role of considering ventures that cannot be considered elsewhere? Are they using correct strategies when selecting these new ventures for their portfolio?

In the VC industry decisions that have to do with venture capital stages, products (industries), and geographical scope of investments, constitute some of the fundamental elements of the venture capital industry's overall strategy (Gupta and Sapienza, 1992). Questions regarding why firms in general pursue the different degrees of industries and geography are some of the most examined issues in the strategic management literature. Gupta and Sapienza (1992) argue that what motivates these types of studies is both practical and theoretical. Practically, these studies have contributed in the understanding of emerging trends in organizational structures and strategies. Theoretically, they have contributed in clarifying the role of markets versus hierarchies, in coordinating economic activities. A few studies have been undertaken regarding preferences of VCs or angels on varying degrees of venture capital stages, geographic scope, more especially in the USA context. However, in Africa this type of study has not been done. The VC industry is still quite immature in Africa (Rescura, 2013), like governments throughout the world, the African governments are looking into the small scale enterprises (SF et al., 2012) and investing their considerable time and resources to improve policies that encourage the VC industry assisting entrepreneurs with skill development and financing (Elumelu, 2015).

Avanz Capital (2012) has an interesting study on the PE industry in Africa, where investment strategies that are currently prevailing in the African continent were reflected. Parts of the PE funds are generalists and other parts of the funds specialize on certain industries. Most funds are primarily in the mid-market targeting rapidly growing mid and small sized enterprises. The industries that have been largely targeted are in the business services, information technology, telecoms, media and communications, and industrial and mining sectors. According to Avanz Capital firms in fully developed markets usually specialize in a certain industry, but African companies differ in the sense that they build their own supply channels. In terms of geographical scope, funds are quite significant in South Africa (SA), Kenya, Nigeria, Mauritius, Egypt, and Morocco. In the course of this research, I will mostly analyze some of these countries, in terms of what strategies are prevailing in their respective VC industry. AVCA (2012c) states that more than 200 PE companies targeting the African continent are coming up with very refined investment strategies ranging from generalist or country focused funds, to more industry or region specific funds, to the extent of Pan-Africa focused funds. Africa is guite a dynamic continent, for which there is no immediate industry, country or business model that can be deduced directly to Africa.

From a survey conducted by the African Private Equity and Venture Capital Association (AVCA) (2012c), findings are that growth capital (instead of early stage capital) dominates in the PE industry (VC industry included). This dominance indicates a limited leverage and financial engineering employed in private equity as an asset class. Africa has a dynamic combination growth of developing industries, which means that the PE industry strategies involved are of an expansionary nature. These types of strategies are where PE firms support enterprises through capturing and developing their value chains of industries; capitalize on expanding the supply channels and regional trade flows; or a mixture of these factors. These PE firms provide exposure to the rapidly growing industries that are usually not captured in the public market.

Although these strategies mentioned above are desirable, there is still a problem. These strategies seem to be focusing on later stage development of these ventures. Drawn from this study above, early stage ventures seem not to be the primary focus, and the concentration of the VC industry is quite low in the study itself. And besides the PE industry as a whole, it also looks like the VC industry is also concentrated in the few countries

mentioned above. The problem arising from this study, which is a concern in this research paper, is that there seems to be a concentration in these particular countries. Another point is that there seems to be more investments in some industries as compared to other industries. Is there a clear cut strategy used in these countries, that is, industry focused type of VC (specialized) or conglomerate type of VC (diversified)?

The Joint Economic Committee (here-forth JEC) (1985) finds the nature of VC industry to be mostly participating in seed, start-up and early development stages of investments. It consists of investors who are highly specialized, who partner with other investors and VC firms. The types of investments that mostly receive venture capital support are in enterprises that use technology to grow the economy into new processes and products that develop the productivity and quality of life. Venture capitalists are the type of hands-on investors whose investments are diversified by stage of venture development, geographic area and so on, as well as by co-investing with other VC firms to minimize risk.

Schilit's (1997) study on 'the nature venture capital investments', challenges the JEC's findings on the nature of VC investments, and poses questions to find out whether these findings still hold today or not. Schilit's study also investigates the types of projects venture capitalists take. He argues that authors like Timmons (1981, 1983, cited in Schilit 1997) had a different view, in that they found that venture capitalists prefer not to finance start-up ventures. The disagreement stems from the fact that during the time JEC did the study, there was a significant amount of funding provided to start-up ventures, especially in the high-tech industry. Investment philosophies have drastically changed since then, indicated by a movement towards specialization- by stage of development, region, and industry and so on. Another point raised by Schilit was that emerging trends are focusing on leveraged buy-outs (LBOs) and low tech industries. He then poses a question that if VCs can actually get a (nearly) fair and safe return of about 30 to 50 percent on certain LBOs, why should they even consider nearly proportionate returns in more risky start-up ventures?

The era in which the JEC did its study, was when the VC industry was emerging. It is understandable why most funds were spent on early stage ventures. Africa is similarly in this era where VC industry is new and emerging, the nature might be similar. The questions that this research should try to answer are whether Africa's VC nature in terms of its strategies is

the same as that of early years of VC in developed economies? How does the African continent differ in terms of strategies usually used in the developed economies and why? If Ojah (2009) argues against certain platforms used in developed economies for developing economies, what about the question posed by Schillit above? Why consider a risky investment with as nearly comparable return as the fairly safe one? Can strategies (specialization and diversification) solve this dilemma without having to sacrifice the greater good that comes from the VC industry (creating jobs for the demography of Africa characterized by youth, poverty and low skills)? And lastly, with or without these strategies, is the African VC industry investing for impact (investing in industries that matter, in geographical areas that are in need and in venture development stages that matter)?

Using such questions as raised above, this research seeks to compare and contrast venture capital that specializes and venture capital that is diversified (conglomerated) in terms of industries, geographic areas and venture stages of development. This not to say that which one works best, but to understand what African venture capital market are using and why. If relevant strategies are well understood and correctly used, then the venture capital industry in the African continent can improve, identifying opportunities that might have been missed previously. Through either specialization or diversification, innovation can still happen as this will be explain in the literature review. What is important is for investors to understand which strategy to use subject to certain circumstances.

#### 1.3 Research questions

These research questions are very important in achieving the aim of comparing and contrasting the two strategies. They are also important in guiding the whole research process.

- 1. What is the current VC industry situation in the African continent in terms of the prevailing strategies? Are the strategies the same throughout Africa?
- 2. What is the nature and role of venture capital?
- 3. What strategies are used the VC industry, and why?

In addressing these three questions, this research may show the nature of venture capital and how the African continent's VC industry differs from the typical VC industry in the developed economies. The analysis may show what strategies that the continent has not adopted correctly, and what actions it can take to improve its VC system.

These questions may address the inefficiencies that Africa is currently faces. For those economies using strategies that are not suitable for their economic state, analyzing these questions may show what strategies are more suitable. For economies doing well, addressing these questions may also show how they can capture unforeseen opportunities. The results from these questions are very important because they may indicate that, subject to the types of involvement selected by venture capitalist or angels, what different strategies involved in various activities should be more relevant.

## 1.4 Useful terminology

**Venture Capital funds:** refers to origination of the funds, ownership, contributions, asset class, and portfolio details.

**Venture Capital Industry:** this term refers to the venture capital market as a whole. This includes all the players (investors, managers, entrepreneurs, and firms), the type of transactions used, assets classes, skills, strategies and other activities.

**Seed capital (and/or stage):** Plummer (1987) defines this capital as the amount of capital given to an inventor/entrepreneur to so that they found out whether the idea they have deserves further consideration and investment, and no production for sales is involved. The idea may be technological (which may involve coming up with a prototype), or it may be an idea for a new marketing strategy.

**Start-up capital (and/or stage):** this stage involves setting up operations (bring together management and staff team, getting together office and production equipment etc.), commercializing intellectual property, and other start-up activities (SAVCA, 2012).

**Development capital (and/or stage):** at this stage, business models are solid, production is peaking up. SAVCA (2012) adds that the capital injected at this stage is to further launch the business, increase the market share so make to the business profitable. According to Plummer (1987) from the early development stage onwards, the risk is considerably minimal.

**Growth capital (and/or stage):** this type of stage is also known as post-revenue deals. This capital is provided to established but still high-risk ventures to assist them in expanding

their activities such as entering into new regions, foreign markets, creating new product/ technology chains, increasing production and/or acquiring competitors.

#### 1.5 Research design and methodology

This study is designed to investigate whether the investors (angel investors and venture capitalists) in the venture capital industry focus on specific industries, regions, stage of venture development or they diversify their investments throughout these categories, in the emerging markets of Africa.

Both primary data and systematic review of literature was used to determine what the participants of the market prefer and the reasons for their preferences. Interviews and questionnaires were designed to gain understanding the preferences of individual investors and venture capital firms.

The questions focused on the following themes:

- 1. Geographical scope preferences,
- 2. Stage of venture development preferences,
- 3. Industry preferences.

The researcher ensured that the questionnaire was distributed to all demographics (i.e. races groups, different age categories, both genders and different income categories) to ensure a diverse sample was obtained. Due the poor response, additional information (secondary) from reliable sources was gathered. Qualitative and Quantitative methods were both used to analyze the data.

Literature on the subject played an integral role in assessing the current state of affairs, particularly in better guiding this study, as a number of studies conducted on the research of the investment strategies in the fields of finance, investment, management, entrepreneurship and industrial policy have been found.

# 1.6 Significance of the study

Venture capital financing is recognized as critical in the development of businesses especially in their infant stages; not because of the funds they provide but most especially the advice and monitoring they bring to the company accessing the funds. This topic is vital in an economy especially in third world area where an industry creates jobs. This topic should reveal some of the issues and gaps that the African continent is currently experiencing, giving all stakeholders idea of what can be done to improve this industry as whole.

Through the analysis of the venture capital market in Africa, the study will provide stakeholders with insight as to what the nature of venture capital in Africa, where it is, where it should be. The study is a step towards developing better strategies for the whole venture capital industry for the Africa continent. The results of the study will also help policy makers and researchers and the alike to widen the scope of venture capital studies through identifying limitations and other recommendation that will be provided by the study. Venture capitalists that are able to structure their capabilities and resources better for success will provide offer benefits to the venture firms they support. More venture firms will be able to benefit from venture capital support; the better the returns VCFs will reap, allowing more capital to be available for fledgling companies.

#### 1.7 Brief orientation of the research

Chapter One has provided background information to the research problem, setting the context within which this study was conceived and the significance thereof. The chapter concludes with a research methodology and significance of this report. Chapter Two reviews the existing theoretical and empirical literature on global venture capital market, its nature and the strategies that are currently prevailing. In addition, the theoretical aspects of the Africa's economic strategies that relate to this topic are included as well as the current situation in the private equity market of this continent. The literature review also generates questions that need to be answered by venture capitalists and angels.

**Chapter Three** of the paper describes the methodology used in the analysis. It includes detailed information around the research population, sample selection, profile of respondents, measuring instruments and methods applied. In addition to this, limitations of the study and any ethical considerations that arose were highlighted. **Chapter Four** handles the

presentation and analysis of the empirical evidence collected. It also discusses the implied strategies from the data collected. **Chapter Five** this chapter deals will focus on general conclusions drawn from the study, and a few recommendation for the industry and possible areas for future studies.

#### **2 LITERATURE REVIEW**

This chapter provides a presentation of the venture capital field, its concept, characteristics and nature. First, the current state of the VC industry is presented, showing the type of industries, regions, and stages over which the VC funds spread. This particular section is essential for answering the first research question about the current state of VC in Africa. This is then followed by the justification of why VC industry important for the African economy. Secondly, the fundamentals of this empirical field are outlined, including the important terminologies, key players, and special characteristics. This is second part tries to answer the second research question about the nature of venture capital. Thirdly, is the detailed discussion of the two contrasting strategies in terms of their nature, how they are used as investment strategies in the VC industry. This part looks at how these strategies are used in terms of geography, stage of venture development and industry. This part tries to answer the last research question.

For the input process of gathering relevant literature that will appropriately answer the research questions, I have managed to choose the literature from the primary source to the tertiary source; that is, from reports, emails, conference proceedings, journals, books to catalogues, bibliographies and more. Since the study is in the African context, primary data was of great help when it came to finding out the current stage of the African VC industry. However, most of this information was more on the PE industry as whole, and it has managed to give out a rough idea of what the state of the African VC industry.

The course of the literature has assisted in the compilation of the questionnaires that I have sent to the relevant units. I have managed to briefly discuss and conclude the literature review based on the facts that I have found. The conclusion also reflects what the literature has managed to cover, and what it has failed cover in terms of comparing the two contrasting strategies. The chapter ends with the type of strategies that industrial policy suggests are necessary for the economy, in terms of what should the approach for the African continent.

## 2.1 Venture Capital industry in Africa

#### 2.1.1 Brief history on Africa's PE industry

The account of the private equity industry in Africa dates back to the late 1980s with the rise of fund resources based and fixated in South Africa (Appia-Kubi, 2013). According to the AVCA (2014c) report with a broader mandate to invest across Africa, Development Finance Institutions (DFIs) pioneered this industry and largely supported this continent by investing through loans in government originated development projects. These DFIs included institutions such as African Development Bank; the United Kingdom's CDC Group plc (the Commonwealth Development Corporation, prior to this name it was called, the Colonial Development Corporation); Germany's Deutsche Investitions- und Entwicklungsgesellschaft (DGE); European Investment Bank; France's Proparco and more.

These DFIs where strategically aligned and they were all investing in Africa to succeed in positively impacting the continent through building businesses, creating jobs, alleviating poverty and improving people's lives. During these years activities of DFIs extended to funding and supporting private enterprises independent of government backed projects. Their funding shifted to offering equity investment to the private enterprises in addition to the formerly ideal debt capital. DFIs acknowledged that equity investments better supported enterprises to grow and succeed, which was the reason for their strategic shift to offering equity capital. This shift was greatly aligned with the DFI community objectives.

DFIs were well placed to work with governments, educating officials on the advantages of privatizing assets and private sector investment, since they had government ties, experience, and history in the region. The DFIs became really successful, and truly introduced the private equity industry in Africa. They created a real capacity for private equity practitioners to come into the market and build upon their achievements. Even though there were some early adopters in the early 1990s, the DFIs were joined by the first movement of Africa focused PE firms, which largely developed in South Africa.

12 PE funds combined had raised about US\$1 billion to in invest in Africa by 1997, for which most of the funds were largely concentrated in the South African market. These funds later began investing in other countries such as Botswana, Ghana, Kenya, Zimbabwe and more. Most of them were country specific and sector skeptical funds and mainly targeted investment sizes under US\$5 million, which was a common lower limit amongst the DFI community during that time. Since then there have been many enterprises in Africa supported by the PE industry including Airtel.

#### 2.1.2 Current state of Africa's Venture Capital

The type of PE that dominates the African market is the growth capital type of PE. Africa is different from the traditional global PE industry that is usually dominated by leverage buyout type of capital. The nature of Africa makes its PE players to prefer expansionary strategies. This is where they support a particular enterprise to grow and capture more of the value chain of an industry or expanding distribution channels and trade flows or all these factors combined (AVCA, 2014c).

Africa has a population of about billion people with a growing middle class, and a few countries that are thought to be one of the quickest developing economies in the globe. They are outperforming their emerging market peers, and have positioned Africa well for VC activity. However, there are still some concerns whether this continent can support such a VC activity, and whether investors are remaining confident about this region due to its poor infrastructure, political risks, economic inequality, sluggish job creation, etc.

The VC industry has been active in the continent for a while, where 116 deals amounting to US\$262 million between 2007 to 2014 March; South Africa being the one with most number of deals (24%), flowed by Kenya (21%) and Ghana (14%). Looking at deal size South Africa was on the top followed by Kenya, Nigeria and Ghana. PE firms based in Africa mostly come from Mauritius, with a total of about 108 VC funds across the world and only five of them focused in Africa. South African PE firms had about 48 and half of them focused on the Sub-Saharan Africa, followed by Kenya with a total 11funds, where 8 of them are Sub-Saharan Africa focused. During

this period most active deal stage were led by seed stage, followed by growth capital. Late stages were focusing more on other PE platforms outside of the VC platform (Coulson, 2014).

#### 2.1.2.1 Kenya

Venture capital funds were introduced during the period of 1996/7 together with other investment funds. Acacia Fund Limited was the first VC fund introduced in Kenya. This fund was endorsed by the Commonwealth Development Corporation (CDC) with a capitalization of one billion KShs (approximately US\$10 million). The fund was launched as a six to ten year close-ended fund, targeted at funding medium sized enterprises that had a potential of being listed on the NSE (Ngugi, Amanja and Maana, 2009). Over the risk capital that it provides for expanding enterprises, it also reorganizes, rationalizes and constructs these enterprises. Other well-known venture capital firms include Aureos East Africa and Kenya Management Company limited which also provide equity to enterprises with high growth potential and for expansion purposes. Industrial Credit Development Corporation (ICDC) and its subsidiary Industrial Development Bank (IDB) and CDC are donor backed public debt corporation that offer VC type of funds to support SMEs in Kenya (SF et al., 2012). SF et al. (2012) feel that though VCFs have been present in Kenya since the early 1970s, they have not made any significant impact on SMEs. In their study the results state otherwise. VC industry has had such a significant impact on SMEs shown in sales growth, profits, assets and improved management of finance and other resources.

#### 2.1.2.2 South Africa

There is a considerable amount of VC literature for South Africa and has been is well documented by SAVCA and other academics. A recent study done by SAVCA (2015) covering calendar years 2011 to 2015, reveals that about 21 fund managers accomplished 168 new deals adding up to a total of R865 million. Of this entire deal flow, 55 deals are categorized as transactions concluded by angel investors, adding up to R42.55 million. Since the e-commerce, new-media, and digitization deals have reportedly required lower transaction amounts, angels have preferred these low sized transactions, which represent a change from earlier surveys.

A recent report by Sikhakhane (2016) reveals that there has been an introduction of a tax incentive (Section12J of the Income Tax Act) for those who support SMEs. This incentive was introduced in 2009, and allows individuals and business to deduct 100% of the amount that they invest in VCFs that are section12J compliant. She also adds that as shown by the SAVCA reports, technology sector is the driver of the VC industry in SA. The challenge that SA face is that this incentive is not well-known and remains underused among in SA.

#### 2.1.2.3 Nigeria

The Central Bank of Nigeria (CBN) adopted venture capital as ground-breaking technique of funding SMEs through equity financing. Due to the fact that debt financing lacked the ability to appropriately bear the large risks that are related to start-up of SMEs in Nigeria (particularly the manufacturing sector), the CBN saw VC appropriate for its economy. Small and Medium Industries Equity Investment Scheme (SMIEIS), which later became Small and Medium Enterprises Equity Investment Scheme (SMEEIS) was introduced in 1999 and is one of the large organizations that promotes VC industry in Nigeria (Ollor and Dagogo, 2009). This scheme requires commercial banks to set aside ten percent of their profit before tax income, to promote equity investments and SME sector (Abereijo and Fayomi, 2007). However, Oyefuga et al. (2008) find that even though the scheme had been supportive to some SMEs, most of them were not mindful of its activities and abilities. Operators of the scheme should therefore make efforts to further create awareness and educate the entrepreneurs. According to Terungwa (2012), the funding mix of SMEs in Nigeria is mainly from the informal market, displayed by the use of this option more than the formal sources by the SMEs. The findings also show that formal sources are naturally more challenging to SMEs in Nigeria compared to informal sources funding.

#### 2.1.2.4 Ghana

Among the several efforts that have been completed by numerous governments over the years, is the attempt by the National Democratic Congress (NDC) governments' Business Assistance Fund (BAF), a project that did not make it. After the New Patriotic Party (NPP) government came into office in 2001, vowed to establish

a VC fund. This fund was based on the idea that many of these SMEs, which make the foundation of Ghana's economy, required the financial strength to survive. The promised fund was then established in 2004, and re-establishment in 2006 after it failed to survive after 2004. Another government institution that has supported the growth of venture capital industry in Ghana is the Private Public Partnership (PPP) (Anokye-Yeboah, 2009).

According to Boadu (2014) above the Venture Capital Trust Fund (VCTF), there are other VCFs such as the Activity Venture Finance Company, Bedrock Venture Capital Finance Company, Gold Venture Capital Limited, Fidelity Equity Fund II and more. Boadu finds that VC industry is severely represented in ICT area, poultry and agro-processing and less of other industries.

#### 2.1.2.5 Venture capital by regions

On the survey report done by Deloitte in 2013 most respondents indicated that they were mostly invested in the Eastern and Southern regions of Africa. Central Africa shows otherwise. Such results indicate that as the political and economic conditions in the regions improve, there will be better PE activity in this region. Investors have shown cautiousness about the Northern Africa region, where the Indian Ocean Islands has also been highlighted as a region to watch.

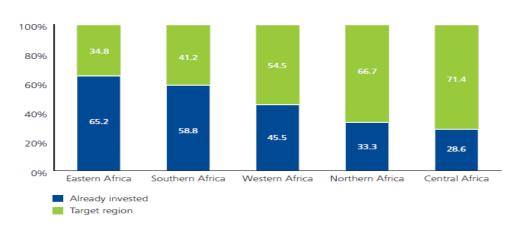
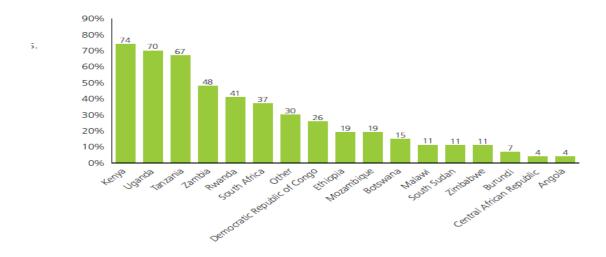


FIGURE 2-1 CURRENT AND TARGETED REGIONS

Source: Deloitte (2015)

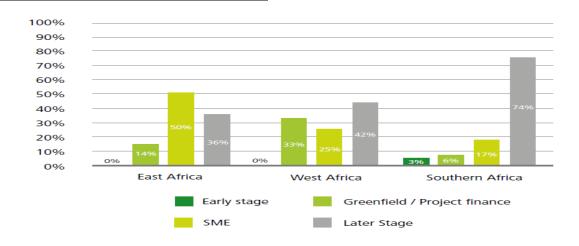
**FIGURE 2-2 INVESTMENT PER COUNTRY (2013)** 



Source: Deloitte (2013)

The major countries investors are focused on are not that different from what other reports have shown in the previous years. Other countries not indicated on the diagram above also include Cameroon, Gabon, Cote d'Ivoire, Ghana, Mauritius, Madagascar, and Nigeria

2.1.2.6 Venture Capital by stages
FIGURE 2-3 COMPANY LIFE STAGE FOCUS



Source: Deloitte (2015)

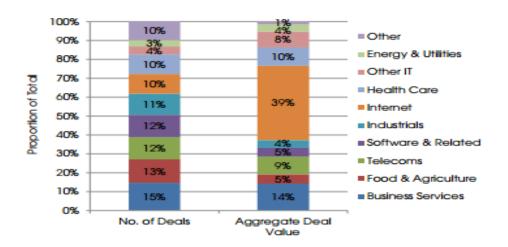
The diagram above represents what the preferences of investors in terms of the stages of development. It indicates that there is quite less investments made in VC stages (early stage and SME) by investors and VCFs. This confirms what Ojah (2009)

finds in his study, that African private equity platforms are more on later stage type of investments. The VC industry is quite immature in Africa even though government attempt have been to incentivize the market in order to stimulate growth in this area of the economy. In East Africa most opportunities are in SMEs, which is different from West Africa where opportunities present themselves in the PE industry on greenfield/project finance. In Southern Africa later stage investments continue to be appealing investments as mature businesses with strong foreseeable cash flows remain a prerequisite for the leveraged buyout (LBO) model.

#### 2.1.2.7 Venture Capital by industry

#### FIGURE 2-4: VENTURE CAPITAL DEALS IN AFRICA BY INDUSTRY, Q1 2007 - Q3 2014

Source: Preqin Venture Deals Analyst (2014)



These deals exclude add-on, venture debt, secondary stock purchase, and merger and grant deals. The industries are that VC invests in are very important for the growth of the African economy, and the type of industries that economies should focus on are

mostly emphasized in the industrial policy literature. The type of strategies and the industries that should be generally pursued in the African region are indicated discussed towards the end of the literature review. According to Deloitte (2015), East Africa is top 5 PE industries are: food and beverage, financial service manufacturing and industrial technology, media and telecommunications, and healthcare and pharmaceuticals. For West Africa the top five industries include: financial services, agriculture / agribusiness, manufacturing and industrials, real estate and construction, and retail. In Southern Africa region industries on the top are: food & beverage, manufacturing and industrials, healthcare and pharmaceuticals support services, and education. These results do not necessarily mean that the VC industry is also top intensely invested in these sectors, instead this gives out a rough idea of what different industries prefer. What is shown by the diagram above is that internet has been dominating in the VC industry in Africa. In one of the following sections the discussions will be focusing on what the nature of the VC industry, and what type of sectors are usually supported by this type of platform.

# 2.2 The need for venture capital in Africa

In the African continent, small businesses face failure in their first year of operation caused by the limited support from government institutions and banks (Biekpe, 2004). According to Ojah and Mokoaleli-Mokoteli (2010), these small businesses are characterized by significant amount of uncertainty, with limited collateral and lack of historical records. "The mechanism for enhancing the availability of finance to entrepreneurs can take the form of strengthening the banking industry, setting up government backed credit support programs, and creating private equity markets" (Ojah 2009:6). In addition, Schumpeter (1912) suggests that with a well-functioning banking system technological innovation is stimulated through the ability of identifying and financing entrepreneurs with a potential to implement innovative products and production processes.

However, Biekpe (2004) argues that the banking system is inherently status quo oriented and restrictive. For instance, restrictive methods are not suitable for the development Sub-Saharan African countries. Fry (1995) claims that when financial intermediaries deal with information asymmetries they would typically ration credit, require collateral, screen their applicants and so on. As result, lucrative investment opportunities are rejected because of credit rationing. These businesses have no credit history, no collateral and banks are mostly not prepared to provide finance for such businesses.

Dana (2007) empirically finds evidence in the setting of West Africa that there are numerous factors that hinder entrepreneurial activity, although there are new business programs available: illiteracy, lack of labor force and managerial skills, lack of access to resources (technology, capital) accompanied by poor infrastructure and more. This means that there is a need in Africa for a financial model that will not only finance entrepreneurs but also transfer skills; provide technical resources and professional advice. "Venture capital plays a specific and important economic role in the lives of budding enterprises which, otherwise, would not exist as viable businesses; even less eventually going on to become publicly owned enterprises." (Ojah and Mokoaleli-Mokoteli, 2010:18). Ojah (2009) emphasizes that, the VC industry is crucial in environments like Africa where thin capital markets and inefficient traditional financial intermediaries exist.

The development of the financial sector through financial intermediaries is important in fostering economic growth. Through financial intermediaries potential projects are identified and monitored; risks and the exchange of goods and services are facilitated. Through these activities efficient capital allocation is encouraged, leading to improved total factor productivity (Levine, 1997). Financial intermediation also provides a vehicle for sharing and diversifying risk. Through this vehicle capital allocation is induced to shift towards risky but "high expected return" projects. Such a shift enhances productivity and economic growth (Greenwood and Jovanovic, 1990). VC firms successfully create sustainable enterprises, especially public-enterprise types (Ojah, 2009). Public enterprise creation is very important in the sense that is

opens up opportunities for the firm to access more capital, promotes best practice corporate governance, and for the survival and longevity of the firm not subject to the existence of the owner (Ojah and Mokoaleli-Mokoteli, 2010).

VC is a subcategory of private equity (PE) industry – PE being an investment vehicle that pulls debt and equity funds to finance firms and acquire stake in those firms. These firms include: start-ups, private middle-market firms, financially distressed firms, and public firms seeking buyout funds (Fenn, Liang, & Prowse, 1997; and Robertson 2009). This industry has been quite successful in the developed economies such as the United States (US), United Kingdom (UK), and Japan. Examples of well-known companies that have been supported by this industry include Intel, Microsoft, Federal Express and more. Ojah (2009) postulates that for the success of this industry, there must be an ability to differentiate between right and wrong type of private equity for the economy, especially if the principle of the industry is to support entrepreneurship.

African economies are in desperate need of economic growth and job creation for the development of the continent. Characterized by inadequate financial institutions, hampered by corruption and legal systems (Ojah et al., 2010), Ojah (2009) argues that the right type of private equity for the African economies is the institutional VC or angel investor platform. The wrong type of private equity is the buy-out platform. The Buy-out platform is the type of investment vehicle that fosters production efficiency of an existing company by managing it as a private company. According to Jelic, Saadouni and Wright (2005) these buyout firms, access equity and large amounts of debt, and usually invest in established firms with foreseeable cash flows. Although some studies found no differences in efficiency between these two platforms, the buyout platform has been found to be mostly successful only in the developed economies (Cumming, Siegel and Wright, 2007; and Jelic et al., 2005).

VC and angel finance platform: "sometimes termed a finance-cum-managerial support platform, it is an equity investment fund provided to entrepreneurial (privately held) firms or start-ups which possess attractive product concept(s) that are yet to

attain sustainable consumers' acceptance." (Ojah, 2009:6). African economies identify with this type of PE, due to the institutional and market infrastructural challenges they currently face. The way that VCs and angel platforms are designed and structured, gives them the ability to address the inefficiencies of badly functioning capital markets (Ojah, 2009). These inefficiencies are caused by most issues faced by emerging economies such as, information asymmetries, low quality of plumbing factors, corporate government and the inadequate size of financial institutions (Ladekari and Zervos, 2004).

#### 2.3 Institutional venture capital

In the form of limited partnership, institutional venture capital is a professionally organized pool of funds that is invested in equity instruments of private enterprises at different stages in their developmental cycle (Sahlman, 1989). They are active investors (Quindlen, 2000), who pride themselves in nursing companies than just supplying money (Hellmann, 1998), and they add value through helping these firms shape their strategies; attract key personnel; and provide these ventures with commercial and technical advice (Byers, 1997; Gorman & Sahlman, 1989; and Sapienza, 1992). This means that VCs are extensively involved; since they also take a sit on the board and retain economic rights on top of the ownership right they already possess (Sahlman, 1989). Such an extensive role of VCs can cost entrepreneurs their control in the firm (Hellmann and Puri, 2000).

According to Fenn, Liang and Prowse (1997), VCs tend to invest in technologies and markets in which they possess expertise in order to make informed decisions. VCs are very strict, in that before they even consider an investment they first scrutinize it (Fried and Hisrich, 1994; and Tyebjee, & Bruno, 1984b). The selection process is very intense. After the selection process and once a venture has been chosen this is when VCs add value. VCs make their greatest contributions when ventures are still at their early stages of development (Timmons and Bygrave, 1986). However, VCs have moved towards later stage ventures, involving angels to provide initial funding to early stages (Hellmann and Thiele, 2014).

The VCs have formalized relationship with the investors from whom they raise capital, and a formalized relationship with the ventures in which they invest. The contract between the VCs and investors is in the form of limited partnership, where the VCs stand as general partners and investors stand as limited partners (LPs from). Due to the fact that VCs are agents for the LPs, there are control mechanisms in place to deal with relationships issues such as agency costs, compensation issues and so on. Besides the selection process of new ventures, VCs have formalized investment processes more like mutual funds (Sahlman, 1990).

VCs screen thousands of applications before deciding on whom to support (Fried and Hisrich, 1994; Sahlman, 1990; and Tyebjee, & Bruno, 1984b). VCs and entrepreneurs are with no doubt likely to have different information or disagree on particular issues. VCs deal with these types of situations by: structuring their investments in order to keep firm control through staging the infusion of capital. Secondly, by formulating compensation schemes that incentivize venture managers. Thirdly, by being actively involved in supervising these ventures they fund. Lastly, they preserve mechanisms in order to make liquid investments possible (Sahlman, 1990). Unlike angels, VCs have the ability to improve corporate governance (Hellmann, 1998), and commercialize the enterprise, both within the organization and at the top management level (Hellmann and Puri, 2000). When these reach maturity, VCs then take an active part in guiding these enterprises in taking up exit strategies (Lerner, 1994; and Gompers, 1995)

#### 2.3.1.1 Sources of funds

A few professional venture capital firms were formed after the American Research and Development (ARD), the first modern VCF. The sources of funds came mostly from individuals, through publicly traded close-end funds. In 1958 the first limited partnership was formed, where later imitators followed. Most of these VCFs raised funds either through closed-end funds or small business investment companies (SBICs) (Liles, 1997). Since the 1970s, the number of institutions investing in the PE industry has had a significant growth, especially the largest investors which are pension funds, endowments and foundations (Fenn, et al., 1997). Limited

partnerships are currently dominating, and their crucial advantage makes them interesting to institutional investors that are tax-exempt (Gompers and Lerner, 1999). The sources of funds have a great influence on the development of venture capital in the sense that preferences differ and therefore may influence the type of strategies VCFs employ.

- Corporate or private pension funds: pension funds are one of the limited partners that have been around since the early development of the venture capital industry (Metrick and Yasuda, 2011). They almost invest purely for financial purposes: attracted by high returns and diversification benefits. Other funds have become active in investing directly and co-investing. They are more sophisticated and tend to rely on their own highly experienced human resources (Fenn et al., 1997). Jeng and Wells (2000) claim that raising money from this source offers a numerous advantages to the VCs. It very quick for VCs to raise large amounts of capital solely from a limited number of large pension funds. With a few investors, it is easy for VCs to economize on the amount of time they spend to keep investors informed of their activities.
- Public pension funds: like corporate pensions funds, these funds also invest for financial reasons, but are usually pressurized to invest within their region. Although they are larger, they are also subject to restrictions such as tighter budgets, few staff and restricted capital for each particular investment. Due to the fact that they are also subject to public scrutiny, they are less of risk takers and have shorter investment horizon. The stages they of venture capital they prefer are usually later stages, and non-venture capital. And lastly, the lengthy process that these public pension funds embark on when evaluating investments, limits them from responding fast to available opportunities (Fenn at al., 1997).
- Financial institutions: this includes banking institutions, insurance companies and investment banks and they are the next largest investors after pension funds (Metrick and Yasuda, 2011). As part of the earliest venture capital investors, they are estimated to be the largest direct

investors. They may be involved as a group, but their involvement varies. Some invest indirectly into PE through bank subsidiaries and their direct investments through licensed Small Business Investment Companies (SBICs) (Fenn et al., 1995).

The involvement of insurance companies in the PE industry developed from enterprises' private placement on debt instruments. For a long time, insurance companies funded risky firms through purchasing debt that contained an equity component. They even financed leveraged buyouts through mezzanine financing activities. Some invest through limited partnership or directly provide mezzanine debt (Fenn et al., 1997).

Investment banks usually participate in the PE industry through partnerships where they are general partners as well. As part of merchant bank activities that provided finance and assisted large buyouts in the mid-1980s, partnerships in investment banks became popular. Till to this day, they invest in in later stage ventures and non-venture investments in established companies (Fenn et al., 1997).

- Endowments and Foundations: this group mostly constitutes of large private universities and charitable foundations (Metrick and Yasuda, 2011). Among the earliest investors of venture capital, they mostly invest through limited partnerships, but some such as university endowments invest directly through their investment programs associated with their research programs (Fenn et al., 1997). Furthermore, these type organizations are the most successful with returns that surpass those of other investors. Additionally, they have a track record of success because they have always been active and consistent since the 1960s and early 1970s (Metrick and Yasuda, 2011).
- Government programs: governments throughout the world have recognized the importance and advantages of the venture capital industry and are making efforts to support it (Jeng and Wells, 2000). Lerner (1997) government backed programs to be producing advantageous benefits. However, O'Shea (1996) then opposes this argument by pointing out disadvantages associated to these efforts, where government spending on

the VC industry could hinder the progress of a private VC sector. Additionally, many are doubtful of the ability of the government to target appropriate and healthy ventures. Jeng and Wells (2000) discuss the importance of numerous government programs, from providing legal infrastructure to launching funds that are directly invested into the PE industry.

• Wealthy Families and Individuals: Fenn et al. (1997) and Metrick and Yasuda (2011) agree on the fact that this group invests substantial amounts in PE industry, but the amount has been declining over the recent years. Pension funds and endowments investments have reduced this group's relative importance in the PE industry. This group includes former executives, wealthy clients of banks and so on. Their contributions are usually smaller than that of institutional investors.

#### 2.3.2 Angel finance

Public equity and the institutional VC market are quite evident, efficient and well understood. On the other hand, informal VC market is frequently misunderstood, and consists of a nearly obscure population of single investors who provide equity-type funding for entrepreneurial ventures of all type (Wetzel, 1987). It is unfortunate that even though the professional venture capital has been quite glamorized for long, many studies have indicated that only backs less than half of the entire equity funding for new ventures (Wong et al., 2009). Equally important but least study venture capital is the angel finance. Angel financing is provided by individuals who are considered to be very affluent, providing their own finance, have some level of expertise, and no family connections with the entrepreneurs (Mason, 2005), and are known as angel investors or angels (Hellmann and Thiele, 2015; and Wong et al., 2009). Available empirical data indicates that the size of the informal VC industry as a whole is twice the size of the institutional VC. In addition to this, the minimum amount of enterprises financed by this informal VC appears to be ten times the amount of enterprises funded by VCFs (Wetzel, 1987).

Literature on informal venture capital is inadequate, and before the 1980s both the research and the policy makers were unfamiliar with the angel market (Mason, 2006). Prowse (1998) states that the angel market is quite obscure, and knowledge about its scope and size and other players is limited. Angels are very important investors in VC industry, since they fill the financing gap between funding from VCFs, and funding from family and friends (Prowse, 1998; and Wong et al., 2009). The reason for this is that when it comes to family and friends it is challenging to raise adequate finance; and institutional venture capitalists hardly consider smaller deals (Wong et al., 2009). According to Gaston (1989), due to the lack of reliable empirical data, it has been challenging for policy makers to formulate effective policies that would guide this market where necessary, speed up their growth where possible, and stay away where desirable (Gaston, 1989).

Furthermore to the argument above Wetzel (1987) agrees to the fact that market efficiency is a more challenging subject to address, in the sense that: (1) inadequate data about the investors and investment prospects seems to a significant barrier to the financing of certain types of entrepreneurial ventures; (2) The stream of informal VC seems to be also restricted by strangeness with the approaches and schemes of effective venture investing on the entrepreneurs' and prospective informal investors' part.

To confirm what Wetzel (1987) finds in his paper, Shane (2008) identifies investments undertaken by angels to be very large, larger than that of venture capitalists and Freear et al (1992) expresses that the size is ten times larger. Wong et al. (2009) also find that due to the U.S technological boom during the 1990s the angels were investing in technology related industries. Angel-backed firms obtain funding at very early stage of their life cycles (recently formed) than the firms financed by VCs. So angels are in way risk appetite than VCs since they are willing to finance ventures with extreme levels of uncertainties. Below are some of the stylized characteristics of angel investors which differentiate them from venture capitalists.

Informal market: The angel investor market is of an informal nature and it is therefore very difficult to quantify its size, scope, the angels themselves and those who raise angel finance (Benjamin and Margulis, 1996; Wetzel 1983). "There is almost no institutional infrastructure supporting the market" (Prowse, 1998:786). Angels show a great amount of heterogeneity in their personal attributes including experience, investment preferences and age (Wong et al, 2009; and Prowse, 1998). As stated by Prowse (1998), the heterogeneity also means that it is difficult to assume how the market works, and appear to be diverse due to the individuals' diverse backgrounds. The investment decision-making model (Tyebjee and Bruno, 1984b) is very informal, unlike the model used by VCs. To elaborate on how unsophisticated this model is to angels; firstly, the deal origination phase where the angel becomes aware of the investment opportunity, usually comes from chance encounters, which consist of personal and business contacts (Atkins and Esiri, 1993). Secondly, on the deal evaluation phase where the due diligence is done, the angel investor examines the venture, whether it is suitable or not for their investment criteria. Syndication is sometimes used by angels, to only free-ride on due diligence (Wong et al., 2009). Angels will typically look at the geographic proximity, nature of business, amount of funds needed, the value they add to the company and so on (Mason and Rogers, 1997). According to Mason (2006) even if angels require business plans, most of them do not really scrutinize them. At this particular stage the angel investor would then decide whether to reject or continue on with the project.

Thirdly, the negotiation and contracting stage comes in, which comprises of terms and conditions (to control behavior of the entrepreneur), deal structuring (to align the behavior of the investee to that of the investor) and valuation. Negotiated terms and conditions should be acceptable for both the investor and the entrepreneur. These three main aspects are a major gap in the angel market. There is currently no unanimously agreed process of valuing venture. Market-based methods are unsuitable due to the infrequent valuation of small businesses by the market. A better and commonly used valuation is the asset-based method, and can get complex due to the nature of these ventures. In terms of contracts, angels do draw them up to protect their investments, but the level of sophistication differs. Some do involve

professional advice (Mason, 2006). Angels are very quick in making investment decisions (Freear et al., 1995). Mason and Harrison's (1996) report shows that the whole investment process often takes less than a month and rarely exceeds three months.

Fourthly, the post-investment stage in where the investor will gets involve. Some angels are passive and would prefer not be involved on day-to-day activities (Mason and Harrison, 1996). Nevertheless, some angels are very active and provide handson capacity, such that they get involved in very early stages of the life cycle, and are even perceived as part of the management team of the venture (Sætre, 2003). In addition, Politis and Landström (2002) observe angel financing as an extension of an entrepreneurial career. Madill et al. (2005) points a couple of roles that angels play, which include: management team advice, contacts, hands-on professional assistance (for example, legality, accountancy, marketing intelligence etc.). Angels also help these entrepreneurial ventures to access additional finance (Sørheim 2005; Wong et al. 2009). The nature and level of participation is influenced by geography. Landström (1992) and Wong et al. (2009) claim that the closer the angels to the ventures in which they invest, the frequent the contact between angels and those ventures. This is the stage where venture capitalists come in (Gorman and Sahlman, 1989; Sahlman, 1990; and Ehrlich et al., 1989).

Lastly, the harvesting phase is where an investor exits from the venture, reason could be that the venture failed, or the venture is successful and the investor wants to sell their shares. Some angels try to draw back some funds through fees or interest (Mason and Harrison, 2002). Lumme et al. (1998) find that the most successful investors are likely to be driven by the fun and interest of being part of such investments, and the least successful are driven by altruism. The former consists of a large deal flow and a lower value estimation of their hands-on involvement. The latter have a lesser deal flow and a distinctive form of hands-on involvement, and over-emphasis of donations that are found to be less relevant by other researchers.

Affluent individuals: In terms of the Securities and Exchange Commission (SEC) angels are accredited investors, with a net worth of over US\$1 million or a total of US\$200 000 household income (Wong et al., 2009). Gaston (1989) also shows that in US 1/3 business angels had a net worth of one million dollars in excess (this excludes the principal residence). Shane (2008) finds that about 23% of these accredited investors account for the angel market, which means that not all angels are accredited. The amount they invest is usually at £10, 000 for each deal, sometimes even more than £100,000 with an average of two to five investments in their portfolio (Mason, 2006).

Investing their own money: Angels invest their own money (Gaston, 1989; Mason, 2006; Prowse, 1998; Wetzel, 1987; and Wong et al., 2009). They are not like VCs who raise money from sources such as banks, pension funds, endowments (Freear et al., 1995; Sahlman, 1989; and Winton and Yerramilli, 2008). The fact that angels invest their own money differentiates them from VCs in the sense that they do not have any legal duty of care for how they choose to invest their funds. Angels are not obliged to invest if they do not find proper investment, unlike institutional VC funds where they have a typically fixed life from 7 to 10 years, and above this the VC fund has to invest and exit (Mason, 2006). Since they invest their own money they are quick in making decisions for their investments (Freear et al., 1995). They do not have to do special financial and legal due diligence and this is less costly for the investee business. Lastly, institutional VC funds invest in specific types of businesses and have to stick to such investment criteria, whereas angels are able to adopt idiosyncratic investment criteria (Mason, 2006).

Investing directly and have no family connections: angel investors make their own investment decisions as compared to a collective investment vehicle where investment judgements are made by different fund managers. This implies that angel investors have individual networks that offer a flow of investment prospects and the skill to take on the appraisal of fledgling entrepreneurial ventures. The prevailing literature is that most angel investors are very successful, cashed-out entrepreneurs, while others either have executive level experience in large corporations or have

specialized business skills. Due to this background, these individuals are able access to deal flows easily and possess the proper skills to make such investment decisions. For such individuals, this is a way of recapturing their fruitful experience, making investments based on the systematic skills and insight they have assimilated in the business. According to Benjamin and Margulis (2000), this also reinforces their self-esteem and sustains credit in their communities. Although the level of skills and capabilities vary amongst angel investors, being a successful entrepreneur, or in an executive level in a large corporation, does not essentially mean an individual possesses all the set of skills required to be a successful angel investor. A survey study done by Sørheim (2003), angels report that their first investments usually involve a sharp learning curve.

Control and mitigation of risk: Angels have different methods in managing entrepreneurial firms. There are no executive board seats, stage funds or solid contractual clauses received by angels. The risk that mostly concerns investors in the venture capital industry is the market risk and the agency risk, the latter being more of a concern to angel investors. Since angels lack the information and valuation mechanisms to assess market risk, they consequently focus on the agency risk. Since they focus on agency risk, they then screen the entrepreneur more, that the deal itself (Fiet, 1995). The entrepreneurial ventures in which angles invest are very risky, and Mason (2006) suggests that the diversification strategy to reduce this risk can be very useful, but angels often do not use this option

The entrepreneur's historical experience, management team or and revenue stream are some of the variables that any investor would be sensitive to, since they represent the uncertainty entail in the entrepreneurial ventures (Wong et al. 2009). Besides the experience, it is also important to angels that the entrepreneur is formerly known or trusted by them or by trusted associates (Prowse, 1998). If any of these variables exist, investors then feel secure to proceed with investing. What is mostly important is the managing team and the existence of revenue flow are an indication that the venture has completed its opening idea and is ready to move to following stage. In dealing with agency costs, the incentives of the founder are usually aligned

with the prospects of the firm through large ownership proportions (Wong et al, 2009; and Prowse, 1998). Other means of controlling for risks are through syndicated groups, geographic proximity and selection of ventures in industry familiar to the investor (Wong et al, 2009).

Other characteristics of angels: The amazing feature in angel finance theory is the consistency in the features of angels across the globe, characterized by the following:

- According to Harrison and Mason, 2005, about 95% of angels are male, because a relative minimal number of women have formed successful ventures or are in top positions in large corporations. However, the small number that exists in the angel market has comparable characteristics to those of their male counterparts.
- The 45-65 year age group. This range reveals the length of time needed to make substantial personal net worth. This is the age where their children are financially independent, where individuals who have succeeded in their business career choose to, or are forced to disengage. These individuals enter the angel market with a desire to continue being economically active, instead of spending time in leisure activities (Landström, 1993). Some angels might be becoming somewhat younger, and Mason (2006) infers that this may be linked to (in part) young entrepreneurs cashing-out, due to the technology boom acquisition hysteria that happened in the 1990s.
- They are successful cashed-out entrepreneurs. Most of these angels are individuals who have already experienced the start-up business environment. As a result, they understand the complexities of starting, managing and harvesting a successful business venture. Their entire careers have trained and prepared them to make informed decisions and add valuable contributions (Freear et al., 1992). The other types of angel investors are simply local businessmen in typical professions such as doctors and lawyers, accountants etc. (Wong et al., 2009).

 They are well educated. Angels usually possess a tertiary degree and/or some certified qualifications. But, angels who possess PhDs are rare. Reynolds (1997) suggests that there is an inverted U-shape relationship between education and entrepreneurship. In simple terms this means that both too low and too much education limits entrepreneurial behavior. However, the success of the economy is supported by higher levels of education.

**Syndication:** The angel market is evolving from the anonymity characterized by informalities, to a more organized industry in which angel syndicates or structured angel groups are becoming substantial (Mason, 2006). Hence, the market is in the course of being changed from a 'hobby' activity to a more professional operation. Structured angel groups are rapidly growing in the early stage venture capital industry (Sohl et al 2000), even though individual angels are still dominating the industry (Lengyel and Gulliford, 1997; and Investor Pulse, 2003).

Mason (2006) makes very interesting arguments in support of angel syndicates and its significant impact in "the development and maintenance of an entrepreneurial economy" (p. 35). Firstly, syndication is an answer to an inefficient angel market due to the fragmented and obscure nature of angels. There is now a mechanism in which angels can receive a continuous stream of investment opportunities. This makes search costs more reasonable for both the entrepreneur and the investor (Mason and Harrison, 1994; and Wetzel, 1987). The investment decision-model can also be more efficient. Secondly, syndication offers a platform where individual angels are able to invest in diverse investments which they could have never got the opportunity to invest in as individuals. As a result, they get the opportunity to acquire skills from more experienced investors and the opportunity to network and build strong relationships with like-minded individuals.

Thirdly, as much as angels finance fills some equity gap (gap between friends/family and institutional venture finance) there is still a remainder of some sort of equity gap. Institutional venture capital market is moving towards late stage venture market,

abandoning the early stage for the late stage ventures (Gorman and Sahlman, 1989 and Ehrlich et al., 1989). The new gap needs angel syndication in that, it is too large for the entrepreneur, family and friends, and too small for the VC firms' portfolios (Sohl, 2003). Fourthly, angels also lack capital for follow-on funding. It is inevitable that as the venture business develops there is would be an urgent need for more funding, and this funding might not be available immediately. This is where the assistance from syndication would come in. Lastly, the combination of different expertise that adds value to these new businesses is much greater. Wong et al. (2009) adds that some angels are even able to free ride the process of due diligence.

# 2.4 The role of VC industry in creating value

VCs and angels provide very valuable alternative sources of funding for the existing and new entrepreneurial ventures who seek funding. Although VCs are well known for their managerial and value adding expertise that they contribute to ventures, entrepreneurs globally still prefer angels. Empirical evidence indicate that angel financing dominates the institutional venture capital globally, in-terms-of the value of amounts invested and the number of firms receiving funding (Wong et al., 2009), especially in developed economies (Gaston, 1989). Fairchild (2009) finds this phenomenon generally explained by the relational aspect between the entrepreneur and the investor, and the over economic value aspect that VCs create gets ignored. Even if an entrepreneur would focus on the value creation aspect, an inefficient decision may result. Fairchild then suggests that is important for entrepreneurs to consider both the economic and the behavioral factors between these two sources, so that the potential of value creation is fully achieved. On the perspective of angels and VC, both these aspects should be assumed.

Venture capital existence is very important in mitigating information asymmetries (Ojah, 2011). As mentioned above, understanding the comparative contributions of VCs and angels and how they add value to entrepreneurial ventures is both important for both the investors and the entrepreneurs. VCs in literature are well known for their role of moral hazard and information asymmetry alleviation. VCs are very active in providing industry information, expanding market visibility, endorsing quality, and

reducing costs associated with searching potential personnel and key networks (Dutta and Folta, 2016). These factors are pronounced in early stage ventures (Stuart et al., 1999). Since VCs act as information intermediaries, they also provide high quality information, allowing firms to form strategic alliances (Linsey, 2008). Although the angel market is not sophisticated as the VC firm's market, it does provide some level of information intermediation. An angel backing the initial stages of a venture endorses quality that reduces uncertainty inherent in the early stages of ventures (Elitzur and Gavious, 2003). This factor can serve as catalyst on the process of innovation. Syndicated angel groups do also attract potential key personnel and networks (Dutta and Folta, 2016).

Angel investors provide a deal flow for the institutional VC; such example can be taken from the report by Madill et al (2005), where technology firms who received funding from angels went on to access additional funding from institutional VC. It is therefore evident that the professional VC market needs a sound informal VC market and the informal VC market needs a sound formal VC market. Policy makers have a tendency of overlooking this connection, and mainly focus their involvements on the institutional venture capital market. It is clear from these arguments that such involvements can be compromised if the informal VC market is not developed properly.

Informal VC plays a major role in the rise of technology clusters. Budding technology clusters lack local sources of professional VC due to lack of their visibility to attract VCs other regions. The only source of risk capital can come from angel investors. This a situation where investors find themselves involved in industries that they do not understand, and where other opportunities from other industries could have been more beneficiary (Mason, 2006). This is similar to the case in the Ottawa technology cluster during 1960s and 1970s the first generation of start-ups in the traditional sectors were funded by angel investors (Mason, cooper and Harrison, 2002). According to Mason (2006) Cambridge, Ottawa, Silicon Valley as well as the UK all provide good scenarios where the growing technology clusters are supported by prospered and cashed-out technology entrepreneurs. These entrepreneurs provide

initial capital, credibility to the following generation of technology companies, active involvement, and also prepare them for later funding by institutional VC.

In terms of governing ventures, VCs make use of sophisticated and highly efficient contracts together with efficient board memberships to facilitate the creation of a proper structure and supervised firm activities (Sahlman, 1990). Early stage ventures experience intense governance. VCs possess strong business expertise, they understand externalities of the venture better that the founders (Hsu, 2006) and are involve in different business functions. They also provide mentorship to develop skills and the overall performance of the firm. Such factors are also important for timing exits. Wong et al (2009) mention that angels are more flexible and rely more on trust and empathy (Fairchild, 2009), and therefore do not have sophisticated governance systems. Syndicated angels are more sophistication due to their nature of investments. In terms of the financial intermediation that these parties play, unlike VCs, angels are not restricted by investment duration and the urgency to sell shares. They are flexible and can extend or reduce their investment horizon.

Observing what most academics have found about the nature and the role of the VC industry, strategies that influence the type of ventures they finance remains an important subject in the VC literature (Gupta and Sapienza, 1992). Firstly, VCs and angels vary in their approaches since they provide funding for different financial gaps. Secondly, if angels and VCs are to impact the African economies they have to reach all regions, industries and more especially reach all stages of the venture's development. Two popular investment strategies that have received special attention in this investment industry are the specialization and diversification strategies.

# 2.5 Strategies in the venture capital industry

There are two opposing strategies that have been long debated in the research of VC market: specialization and diversification (such as, Fern, Cardinal and O'Neill, 2012; Gorman and Sahlman, 1989; Gupta and Sapienza, 1988, 1992; Matusik and Fitza 2012; and Schilit, 1997). The specialization strategy refers to a lower degree of diversification where few ventures in an industry are targeted (Zhang, 2013).

Specialization strategy also refers to focusing on specific region, or stage of venture's development (Schilit, 1997). An example of a benefit from specializing would be access to efficient knowledge (Busenitz and Barney, 1997). On the other hand, the diversification strategy focuses on multiple ventures across different industries, across regions and across different stages of a venture development. Benefits of diversification are gained from the value of diverse knowledge derived from different industries. This knowledge facilitates investors and entrepreneurs to identify innovative solutions to complex problems faced by ventures (Ahuja and Katila, 2001).

The concept of specialization dates back to the 1700s where Smith (1776) celebrated the gains of this strategy, and his concept alive to this day. His economic concept about specialization (and division of labor) is that productivity, hence income and wealth, are increased through specialization of labor. As an individual specializes more in their job, the better they become at doing it. A larger production scale is more efficient than a smaller production scale, which means that, as the production scale becomes larger, individuals get to see and understand their portion in the production chain. They also get to find better ways to perform their task through reflective reasoning and through interacting and working with others. As a result, these production techniques find their way into the production cycle, wealth increases, and thereby improving the whole economy. However, these production efficiencies gains depend on the market in which they take place. Until there are competitive pressures, individuals in that society are not encouraged to go beyond their tradition (what has always been done).

Smith also developed another theory of 'absolute advantage' that relates to his theory of specialization. This theory refers to a situation where each economy has an absolute advantage over another economy if it can produce a particular good less costly than the other one. However, this theory was dwarfed by David Ricardo's theory of 'comparative advantage' which is still praised to this day (Schumacher, 2012). This specialization theory refers to a country's cost structure that allows its industry (call it industry A) to compete comparatively superior at international market level than industry B, without necessarily having any industry with an absolute cost advantage

over any other (Porter 1998, as cited by Asche et al., 2008). The general statement is that economies should specialize in industries in which they have comparative advantage (Kaulich, 2012). In addition to this point, the principle of comparative advantage also means that countries succeed by first taking advantage of their assets, focus on what they do best, and industrial success is composed of focusing on a narrow variety of high-productivity activities (Hausmann and Rodrik, 2003; WTO, 2009).

Diversification theory has been supported by a famous Novel Prize winner Simon Kuznets where he defines a country's economic growth "as a long-term rise in capacity to supply increasingly diverse economic goods to its population, this growing capacity based on advancing technology and the institutional and ideological adjustments that it demands" (1971: para. 1). This idea was later supported by Grossman and Helpman (1992) where they state that production of growing economies always increase their goods and services in quantity, quality and variety. In later years, two economists Imbs and Wacziarg (2003), tried to reconcile these two contrasting theories. In their study of stages of development they show that specialization and diversification occur at various stages in development, and an industry concentration follows a U shape pattern: (1) economies first diversify their industries in such a way that their economic activity spreads equally across industries; (2) but there exists a level of income per head over which the diversification trend starts to decrease and after a turning point (later in the development process, at high levels of income per head), economies then begin to specialize in their industries again.

Specialization and diversification strategies have been of high interest in the strategic management literature, economic policy literature, entrepreneurship and portfolio management (Fern, Cardinal, and O'Neill, 2012; Gupta and Sapienza, 1992; Matusik and Fitza, 2012; Montgomery and Wenerfelt, 1988; Porter, 1998; and others). Specialization has been emphasized over diversification in the literature of commercial banking. An example is a study done by Winton (1999) where he develops a model in which banks encounter a high level of risk failure when entering into the new sectors. Another scenario is where Delong (2001) finds that abnormal returns follow

announcements that relate to the bank mergers intention to increase banking activities or geographic concentration, as opposed to diversifying mergers where no value is created. Another consistent example is from a study done by Acharya (2002) where he finds that diversifying individual bank loans may increase overall portfolio risk compared to using a focus strategy.

There is an interesting study done by Schilit (1997), where he argues against the definition that the JEC formulated after their survey study on VCFs in the US. The JEC find the nature of VC industry to be mostly participating in seed, start-up and early development stages of investments. It consists of investors who are highly specialized, who partner with other investors and VCFs. The types of investments that mostly receive venture capital support are in enterprises that use technology to grow the economy into new processes and products that develop the productivity and quality of life. Venture capitalists are the type of hands-on investors whose investments are diversified by stage of venture development, geographic area and so on, as well as by co-investing with other VC firms to minimize risk.

Schilit (1997) investigates this definition in his study and finds that the trend of VCFs is moving towards specialization. Not to disregard the JEC's definition, the reasons why JEC findings are currently not holding, are due to the fact that investment philosophies have dramatically changed since the time when the JEC survey was conducted, during the 1970s and 1980s; industries are not necessarily high tech industries; geographical proximity of VC projects differs; and lastly, VCFs do not necessarily invest start-ups only.

In the venture capital literature, these two strategies have been popularized as investment strategies (Gupta and Sapienza 1992; and Norton and Tenenbaum, 1993) for maximizing returns and mitigating risk. Authors have highlighted a range of areas from which these strategies are used. These areas include: information and knowledge (Fern et al., 2012; Matusik and Fitza; and Zhang, 2014; Bygrave, 1987; Sahlman, 1990), industry choice (Gupta and Sapienza, 1992; Sandberg and Hofer, 1987; and Schilit, 1997), stages of a ventures development (Gupta and Sapienza,

1992; Tian, 2011; Wang, & Zhou, 2004), and geographical scope (Gupta and Sapienza 1992; Wetzel, 1987). Industries, geographic scope, financing stage, as well as the investment size criteria are the 'firm-specific criteria' used for screening ventures during the decision making process (Fried and Hisrich, 1995; and Tyebjee & Bruno, 1984b). Ideally and for this research paper, the areas of focus that have been a strategic concern in the VC market include the industry choice, geographical proximity and the stage financing (Echols, 2000).

## 2.5.1 Knowledge and information effect

Knowledge and information management's perspective has been applied to distinguish between the effect of these two strategies (Matusik and Fitza, 2012). There are costs and benefits associated with both specialized and diversified knowledge resources used in the VC market. The type of environment in which VCs and Angels invest is very risky and requires knowledge resources. Matusik and Fitza (2012) suggest two approaches of how to use these strategies effectively to deal with uncertainties: firstly, accumulate highly specialized knowledge in specific areas relevant to the ventures they finance. Those with deeper knowledge in specific areas can see risks linked to opportunities relating to that particular field differently to those with shallow knowledge relating to the same field (Busenitz and Barney, 1997). Secondly, manage their portfolio of venture investments by maximizing exposure to a broad range of knowledge in the hopes that whenever they encounter unpredictable problems their exposure will help. The first view encourages specializing in knowledge, while the second one refers to diversifying knowledge.

Specialized firms and diverse firms have different learning and management techniques (Barnett, Greve, and Park, 1994), where the survival of the former highly depends on the outcome of the arears in which they specialize, and this pressurizes them to do better in those areas. The processing of information within a restricted sphere is more efficient. The efficiency provides more flexibility and adaptability which can be gained in a scenario where market uncertainties may arise within an industry (Grant and Baden-Fuller, 2005; and Heeley and Matusik, 2006). The coordination costs are also minimized through the efficiently processed information. However,

mastering a specialized knowledge does not encourage skills of detecting innovative ideas external to the pre-defined area (Ahuja and Katila, 2001). This point is supported by Smith's idea of a market being a limited to outside opportunities. This then calls for knowledge from a variety of unrelated fields, enabling investor's ability to think outside the box (Zhang, 2014).

Given the preferences of the VC industry group analyzed by Gupta and Sapienza (1992), VCs indicate a sense of superior selection when making decisions – with their highly specialized knowledge they are able to make effective decisions regarding the selection of investments to be funded. However, after the decision is made no additional value is added by these VCs in terms of the strategy they have used. On top of this superior selection, risk-return characteristics improve through industry knowledge, external networks and technical advice they provide.

Diverse firms are not entangled in a cycle of intensified focus on knowledge in a particular area of expertise. Instead, various sequences and procedures for learning are preferred in diverse firms. These firms tend to learn better from external events such as indirect learning from others or general changes in technology as compared to their own distinct experience; they also have a greater ability to carry in outside information and knowledge, use it successfully and probably place less focus on their stocks of information, which can lead to biasness in a transforming environment (Ingram and Baum, 1997). Diversification of knowledge can also bring flexibility and adaptability, bringing a greater set of choices for solving complex problems (Ahuja and Katila, 2001). This is very crucial in a scenario where uncertainty is not restricted in a specific industry, which is the case in budding industries and technologies.

Within the strategy of diversification, it can be of a related or unrelated nature (Hill and Hoskisson 1987; Hitt, Ireland, and Hoskisson, 2010). Related diversification refers to a relationship among the diversified enterprises. This type of relationship is associated with sharing of information, activities among businesses, or information transfers from parent company to its businesses (Zhang, 2014). This creates synergies when combined activities are found, integration is sustained, or information

is extended through businesses through business chains. Unrelated diversification refers to a scenario where diversified businesses are hardly linked together. This relationship does not create synergies, but rather creates financial economies as referred to by the literature of financial portfolio management (Bodie, Kane, and Marcus 2002). Within this type of diversification, the unrelated businesses generate a pool of imperfectly correlated revenue streams. As a result, superior returns are produced, due the fact that the inherent unsystematic risk from these businesses cancel each other out. The related diversification strategy requires corporate control, in order to make sure that synergies among ventures are generated effectively and efficiently (Hill and Hoskisson, 1987). Since the unrelated diversification aims at industries with high levels of variety (Bodie et al., 2002), these individual ventures in a portfolio rarely share resources (Matusik and Fitza, 2012), consequently there is less need to control and monitor links among ventures, making the unrelated diversification less costly. Although related diversification strategy may not completely reduce firm specific risk, accumulated knowledge in one industry can aid as a guide in venture selection from other industries.

Matusik and Fitza (2001) identify the relationship between diversification and performance of a VC firm to be a U-shaped one; where performance benefits are derived from either diversification or specialization of knowledge; especially in the presence of uncertainties where VC firms can derive value from both these strategies. Zhang (2014) finds that related diversification improves performance of VC firms, while the unrelated one decreases the performance of the VC firm. At the same time, the VC firm performance is improved by the relatedness of the overall diversification. And another finding is that the larger the fund size, the poorer the VC firm performance, due to the less time spent screening ventures, given too many alternative ventures to choose from. VCs end up participating in bad deals.

## 2.5.2 Geographic scope

Gupta and Sapienza's (1992) findings are that, "venture capital firms that provide primarily SBIC financing will prefer venture investment opportunities within a narrower geographic scope than will other venture capital firms." (p. 353). These VCFs portfolios indicate a tendency to specialize by geographical areas. This tendency is due to the fact that entrepreneurs will search for funding close to them where their resourceful networks such as banking, accountancy and legal contacts are more solid (Tyebjee & Bruno, 1984). In addition, Mason (2006) also finds a tendency of angels to prefer closer geographical proximity with the entrepreneurs they finance.

Gupta and Sapienza's (1992) second scenario on geography is that, "venture capital firms that invest only in the early stage will prefer venture investment opportunities within a narrower geographic scope than will other venture capital firms." (p. 351). This scenario demands both highly specialized knowledge and interaction, hence the narrower geographic scope and lower industry diversity. This scenario is what Gupta and Sapienza find to be the most reinforced scenario by VCs than the first one.

Schilit (1997) claims that in general VCs concentrate on a specific geographical location that is highly concentrated by entrepreneurial activity. VCs tend to specialize by geography when ventures are in low tech industries (such as, sports goods, furniture etc.) within low growth regions. VCs that specialize by geographical areas usually make substantial contributions in economically developing that particular region. Schilit provides an example of Kentucky Highlands Investment Corporation that has avoided fancy investments in favor of small businesses in the manufacturing and agriculture sectors in the area of Appalachian Mountains. This VCF has managed to improve the economic state of Appalachian Mountains and at the same time has generated satisfactory returns for its investors.

### 2.5.3 Venture's Development stages

According to Gupta and Sapienza (1988), since VCFs have different risk preferences prefer to offer VC funding at different stages. Robinson (1987), in the

study of 'emerging strategies in VC industry' finds that, although the whole industry mainly focuses on the early stages (start-up, early growth and expansion stages) of a venture's development, certain firms differ substantially in the distribution of funds emphasis across these stages. This means there is some level of specialization according venture development stages. Tyebjee & Bruno (1984b) state that, capital injection occurs several times in a venture's life cycle, and VCs rarely invest in the seeding stage, instead angel investors are the one who invest. Some VCs invest only on later stages of the venture development.

Norton and Tenenbaum (1992) try to determine whether the VCs use both competing strategies to control for risk, by examining the sources of risk and how these strategies influence their portfolio construction. Firstly, portfolio diversification is a wellknown method for reducing risk vulnerability by financial means. Unsystematic risk can be reduced by investing in different types of ventures or industries. Risk can also be diversified away by having investments in different stage deals during cold IPO markets. In favor of Bygrave's findings on the importance of specialization and information sharing theory, their empirical evidence confirms that seed deals are less diversified across varying ventures and industries. VCs tend to specializing according to financing stages instead of staggering their investments over varying financing stages. In conclusion, their paper favored the specialization strategy as the strategy mostly used by VCs to reduce risk. They specialize in order "to build reputation capital, to become important members of information and deal flow networks." (p. 441). On the choice of strategy where investors showed much preference for specialization compared to diversification can be found from a study done by Tyebjee & Bruno (1984a). Their results indicated that the criteria commonly used by VCs when selecting investments are the venture stage and industry. They use these two variables "to limit the boundary of investment activity and balance the portfolio within these boundaries" (p. 197).

What Schilit (1997) finds about specialization by stage development is that entrepreneurs really get frustrated in searching for seed capital. When it comes to this stage, management experience in the related field is almost always a prerequisite to

getting this fund. The funding for this stage has is low, due to the fact that managers are being pressured to limit their investments from to lower-risk ventures that have immediate returns. The returns for this stage range from 50% to 100%, but a few VCFs target with very low investment fund size. Usually, smaller VCFs that target seeding stage possess highly specialized skills relating particular industries. According to Nayar (1992), early stage ventures are given high priority by managers to providing professional services and expertise. Such skills are usually related to the entrepreneurial firm in question.

# 2.5.4 Industry Criteria

The JEC (1985) defined VCs as investors that are highly specialized, who involve other VCs and investors to participate in the seeding, start-up and early expansion stages of venture. These companies are in the technological industries. VCs are very active in their investments in they diversify their investments according to stage of development, region and so on, and by syndicating with other VCs to minimize risk. A question posed by Schilit (1997) was whether these strategies about VCs still hold.

Gupta and Sapienza (1992) did a study where they examined the reasons VC firms prefer different levels of industry diversity and geographical scope in their projects. They composed four hypotheses, and all them where empirically supported. One of the hypotheses relates to this sub section where it states that: "venture capital firms that invest only in early stage will prefer venture investment opportunities within a less diverse set of industries than will other venture capital firms" (p. 351). This this type of condition demands highly specialized knowledge, and does not need much interaction between the VCs and the founders after the investment has been made, which renders geographic preference unimportant. Another hypothesis is that, "venture capital firms that are subsidiaries of non-financial corporations will prefer venture investment opportunities within a less diverse set of industries that will other venture capital firms" (p. 352).

Bygrave (1987) in the article titled "Syndicated Investments by Venture Capital Firms: A Networking Perspective" argues that knowledge is a very important

competence of VC firms. Knowledge includes technology, innovation, and people in particular industry segments. As technology rapidly grows and getting more complex, there is expectation that VCs will increasingly specialize as per the type of ventures in which they invest. Like department stores, the largest firms with several VCs, will invest in different types of ventures. Like boutiques, the smaller VC firms will tend to focus on particular ventures (industries and financing stages) or particular regions around the world. Bygrave's (1988) findings from an article titled "The structure of the investment networks of venture capital firms" imply the importance of specialization to control for risks caused by an uncertain environment in which they operate.

Sandberg and Hofer (1987) have a study that examines the determinants of a new venture performance and also find that not only does the performance depend on entrepreneurs' characteristics, but it additionally depends on the structure of the industry entered, and the venture's strategy<sup>1</sup>. Firstly, their findings reveal that the interactive effects of the entrepreneur, the strategy and the industry structure have a significant impact on the performance of a venture compared to when these variables are isolated. Why is this so? These new ventures are very complicated, which makes them risky. The performance can be enhanced through specializing in the type of entrepreneur, industry structure, or strategy. Previous academic models experienced limited success due to the fact that they did not specialize in any of the above variables (industry structure, entrepreneur, and strategy).

In the same paper, they find that when the interactive effects are disregarded, the industry structure variable shows a superior impact on the success of the enterprises. This finding supports the practice of specialization by many VCs and academically proposes that specialization by industry may generate a constructive research. Another finding is that within the strategy variable, the focused (very narrow scope, with one or two market segments) strategies are outperformed by the differentiated (broader scope) strategies, but this result subject to some condition. The entrepreneur

<sup>&</sup>lt;sup>1</sup> According to this study done by Sandberg and Hofer, strategy here referred to competitive strategies (e.g. reduce production costs, marketing innovation, offer superior products etc.); political strategies (e.g. customer contract, rule changes, etc.) and business definition strategies (differentiated, focused, etc.).

characteristics (variable) have very little impact on the performance of new ventures. The implications on these findings are that VCs should continue specializing by industry and improve their strategy skills even more (Sandberg and Hofer, 1987).

Tyebjee & Bruno (1984b) find interesting results: when VCs screen according to technology and the type of market sector (industry), they must be familiar with technology and the market sector of the venture under screening. In this specialization in some technology markets is implied, due to the fact that VCs cannot be knowledgeable (or possess deep knowledge) across a diverse number of technologies. VCs also prefer nascent technology industries instead of mature technology industries, products instead of services, and the industrial market instead of the consumer market. What Schilit (1997) finds on this criteria is that the VC industry are also specializing according to low tech industries. VC funds are specializing in industries such as health care, retail and franchising.

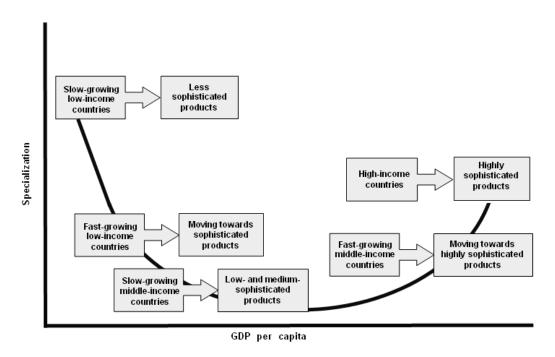
# 2.5.4.1 What does the industrial policy suggest about the Industry Criteria

There has been renewed pledge to promote industrial development in Africa, and this process timely. Some authors such as Lall, (2005), Rodrick (2007), Hesse (2008) and others suggest that economic development needs structural changes from low productivity activities to high productivity activities, and that the industrial sector serves as a major driver of growth in the development process. Szirmai (2009), adds that in modern economic development all scenarios have to do with, rapid, high and sustained economic growth have been related with industrialization, especially in manufacturing production. Manufacturing has the best potential for job creation compared to agriculture and traditional services (UNIDO& UNCTD, 2011). However, policy makers should also avoid pursuing industrial development at the expense of these other sectors, as shown by Rattso and Torvik (2003), the consequence of discriminating the agricultural sector could contract the sector through trade linkages. De Janvry and Sadoulet (2010) emphasize the need for both agriculture and industrial

to complement each other. In addition, they argue that the development of agriculture can enhance the creation of competitive advantage in the industrial.

African countries are behind in their industrial performance compared to other emerging economies. This is shown by their export-related indicators, where most countries offer relatively unsophisticated products, in which they also focus on a few of them. Another finding is that a very few number of countries have diversified their industries to a considerable level. Which include: South Africa, Morocco, Tunisia and Egypt? The African industry landscape is characterized by a large number of countries that heavily rely on a few unsophisticated products and sometimes even one product (UNIDO, 2009). Asche, Neuerburg, and Megatti (2012) argue that industrial agglomeration phenomenon remains rare in Africa, with most countries at early stages of industrial evolution, where specialization is not a suitable strategy. They suggest the following actions for Africa's developing industrial revolution: (1) try to diversify products that are of a higher value, and then later in revolution trajectory specialize on more limited number of these products although they claim that the idea does not fit with the attributes of modern intra-industrial world trade and given the characteristics of its players (shown in the figure 1). (2) Follow the comparative advantage theory that suggests focusing on fully utilizing land, labor factor endowments in other words cautiously managing natural riches. (3) Or participate in a number of global value chains (GVC), obviously starting with natural resource and agro-industry and at the same time search for specific tasks with the GVCs so to create more downstream value added products (as indicated in the figure below). Although recent FDI inflows in Africa still focus on a couple of mineral endowed economies, the flourishing Chinese investments, is spreading across wide variety of African sectors (Asche and Schüller, 2008).

FIGURE 2-5 PROCESS OF DEVELOPING INDUSTRIAL REVOLUTION (ASCHE ET AL 2012)



Asche et al. (2012) discuss some of the crucial strategies from the AIDA and NIP policies, where they mention a number of criteria that should be supported:

Comparative Advantage: developing countries are usually advised to exploit their maximum absolute comparative advantage, that is, by upgrading agricultural industries, mining industries and services. The comparative advantage of the designed industrial policy for emerging countries targets diversifying industrial structures, as opposed classical theory of that targets full specialization. Developmental states that have been successful have searched for dynamic comparative advantage of their economies. "The screening for advantages in global competition will also be informed by long-term considerations on new lead sectors that drive accelerated economic growth. With information and communication technology (ICT) lead arguably coming to an end, an upcoming sixth long growth cycle will be driven (or underpinned) by the transition to *renewable* energies – Green Growth." (Asche et al. 2012: 7).

**New or renewed industries:** it better to look for new activities that eternally protecting ones, which means encouraging local innovations. This also includes industrial restoration of present capacities.

Going down the value chain: to take advantage of downstream options of raw product refinement. However, NIP authors suggest that it is not a promising economic route. For instance, just because South Africa has coal and iron, means it is predestined to creation special-steel products. However, Asche et al. (2012) debates that this objection would be valid in the case of excessive emphasis on downstream benefits.

**Going up the value chain:** the main premises here is to motivate common local industrial inputs, in other words, intermediate goods used in various industries. Even if they do not produce exports directly, they still qualify as modern marketable products, and therefore deserve similar consideration.

# 2.5.4.2 The PE's perspective on the important industries for the African economy

There is a recent concept of 'investing for impact' that has been preached by many organization that are currently supporting the PE and VC industry in Africa. This approach suggests tries to influence the strategies and models that investors use when selecting the enterprises to finance. The type of *product* that investors support should be a product that can socially benefit underserved customers such as improving quality or providing access to previously underprivileged customers. The *practices* enterprises should are adopt t are those that expand the participation for population, to include those previous excluded. Lastly is to *place* the enterprises should be placed where underprivileged communities where it can generate economic benefits, for example, job creation, poverty alleviation, increased tax revenues (Bridges Ventures and AVCA, 2014).

In most surveys done for the PE industry, the type of industries that they invest in are do not necessarily focus on traditional industries such as agriculture and mining, due to fact that they usually need quite a lot of funds. Typically these types of industries

are found in very late stage investments. The report by Deloitte (2013) indicates that most of the PE funds who target agribusiness in Africa focus on agro-processing, distribution, logistics, input suppliers, etc., instead of going straight into primary production. Given that primary producers still fail to entice more commercial capital and development, the industry will not be able to grow fast as it should and large deals will remain limited.

#### 2.6 Conclusion

What the literature review indicates about the African continent is that specialization according to region is a practice that began from a long time ago. Another point that the literature reveals is that Africa's PE has been pursuing seed stage and growth stage capital, for which the growth stage capital is currently prevailing. Even though the continent is growing in the VC industry, there are still concerns such as political risk, in adequate infrastructures that push investors away in some regions.

The nature of VC and what is in the developed economy is quite different from Africa. As discussed above, the VC in developed economies is very sophisticated and strategies are very clear. VCF have managed to understand and pursue investments knowing well what strategies are suitable for what region. The literature has also shown that specialization and diversification strategies do not necessarily compete all the, they also complement each other, as indicated in the industrial policy section.

The literature has managed to give a clear presentation about the two opposing strategies. Since these strategies have not been thoroughly studied in the African context, the research findings should at least indicate what Africa is currently focusing on. The research findings should also confirm the nature and characteristics of typical participants in a typical venture industry.

# 3 DATA AND METHODOLOGY

The data and research methodology section details the appropriate research design essentials. A brief overview about the qualitative tools that have been used to gather information is explained in this section. Here, I will also provide clarity on the scale used to analyze data, how the results should be interpreted and the nature and form of the data. Finally, this section also presents the limitations and ethical considerations of the research design and methodology used.

Like any scientific research, qualitative research seeks answers to a question; methodically uses a set of processes established in advance to answer that particular question; it gathers evidence; produces results that were not pre-determined; produces results that can be applied beyond the immediate limits of the study. Additionally, it pursues to comprehend a given research topic from the standpoints of the local population it involves. This research method is more effective in obtaining traditionally specific data about the sentiments, values, behaviors, and social contexts of specific populations (Mack, Woodsong, MacQueen, Guest and Namey, 2005). This type of research methodology also explores topics in more and in detail and is usually less costly that the quantitative research (Ostrom and Wilhelmsen, 2012). Qualitative methods are also effective in identifying intangible aspects, for instance, social norms; socioeconomic status, gender roles, and whose part in the research matter may not be readily obvious (Mack et al., 2005).

## 3.1 Sources of Data

There are two sources from which I have collected data, and can be classified as being primary and secondary sources of data. Primary data is collected for the first time and is the original data collected particularly for research question in mind. The reason for pursuing this type of data source is the fact I have not found this type of topic or related topic in the African context. For this reason and other, it has been necessary to gather primary data.

However, due to the nature of venture capital in general and especially in a developing economy such as Africa, I anticipated that primary data would not be enough. Rescura (2015) states that Africa's venture capital industry is still fledgling, it implies that information gathering can be inadequate. There are not a lot of venture capital firms or angel investors widely known in Africa. Although these parties are out there, the platforms from which they are found do not give adequate contact information, especially when you are not actively involved in the PE industry. For example, I visited a website called 'angel list' to try to locate angel investors who invest in Africa. What was required from me in order to have access to these angel investors was a long list, which included, my startup business, the social causes in which I needed the investors to invest, and more. Basically, I had to be a person actively involved in the business of venturing. Such reasons make it more difficult to reach out to the very people from which I require information. As frustrating as it was searching for respondents, this experience inspired many ideas and future research topics for the African continent.

During my readings from the different authors in the venture capital field, I noticed a common trend of insufficient information available to make straight forward and clear conclusions. I had to then opt for secondary data source. Secondary data is information that has already been gathered and recorded by someone else before and for another purpose different from the current research project.

### 3.2 Data collection method

Since this research is aiming to answer the research laid on earlier, the qualitative research methods I have used are aiming to help explain why things are the way they are in venture capital industry of Africa. Additionally to understand how are other parties involved in this industry are affected by the events that go on around them; and how and why cultures and practices have developed in the way they have in this industry. Below are the techniques I have used to collect data.

About 100 emails where sent with a questionnaire link and an interview request to those that met the criteria. Some of the emails were requesting individuals that knew

people who met the criteria. The types of people that received these emails were mostly in the Finance and Investment fields, including Banks, Asset management institutions, and other financial institutions. I then did a follow up on institutions that were involved in the VC industry in the African continent. The response was from South African based investment funds due resource limitations. The surveys and interview question themselves are provided on the appendix.

#### 3.2.1 Questionnaires

This is a way of obtaining information from individuals regarding their views on particular topics or issues and it an effective and efficient way of eliciting those views and opinions. I saw it necessary to use this method, since it can be designed and used to collect vast quantities of data from a variety of respondents. Taking into account the way respondents from this industry usually respond and given the limited time I had, this was a best choice. For this research, responses had to come from angel investors, venture capitalists and venture capital firms, since they are the parties that choose whether to specialize or diversify their VC funds. For angel investors and venture capitalists I have compiled one questionnaire, just to get individual opinions and views. The other questionnaire was for venture capital firms aiming to understand what they prefer as the whole firm. The type of questionnaire I have used is the Google web-based survey, which was supposed to be completed online. All these questions attempt to establish whether investors prefer to specialize or diversify their investments.

TABLE 3-1 IDENTIFIED QUESTIONS INCLUDED IN THE QUESTIONNAIRE

Sections	Questionnaire for Angel investors and Venture Capitalists	Questionnaire for the VC
Section 1	This section asks basic background information such as, what type of investor, occupation, experience, reasons for investing etc.	This section asks basic background information such as, the type of firm they are, occupation, sources of funds, when was it launched etc.
Section 2	The second section was focusing on question that had to do with their geographical scope of investments.	The second section focuses on question that had to do with their geographical scope of investments and also investment stages and industries that they prefer
Section 3	This section was focuses on the investment stages and industries that they prefer.	This continues with more questions on what they prefer in terms of the three criteria.

# 3.2.2 Interviews

The interview method has long been used in research as a way of attaining thorough information about a topic or subject. The type of interview structure that I conducted is known as the semi-structured interview. The interviewer directs the interview more closely is less flexible. The questions predetermined though there is enough flexibility to allow the interviewee an opportunity to shape the flow of information (Wilkinson and Birmingham, 2003).

All interviewees were contacted prior to the interview to gain permission to conduct the interview. Venture capitalists were contacted and the same interview was conducted. I manage to get an opportunity to conduct a face to face interview with the angel investors. All interviews were recorded and treated with confidentiality. The interviews followed a logical manner although respondents were given an opportunity to provide additional comments that were not part of the original questions. Interviews took about 15 to 30 minutes. Follow-ups were required in certain instances and the response rate did not improve that much.

TABLE 3-2 IDENTIFIED QUESTIONS INCLUDED IN THE INTERVIEW QUESTIONNAIRE

Sections	Venture Capitalist Firm
Section 1	The background information on the ventures under management. This part of the section is optional.
Section 2	The second section focuses on questions that have to do with their geographical scope preferences of their investments.
Section 3	This section focuses on the investment stages and industries that they prefer.

## 3.2.3 Secondary data

Secondary data is usually data collected earlier by other researchers or for other reasons than research, for instance administrative records, official statistics, or other records kept habitually by organizations. The challenge I have faced with collecting this data as Hox and Boeije (2005) conforms, is locating data useful to my research problem, retrieving relevant data and how well the data meets the quality of the current research. Data sets that are well documented come with comprehensive descriptions of the procedures and methods that have been used to collect data. There are two sources from which I have gathered information, that is: quantitative research done by

a venture capital association and the second source is from Bloomberg data. The reason for additional information is due to the inadequate data and poor responses from primary sources.

#### 3.2.3.1 VC4A

This is a platform for startup funding, a community of business professionals in about 159 countries devoted to building game changing enterprises on the African continent. The VC4A research team collected data from their platform to help explain trends and set the way forward. Their report presents the performance of ventures listed on their platform and also shows the activity of investors' part of the network. The report is broken down into 5 parameters: employment, performance, investments, investors and ecosystem. The VC4A research team constantly communicates with its members and conducts a regular series of data collection in the form of interviews, surveys, focus groups, brainstorms and design sessions. Specifically for this report I have used, the data has been pulled from an annual survey conducted with the ventures and investors registered on the platform.

# 3.2.4 Bloomberg

Bloomberg is the only site available to me where reliable information about PE equity deals was found. It also shows some deals in the venture capital industry. Bloomberg collects this information from their news and other news reports from other organizations. Bloomberg is very trusted source of data, and their information is not just edited by anyone, but is also taken from reliable sources, or directly from organizations. The information itself is not adequate, hence the two previous parts of data collection. The variables that have been selected to are to explain the patterns of VFCs, and in terms of the industries, and geographic scope they prefer. This should also indicate whether they are industry specific investors or conglomerate type of investors.

The raw data I obtained had quite a number of variables that were not useful and relevant for this research. Variables such as Seller, Announcement amount, Nature of Bi, Payment Method and other variables were removed. The target investment criteria

has also been edited and made to be specific to African regions and only in the venture capital industry. The variables were further filtered down to only the announcement date, acquirer (name, industry sector, country); target (industry group, industry subgroup, country).

TABLE 3-3 THE RELEVANT VARIABLES AND THEIR DESCRIPTIONS

Variables	Description	
Announce Date	The date the corporate action was announced.	
Acquirer	A one party (company/investor group/consortium) that gaining control of another by purchasing the stock of the target.	
Target	A firm that is the object of a takeover by another firm (the acquirer).	
Country	The country where the party is situated.	
Industry Group	Individual stocks or companies, usually grouped based on common lines of business.	
Industry Sector	Industry sector is a general segment in the economy within which a large group of companies can be categorized. It nearly all of the business activity in that economy	
Industry Group	Individual stocks or companies, usually grouped based on common lines of business.	
Industry Subgroup	Type of business line under a particular industry group	

# 3.3 Data analysis

The interview consists of a number of questions divided into 3 sections, to try to understand the typical strategies used in the VC industry. These questions will be elaborated on and the answers from respondents will be summarized and presented in the following chapter. The results are presented using tables in order to formulate a general consensus in answers.

The questionnaire consists of approximately 30 questions, divided into 3 sections. The next chapter will elaborate on each section, providing an analysis of each section and of the answers supplied by the sample population. The results of the questionnaire are analyzed using graphical representation such as pie charts and line graphs and a tabulation of results. The secondary data from AVCA is also presented the same as the primary data. And the Bloomberg data is presented using tabulations.

#### 3.4 Shortfalls

The list below indicates the constraints encountered in this study

- The respondents interviewed represent their respective firms but may not necessarily be representative of the firms' interpretation of the questions asked.
- Research was limited to angel investors and venture capitalists and very few on other type of parties involved in the VC industries such as governments and NGOs.
- Minimal face-to-face interviews were conducted.
- The responses to questionnaires and interviews were very poor, and therefore do not represent the African continent properly.
- Due to time and resource constraints, the sample size is limited; however it was sufficient enough to provide consistent and valid findings.
- Qualitative research is not generalizable to a larger population due to the very small sample group and the participants were not chosen randomly.

One of the difficulties that typically plague this line of research is the dearth
of available datasets. Data sets on this emerging segment are limited and
there are few comparative studies.

Other facts pointed out by other authors are that the angel investors are a largely invisible population, due the fact that they prize their secrecy and facelessness (Wetzel, 1983; Benjamin and Margulis, 1996). The same considerations are likely to make them unwilling to reply to surveys (Haar et al., 1988). There are no indexes of angel investors and limited open records of their transactions (Wetzel, 1981).

# 3.5 Research Quality

It is important that the quality of a research project is valuated. Good research is expected to be: (1) *valid*, that is., the study is investigating what it was supposed to (try to answer the research questions and relates to the topic), (2) *reliable*, that is., the procedures of the study could be repeated, and (3) *contributory*, that is., the study adds to present information. When working with this dissertation, a considerable amount of attention has been paid to ensure high quality along these lines. The information is quite consisted in a way that there are no variables or answers that come out as bazar.

#### 3.6 Ethical Considerations

It is also important that the research is always guided within the set of ethics in the area of study. For this particular research, thoughts must be given to appropriate data collection methods and the respect of privacy of respondents in relations to the analysis of data and reporting of research findings. Generally, it is considered unethical to disclose raw data to competing companies when dealing with companies within the same industry.

The procedures I have taken in regards to my work as specified in the data collection methods section, I established contact (through telephone and e-mails) with the appropriate VC firms and individuals to inform them about the purpose of my study and also to seek their permission for interviewing. After approving on the modalities for the interview process, I usually send interview sheets to all interviewees prior to the interview date to give them time to prepare for the interview questions. I respected the privacy of

interviewees by not pressing on to questions interviewees were reluctant to answer. For instance, question that were regarded too private for their employers were left unanswered. Data reporting and analysis have also been handled with utmost care to avoid pointless disclosures that would break the trust they posed in me.

## 4 RESEARCH FINDINGS

This chapter presents the results of the analysis conducted and hopefully provides answers to the questions that have been asked during course of this study. The chapter will elaborate on the results obtained from the instruments employed, namely an interviews, questionnaire, and secondary data to gain pertinent data from the sample population. This chapter consists of three parts, where the first one is the analysis of primary data; followed by the two parts analyze secondary data.

# 4.1 Interview and Questionnaire Analysis

## 4.1.1 Analysis of responses to interview questions

The two individuals that were able to respond come from the financial services industry companies, and both had the capacity and the experience to participate in these interviews. These interviews are basically trying to establish the approaches that these venture capital funds use.

- The first respondent is from company A. This company is quite old, but the venture capital fund was launched in October 2015, and has been raising funds from individuals and other companies ever since. It is targeting an amount of R250 million, and targeting ventures in South Africa. The team involved has a wide range of experience from PE industry, public equity, corporate finance and more. Their team also has a wide range of network and strong record in realizing value from small-mid cap companies. The sources of their funds come from trusts, individuals and families. The respondent also mentioned that their VC fund has a specific mandate on the type of limited partners (LPs) that they are attracting. The limited partners should be very smart, very wealthy and confident.
- The second respondent is Company B. Their fund is aimed at financing high impact entrepreneurs. The ventures that qualify for their funds have a new product / concept or taking a new initiative to market. Very risky investments that can also create substantial jobs; increase exports; well BEE structured

- and can transfer skills. The respondent is 34 years of age and has been in the industry for ten years, with his background of accounting.
- The third respondent (Company C) that referred me to their website and basics about what their investments. They are the first Angel group that started out, and launched as a venture capital fund in January 2014. They are backed by family offices and focus on early stages of development. The ventures that they have invested in are in the high tech (E-commerce and internet) industry, that is, high scalable and high growth. There are five ventures under-management and all in South Africa. R20 million was invested in these companies in 2014. These companies range from seed capital to growth capital. The fund managers are quite experienced in the sense that they come from an entrepreneurial background themselves.

**TABLE 4-1 SUMMARY OF INTERVIEW RESPONSES** 

Question	First respondent	Second Respondent
1) Background Information	Fund still new	Was launched in 20The Fund size is R200 million. Investment period of 3 to 7 years. It excludes: These investments will normally exclude: property transactions; lifestyle type of businesses; investments with low returns; research and development; seeding stage capital; lack of technical viability.

2) Choice of Ventures (year, industry, location, stage, success)	<ul> <li>South Africa is the target country for now. Fund is still new and is still taking applications. The end of February the 29<sup>th</sup> is the closing date for raising funds.</li> <li>In terms of the criteria of ventures we are going to be financing:</li> <li>The entrepreneur should have high experience in in their industry</li> </ul>	<ul> <li>The fund is the biggest in Africa with 12 ventures under management. We receive numerous applications.</li> <li>As mentioned above, we do not invest in pre-revenue stages (seed and R&amp;D). Our ventures are across different industries. They are in media, manufacturing, forensics, technology, renewable energies and chemical industrials.</li> </ul>
3) Why do you invest in the venture capital industry? (in terms of returns, business, social development, fun or interest)	<ul> <li>The social impact that the launching of this fund will have will be to create more jobs.</li> <li>We are also anticipating that it will have an impact in business tourism, Impact on the rand value</li> <li>The industry itself is very interesting and exciting</li> <li>There is a global firm that we are currently partnering with in charitable events, and this firm supports angel investing.</li> </ul>	<ul> <li>For the development of the economy. Mainly through broadening the tax base.</li> <li>Investing to impact the economy (called impact investing)</li> <li>There is immature funding for innovation in this economy</li> <li>The returns in this industry are very good</li> </ul>

4) Please comment of the success and the failure of these ventures. (why the successful have succeeded and why the failed ones have failed)	N/A  It is quite challenging to just pick up any industry because the type of entrepreneur we are	One of our ventures grew rapidly in the sense that it needed more funding. We then had to take it up to a PE fund.  - The type of industries we invest (especially the venture itself) are very innovative. We
5) Why these industries specifically? Why not any other industries?	picking has to be trust worthy, and a right partner.  - The investment approach is not industry specific; instead it is specific on the type of entrepreneur involved in the venture.	do not consider just any venture. The characteristics of the venture have to such that it has the ability to create a new industry, or replace an existing industry or process or has a recycling ability.
	- The entrepreneur has to have a high level of experience in that particular industry, or skills necessary for that particular venture.	- For example we do not invest in agriculture, unless the business has come up with some innovative process, storage, logistics, etc. and has the potential to make an impact.

The entrepreneur should also
have a track record of high
performance and a high level
of passion

- They should also invest alongside the fund
- We are currently investing in SA because we understand the laws and regulations, the risk conditions, and have experience on the investments of this region. What we know currently and extensively is this country.
- We do not target specific industries; the main thing we look at is the product, and it much go beyond the basic standards of innovation.
- The pre-revenue streams of the business must be good.
- What we then do is take the product or business to the market (commercializing the product)
- The company as a whole is involved in other countries for other purposes. In countries like Zambia, Malawi, Rwanda and Namibia.

- thought of investing in other industries, stages and geographical locations different from the
- Currently we are focusing on SA ventures. The entrepreneur has to be a right partner.
- The investment must be predictable.
- There should also be an annuity base equity

We are currently funding SA entrepreneurs; we have a 34 year old model. As an evergreen company, we our own business returns from other investments to fund this platform. Any changes or interest depend on the

	ones you currently invest in?	<ul> <li>The business model should be sustainable and scalable. Scalability is a very important factor.</li> <li>Sustainability of the business model refers to the level of risk and return. The level of risk should be met by the level of returns</li> </ul>	shareholders. And our shareholders are different with have dynamic preferences.  Pursuing other scope also depends on growth as well.
7)	Do you have relevant experience for all these ventures? (for example maybe in some you might not need to have experience if not that involve, or provide some other type of guidance)	No experience in the VC industry. But broad range of experience transferable from field within the finance and investment industry. There are other managers that have skills as well that are relevant to run this fund.	<ul> <li>- As the managers we are involved in the initial stages of the investment processes. We do analyze the financials and conduct due diligence.</li> <li>- For post investment processes, we have consultants with highly specialized experience.</li> <li>- We also have a database of mentors from different relevant industries on a contractual base.</li> <li>- As managers we do not possess technical skills for different industries.</li> </ul>
8)	Any comments on how the venture capital industry can be improved in the	I have two main comments:  - Firstly, getting an investor is the one of the most difficult tasks. Due to the fact that we	The public and private sector can have good relationships where they can collaborate and share risks

# African continent?

have to gain the investor's trust and confidence about the fund. LPs have their own perceptions and especially the fact that they are to invest for a long term,

- approved by SARS which protects them from the downside risk. The new VC Income Tax Act that allows them to also increase their investment size. These are great benefits for the VC industry, and have had a great impact.
- huge gap on the adequacy the right experience to raise money for managing funds.
  The Government should support education, especially the youth. It might take time to get the youth skilled about most things. But it is very necessary.

There is also a need to celebrate the success of this industry to encourage more success

There is still a huge gap in the VC industry, that is, a mismatch between funding and innovation. With no doubt, there is innovation in Africa.

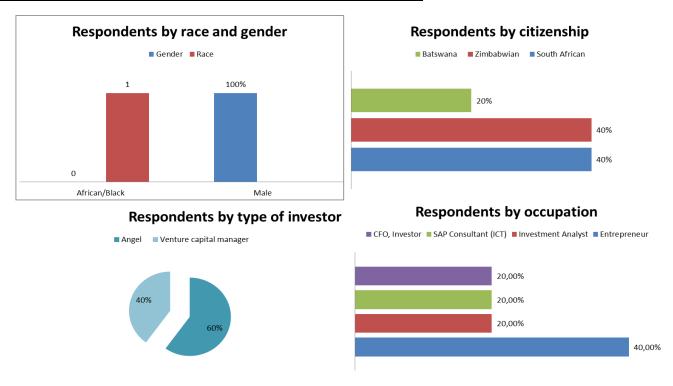
However, it is not properly matched with the correct funds, especially seeding and other very early stages of VC.

There is a need for programs that can improve this mismatch; programs that build strong and good relationships between the public and the private.

#### 4.1.2 Summary of responses to questionnaires

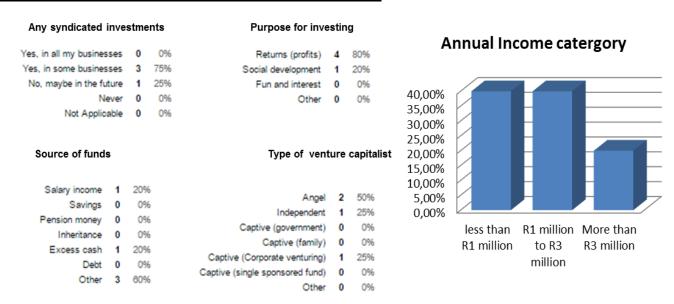
### 4.1.2.1 Questionnaire (A)

#### FIGURE 4-1 BACKGROUND INFORMATION OF THE RESPONDENTS



The combined diagrams indicate the demographics of the 5 respondents. Each individual represents 20% of the sample. No females' respondents on this survey. This confirms some of the characteristics of angel investors. They are usually professionals from different fields and most of them are males.

#### FIGURE 4-2 BASIC CHARACTERISTICS OF THE INVESTMENTS



The most of the respondents had an annual income more than R1 million. This diagram represents the characteristics of the respondents' investments. Some of them are angels and some are venture capitalists of different natures. Most of the funds are sourced from other sources of funds other than the ones mentioned on the survey. This makes sense due to the fact that some respondents are venture capitalists, and VCFs raise funds from other sources. Respondents indicated that they source funds from business income, parent company and other investments. Only one investor indicated that they are not involved in syndicated investments and only one indicated that they invest for social development. Most of them are in involved in syndicated investments and they invest in these businesses solely for returns.

#### 4.1.2.2 Section 2 and 3 of questionnaire (A)

#### TABLE 4-2 SUMMARY OF SECTION 2 (QUESTIONNAIRE A)

Questions	Most Likely	Less likely
How many businesses have you invested in so far?	More than 2	1
How long does it take for you to make a final decision to pursue an investment?	Between 2 to 3months	More than 3 months

Since when did you start investing in entrepreneurial	Between 5 and 10	Less than 3	
businesses?		years	
On average, how close are they from where you live? (scale	2	3	
of 1-5, close to far)			
Where are they situated?	Same country	Different	
		countries	
Name of the countries you have invested in	South Africa	Zim and	
		Botswana	
Given an opportunity, would you invest in other countries	Maybe	Definitely	
different from the current one?	iviayue	Deminiery	
different from the current one:			
In which stages have you invested?	Start-up,	Seed and	
	Development,	Later stages	
	Growth		
In what industries have you invested? Also write match them	Mostly Financial sector	or. But the	
with their stages and amount. (E.g. mining (G), web design	stages and industries		
(other)) if not S, Su, D or G, please write other.	varying quite a bit.		
How much experience do you have in the industries in which	More than 2	0	
you have invested? (scale of 0-5, most to none			
Are there any of the businesses in which have invested,	none	1 yes	
successfully entered the later stages?			
and and suggest			
Any of your the businesses in which you invested ever	4 (yes): improper	1: did proper	
failed? (No or yes provide a reason if possible)	business model, too	research	
	much capital was		
	needed, insufficient		
	oversight		

Any new industries discovered during the course of your	none	
investments (name it if possible)		
Are you interested to invest in:	All say yes	
How much have you invested in the venture capital industry	More than R2 million	Less than a
in total		R1 million

The frequency part of the table indicates the most frequent answers and less frequent answers by respondents. Most likely represents a range, average or mode and the answers on this column will represent the general views of this group.

TABLE 4-3 OPTIONS OR STRATEGIES THAT RESPONDENTS PREFER UNDER SECTION 3

What option do you prefer?	Agree	Maybe	Disagree	Mostly
Better to manage more industries	1/5	2/5	2/5	Maybe or Disagree
Better to manage one industry	3/5	0	2/5	Most agree
Diverse knowledge is better	4/5	0	1/5	Most agree
Specific knowledge is better	1/5	2/5	2/5	Maybe or Disagree
Better to invest in different regions	2/5	3/5	0	Agree and Maybe
Better to focus in one region	0	2/5	3/5	Maybe and Disagree
It does not matter how and where you invest	0	1/5	4/5	Disagree

The results of this table indicate that these respondents find managing different industries a problem, and to some think that it depends. But at the same time there are a few who find value from managing different industries. However, most of them

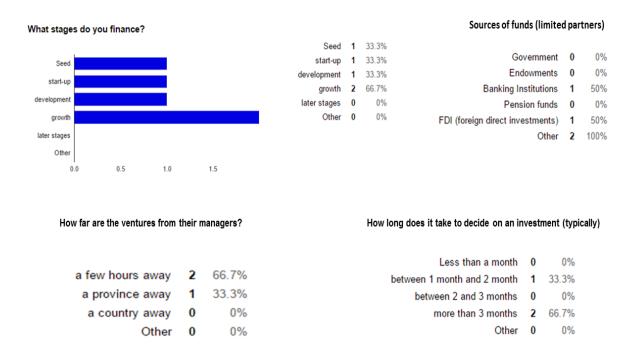
find diversified knowledge valuable and less preference for specific knowledge. When it comes to diversifying according to regions, some find good and to some it depends. A question that follows indicates that people do prefer to diversify their investments over different regions.

#### 4.1.2.3 Questionnaire (B)

#### 4.1.2.4 Section 1 of Questionnaire (B)

All the three of the firms that replied to this questionnaire are of a VC platform and only one of them also has LBO/MBO platform. It has been indicated in the question that respondents should also respond to investments under the VC platform. All these firms are from are situated in South Africa, Western Cape Province, and they are currently targeting South African ventures. The sources of funds are purely equity with no debt or any other type of financial instrument. Lastly, the other two firms are independent (and they don't have a parent company). The responses in terms of the industries that these VCFs finance were different. VCF (1) invests in renewable energy, VCF (2) invests technology focused across industries, and VCF (3) invests in most industries (including gambling), except capital intensive industries such as property. The other firm is a subsidiary and a captive of a family office. Below are some of the characteristics of these three respondents.

#### FIGURE 4-3 BASIC CHARACTERISTICS OF THE INVESTMENTS



#### **TABLE 4-4 OTHER CHARACTERISTICS OF THE RESPONDENTS**

Questions	Range	Average
When did the venture capital firm start?	2-8 years	7.5 years
Number of years firm holds a typical investment	5-8 years	5-7.5 years
How many managers?	2-5 managers	4 mangers
Average experience of managers (in years)	10-20	15 years
Funds currently under management (please specify currency)	R88-R100 Mil	R94 Mil
How many ventures under management	3-8 ventures	6 ventures

# 4.1.2.5 Section 2 and 3 of Questionnaire (B)

### TABLE 4-5 PREFERENCES INDICATED BY RESPONDENTS

Geographical/Industry/venture development stages preferences:	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Your preference on geographical proximity [Early stage venture should be closer]	1/3	2/3	0	0	0
Your preference on geographical proximity  [Late stage venture should be closer]	0	1/3	2/3	0	0
Your preference on geographical proximity [It does not matter which venture is close]	0	0	2/3	1/3	0
Industry preference [We invest in one industry]	2/3	0	0	0	1/3
Industry preference [We invest in in different but related industries]	0	0	1/3	1/3	
Industry preference [We invest in unrelated industries]	1/3	0	0	1/3	0
Industry and geographical proximity to managers [Ventures in related industries are close]	0	1/3	2/3	0	0
Industry and geographical proximity to managers [Ventures in unrelated industries are far]	0	0	2/3	1/3	0
Industry and stage preferences [Early stage ventures are in one industry]	1/3	0	1/3	1/3	0

Industry and stage preferences [Early stage ventures are in different but related industries]	0	1/3	1/3	1/3	0
Industry and stage preferences [Early stage ventures are in unrelated industries]	0	1/3	1/3	0	1/3
Industry and stage preferences [Late stage ventures are in one industry]	1/3	0	2/3	0	0
Industry and stage preferences [Late stage ventures are in different but related industries]	0	1/3	2/3	0	0
Industry and stage preferences [Early stage ventures are in unrelated industries]	0	1/3	1/3	0	1/3
Industry and stage preferences [It doesn't matter what industry in what stage.]	1/3	0	1/3	0	1/3

Some of the preferences are very ambiguous in terms of what most VCFs prefer. Obviously, due to the lack of data there are no clear cut preferences besides the fact that these VCFs prefer their ventures closer and that their investments differ in terms of strategies preferred.

#### **Comments from all respondents**

General comments from the survey respondents were that the industry is in need of more people with experience and knowledge. There are many businesses that need investors, and investors are available but do not know where to invest. There is a need for platforms where investors and entrepreneurs can meet. There is also lack of information in this industry. Some investors have the funds but lack knowledge and

entrepreneurs are the worst when it comes to knowledge. Additionally, small businesses are doing well but lack business knowledge

#### 4.2 Part 2 (from secondary data)

#### 4.2.1 Venture Capital for Africa

The information in this part of the chapter has been extracted from the report that was conducted by VC4Africa in 2014. The part of the research that is relevant for this research is the section that analyzes investor responses. The ventures that examined in this report are early stage, post-seed and pre-late stage, and require investments less than USD 1 million; the primary sectors being the mobile, web, renewable energy, healthcare, education and agriculture. 43% are in a growth stage and 57% of the ventures are in a startup phase where. According to this report startups ventures focus on solution authentication, product market suitability and survival, whereas growth stage ventures focus on product line expansion, revenue growth and team growth. All these ventures in the report are innovative, make use of technology or even disruptive in terms of business models. 30% of the ventures are explicit social mission and mostly could qualify as social enterprises.

Venture Capital firm N 16
Social Impact fund N 10
Other N 11
SME lender N 6
Angel Investor N 22
Accelerator N 6
Total sample N 71

FIGURE 4-4 AVERAGE INVESTOR SIZE IN US DOLLARS

(Source: VC4A, 2015)

The diagram above shows the list and type of respondents that invest in these ventures. Angel investors, venture capital firms and social impact funds contribute

quite a large amount in the VC industry. This confirms what has been found in the literature review section in that angel funds are usually investing this amount of funds.

ICT N 34
Agriculture N 27
Finance & Banking N 27
Real Estate N 18
Healthcare N 18
Education N 18
Transportation N 15
Wholesale & Retail N 9
Sanitation & Waste Management N 4
Other N 13

6%
BASE N = 71

FIGURE 4-5 ALLOCATION INVESTMENTS PER SECTOR

(Source: VC4A, 2015)

The diagram above indicates that the investors are investing in quite a number of different industries across the continent. There are low tech and high tech industries. These investors are also actively investing with 82% of their funds, which also means that the investments have already been concluded. The difference in investment sizes varies between the different types of investors. VC's and social impact funds are invest over USD 100K (approximately more that R100 million), whereas, angels are investing between USD 25K and USD 100K. The investors find the ICT sector more attractive, as they have secured 61% of all investments. Despite the economic challenges faced by investors for various countries, similarity with the market is seen as less essential when compared on average. This could imply an increasing opportunity for cross-border investing and appetite for syndication (VC4A, 2015).

#### 4.2.2 What do investors prefer according to Bloomberg data

Below is a table indicating the features of the target investments for each acquirer. Since the acquirer is the investor in this case, from the data, there should be an indication of whether investors are specializing or diversifying their investments according to target categories shown below. The acquirers were chosen if they

appeared more than once in a particular investment. The deals were done between 2008 and 2016, and most of them being done in 2014 and 2015.

TABLE 4-6 INVESTORS AND TARGET COMPANY PREFERNCES

	Acquirer	Acquirer	Target	Target Industry
Frontier Digital	Country	Industry Sector	Country	Subgroup
Ventures	Malaysia	Financial	South Africa	Advertising Services
Tomaroo	Malaysia	Financial	Tanzania	Advertising Services
	Malaysia	Financial	Ghana	Advertising Services
	Malaysia	Financial	Mozambique	Advertising Services
	Walaysia	Tinanciai	Wozambique	Advertising betvices
Vostok New Ventures Ltd				
				E-
	Sweden	Financial	Egypt	Commerce/Services
	Sweden	Financial	Egypt	Applications Software
EchoVC Partners				
LLC				
	U.S.	Consumer, Non- cyclical, Financial	Nigeria	E- Commerce/Services
	U.S.	Financial	Nigeria	Advertising Services
	0.0.	Tinanolai	Trigeria	Advertising octvices
	U.S.	Financial	Nigeria	Distribution/Wholesale
Private Investor (US)	South Africa	Communications, Financial	South Africa	E- Commerce/Services
	U.S.	Consumer, Non- cyclical, Financial	Nigeria	Diversified Financial Services
	U.S.	Financial	South Africa	Web Portals/ISP
	France	Energy, Financial, Utilities	Ghana	Energy-Alternate Sources
	Nigeria	Financial	Nigeria	E- Commerce/Services
	U.S	Financial	South Africa	Commercial Serv- Finance
	Nigeria	Financial	Nigeria	Applications Software
	Kenya	Financial	Kenya	E- Commerce/Services

Omidyar Network Commons LLC				
Commons LLC				
				Energy-Alternate
	U.S.	Financial	Tanzania	Sources
				Energy-Alternate
	U.S.	Energy, Financial	Tanzania	Sources
Piton Capital LLP (Fund: Piton Capital Venture Fund II LP				
				E-
	U.K.	Financial	Egypt	Commerce/Services
	U.K.	Financial	Egypt	Applications Software
500 Startups Management Co LLC (Fund: 500 Startups III LP)	U.S.	Financial	Botswana	Real Estate Oper/Development
·				E-
	U.S.	Financial	Egypt	Commerce/Services
	U.S.	Financial	Egypt	Applications Software
Omidyar Network Fund Inc.	U.S.	Consumer, Non- cyclical, Financial	Nigeria	Diversified Finan Serv
	U.S., U.S.	Consumer, Non- cyclical, Financial	Nigeria	E- Commerce/Services
		2000	9	
Amadeus Capital				F
Partners Ltd	U.K.	Communications, Financial	South Africa	E- Commerce/Services

The table above relates to the theories that were developed in the literature review. This will also be a case, because most of these investors are from the developed economies. The private investors that are from Africa are indicating that, where they are currently investing, is where they are located. This relates to the information from the first data set; in that investors prefer ventures that are closer to them.

Looking at the firms from developed economies, the choice of industry and country show a clear pattern. The first company, Frontier Digital Ventures, is showing that it specializes in one industry but across countries. Another strategy that is shown by 500 Startup that it has invested in Egypt and has and the industries are related, indicating specialization in industries within the same region. Other companies indicate other mixture of strategies

#### 5 CONCLUSIONS AND RECOMMENDATIONS

What is found on the first data set is quite ambiguous due to the lack of data. The commonalities within this data set it that that the characteristics of venture capital managers and angel investors are what has been described in the literature. Focusing on the crucial parts of the responses where respondents have indicated their preferences in terms of venture stages, industry and geographical scope, all the responses from surveys to interviews indicate that there is a preference to invest closer to location. Where the results are not a clear cut is whether respondents diversify or specialize according to industry or stages. Both angel investors and venture capital managers' responses have indicated that they are involved in different stages of VC financing. What this implies is that they diversify their investments according to stages. Another result is that some respondents clearly cut out the seeding stage. This is not uncommon, as it has been stated in the literature that finding this type of investment is a struggle. Another interesting finding comes from the interview answers. The respondents indicated that they do not base their investment decisions by looking at specific regions, industries or stages. There are other strategies or approaches they use when taking up investments.

The second part of the research findings indicates that investors across the globe are interested in Africa and make investments in different industries but more especially in the ICT industry and the reason being that the industry is having impact on the employment rate. The results of this study indicate that investors might have other approaches in investing in ventures, such as social impact, and not necessarily investing with specialization and diversification strategies in mind. These results relate a bit to the responses gathered from primary data.

The last part of the results are confirming the primary data results that investors in Africa prefer investments close to them and that there is no clear cut whether the investments are specialized diversified throughout industries. Other VCFs that are represented in the table indicate that, VCFs from developed countries have clear cut strategies in terms of whether they specialize or diversify their investments according

to industries and regions. Since it has been easy to detect from the data, this indicates that African results could be currently unclear because of the immature VC industry.

This study can further be investigated better and developed through with more data. It is clear that information is a problem for all parties involved including researchers. Another strategy that could be useful to get comprehensive study for this industry, is through getting intense information from all the VCFs, Angel groups and other VC programs to get an overall understanding. This would obviously take time. With enough intensive information there is so much that can be learnt and developed in VC industry. The African governments should encourage this industry and offer programs that generate information for entrepreneurs and investors. LPs in South Africa are already encouraged by regulations; other countries should also do the same.

#### 6 REFERENCES

Abereijo, I. O., & Fayomi, A. O. (2007). The Attitude of Small and Medium Industrialists to Venture Capital Financing in Nigeria. *Global Journal of Business Research*, 1(1), 127-138.

Adekunle, B. (2011). Determinants of microenterprise performance in Nigeria. *International* 

Anokye-Yeboah, W., (2009). Venture capital financing in Ghana "challenges and prospects". Master's thesis, Kwame Nkrumah University of Science and Technology.

Adam Smith, An Inquiry into the Nature and Causes of the Wealth of Nations, New York: Modern Library Edition, [1776] 1994, page 19.

Acharya, V.V., Hasan, I. and Saunders, A. (2002). Should Banks be Diversified? Evidence from Individual Bank Loan Portfolios. *Working Paper*, London Business School: London.

Ahuja, G., & Katila, R. (2001). Technological acquisition and the innovation performance of acquiring firms: A longitudinal study. *Strategic Management Journal*, 22(3), 197-220.

Altenburg, T., Drachenfels, C. (2006). The "New Minimalist Approach" to Private-Sector Development: A Critical Assessment. *Development Policy Review*, 24: 387-411.

Amit, R., Glosten, L., & Muller, E. (1990). Entrepreneurial ability, venture investments, and risk sharing. Management Science, 36(10), 1233-1246.

Asche H. Schüller M. (2008). China's Engagement in Africa – Opportunities and Risks for Development. Study by order of GTZ. . Last accessed, 20th January, 2016. from

http://sociology.sunimc.net/htmledit/uploadfile/system/20110123/2011012319141 3632.pdfAtkin

.

AVCA. (2013). Sub-Saharan Africa Region. Retrieved 10 November, 2015, from <a href="http://www.avca-africa.org/wp-content/uploads/2013/09/SSA-Economic-Outlook-2013.pdf">http://www.avca-africa.org/wp-content/uploads/2013/09/SSA-Economic-Outlook-2013.pdf</a>

AVCA. (2014a). Guide to private equity in Africa. Retrieved 10th November, 2016, from <a href="http://www.avca-africa.org/wp-content/uploads/2014/07/AVCA-Guide-to-PE-in-Africa-2013-2014-AVCA-Member-Directory.pdf">http://www.avca-africa.org/wp-content/uploads/2014/07/AVCA-Guide-to-PE-in-Africa-2013-2014-AVCA-Member-Directory.pdf</a>

AVCA. (2014b). Investing for impact: A strategy for African policy makers. Retrieved 05th November, 2015, from <a href="http://www.avca-africa.org/wp-content/uploads/2014/04/Final-Investing-for-Impact-Report-Apr-20141.pdf">http://www.avca-africa.org/wp-content/uploads/2014/04/Final-Investing-for-Impact-Report-Apr-20141.pdf</a>

AVCA. (2014c). AVCA: Guide to Private Equity in Africa. Retrieved 05th November, 2015, from <a href="http://www.avca-africa.org/media/1370/avca-guide-to-pe-in-africa-2013-2014-avca-member-directory.pdf">http://www.avca-africa.org/media/1370/avca-guide-to-pe-in-africa-2013-2014-avca-member-directory.pdf</a>

Berglof, E. (1994). A Control Theory of Venture Capital Finance. *The Journal of Law, Economics, & Organization*, 10 (2), 247-267

Biekpe, N. (2004). Financing Small Businesses in Sub-Saharan Africa. Journal of African Business, 5(1), 29-44.

Black, S. E., & Strahan, P. E. (2002). Entrepreneurship and bank credit availability. *The Journal of Finance*, 57(6), 2807-2833.

Benjamin, G. A., & Margulis, J. (2000). *Angel financing: How to find and invest in private equity*, (Vol. 75). New York: John Wiley & Sons.

Blair, A. (1996). Creating an Informal Investor Syndicate: Personal Experiences of a Seasoned Informal Investor. In R. T. Harrison and C. M. Mason (Eds.), Prentice Hall, Hemel Hempstead. *Informal Venture Capital: evaluating the impact of business introduction services* (pp. 156-196).

Bodie, Z., Kane, A., & Marcus, A. J. (2002). Investments. International Edition. New York, Boston, London.

Brautigam, D. (2009). *The Dragon's Gift: The Real Story of China in Africa*. Oxford: Oxford University Press.

Bridges Ventures and AVCA (2014). Limited Partner Survey. Retrieved 10th May, 2016, from <a href="http://www.avca-africa.org/media/1113/2015-avca-limited-partner-survey-final1.pdf">http://www.avca-africa.org/media/1113/2015-avca-limited-partner-survey-final1.pdf</a>

Busenitz, L. W., and Barney, J. B. (1997). Differences between entrepreneurs and managers in large organizations: Biases and heuristics in strategic decision-making. *Journal of Business Venturing*, 12(1), 9–30.

Byers, B. (1997). Relationship between venture capitalist and entrepreneur. Pratt's Guide to Venture Capital Sources.

Bygrave, W.D. (1987). Syndicated Investments by Venture Capital Firms: A Networking Perspective. *Journal Business Venturing*, 2(2), 139-154

Bygrave, W.D. (1988). The structure of the investment networks of venture capital firms. *Journal Business Venturing*. 3(2), 137-157

Bygrave, W. D. and Reynolds, P. D. (2004, 3-5 June). *Who Finances Startups in the USA? A Comprehensive Survey of Informal Investors, 1999-2003.* Paper presented at the Babson- Kaufman Entrepreneurship Research Conference, University of Strathclyde, Glasgow.

Bygrave, W.D., & Timmons, J.A. (1992). *Venture capital at the crossroads*. Boston: Harvard Business School Press.

Causey, J. P. (2014). An Analysis of South African Venture Capital Practitioners' Views on the Motivations, Benefits and Constraints of International Syndication. Master's thesis, University of Cape Town, Cape Town

Chan, Y. (1983). On the Positive Role of Financial Intermediation in Allocation of Venture Capital in a Market with Imperfect Information. *The Journal of Finance*, 38(5), 1543-1568.

Chang, H. J. (2002). *Kicking away the ladder: development strategy in historical perspective*. London: Anthem Press.

Chemmanur, T., Krishnan, K., & Nandy, D. (2011). How Does Venture Capital Financing Improve Efficiency in Private Firms? A Look beneath the Surface. *The Review Financial of Studies*, 24(12), 4037-4090.

Coulson, J. (17 March, 2014). Venture Capital Deal Activity in Africa - March 2014. *Preqin.* Retrieved 10th January, 2016, from <a href="https://www.preqin.com/blog/0/8564/venture-capital-africa">https://www.preqin.com/blog/0/8564/venture-capital-africa</a>

Cumming, D., Siegel, D. S., & Wright, M. (2007). Private equity, leveraged buyouts and governance. *Journal of Corporate Finance*, 13(4), 439-460.

Dana, L. P. (2007). Promoting SMEs in Africa: Some Insights from an Experiment in Ghana and Togo. *Journal of African Business*, 8(2), 151-174

De Janvry A and Sadoulet e (2010). Agriculture for development in Africa: business-as- usual or new departures? Journal of African Economies. 19 (AeRC supplement 2): ii7–ii39.

Deloitte & SAVCA. (2015). *Africa Private Equity Confidence Survey 2015*. Retrieved 10<sup>th</sup> November, 2016, from <a href="http://www.savca.co.za/wp-content/uploads/2013/08/Deloitte-Africa-Private-Equity-Confidence-Survey-Asurvey-of-sentiment-amongst-GPs-in-West-East-and-Southern-Africa.pdf">http://www.savca.co.za/wp-content/uploads/2013/08/Deloitte-Africa-Private-Equity-Confidence-Survey-Asurvey-of-sentiment-amongst-GPs-in-West-East-and-Southern-Africa.pdf</a>

Deloitte, (2013). 2013 East Africa Private Equity Confidence Survey 2013: Seeing Beyond the Waves. Retrieved 10th September, 2016, from <a href="http://www.eavca.org/Deloitte\_PE\_Survey\_2013.pdf">http://www.eavca.org/Deloitte\_PE\_Survey\_2013.pdf</a>

Delong, G.L. (2001). Stockholder gains from focusing versus diversifying bank mergers. *Journal of Financial Economics*, 59, 221-52Dutta, S., and Folta, T. B. (2016). A comparison of the effect of angels and venture capitalists on innovation and value creation. *Journal of Business Venturing*, 31(1), 39-54.

Djankov, S. (2009). The regulation of entry: A survey. Retrieved 10th November, 2016, from http://down.cenet.org.cn/upfile/39/20099303936159.pdf

Echolos, A. E. (2000). Extending the Resource-Based View to Explain Venture Capital Firm Networks' Contributions to IPO Performance: A Study of Human-Based Factors, PhD thesis. State University: Virginia

Ehrlich, S. B., De Noble, A. F, Moore, T. and Weaver, R. R., (1994). After the cash arrives: A comparative study of venture capital and private investor involvement in entrepreneurial firms. *Journal of Business Venturing*, 9, 67-82

Elitzur, R., Gavious, A. (2003). Contracting, signaling, and moral hazard: a model of entrepreneurs, angels, and venture capitalists. *Journal Business Venturing*, 18, 709–725.

- EY. (2014). Private equity roundup Africa 2014. Retrieved 10<sup>th</sup> November, 2016, from <a href="http://www.ey.com/Publication/vwLUAssets/EY-private-equity-roundup-africa-2014/\$FILE/EY-private-equity-roundup-africa-2014.pdf">http://www.ey.com/Publication/vwLUAssets/EY-private-equity-roundup-africa-2014.pdf</a>
- Fairchild, R. (2011). An entrepreneur's choice of venture capitalist or angel-financing: A behavioral game-theoretic approach. *Journal of Business Venturing*, 26(3), 359-374.
- Fenn, G. W., Liang, N., & Prowse, S. (1997). The private equity market: An overview. *Financial Markets, Institutions & Instruments*, 6(4), 1-106.
- Fern, M. J., L. B. Cardinal, and O'Neill, H. M. (2012). The genesis of strategy in new ventures: Escaping the constraints of founder and team knowledge. *Strategic Management Journal*, 33(4), 427-47.
- Fiet, J. O. (1995). Risk avoidance strategies in venture capital markets. *Journal of Management Studies*, 32, 551-574.
- Freear, J., Sohl, J. E., & Wetzel Jr, W. E. (1992). The investment attitudes, behavior and characteristics of high net worth individuals. *Frontiers of entrepreneurship research*, *16*, 374-387.
- Freear, J., Sohl, J. E. and Wetzel, W. E. jr. (1994). The private investor market for venture capital. *The Financier*, 1(2): 7-15.
- Freear, J., Sohl, J. E. and Wetzel, W. E. jr. (1995). Angels: personal investors in the venture capital market. *Entrepreneurship and Regional Development*, 7, 85-94.
- Freear, J. and Wetzel, W.E. (1990). Who Bankrolls High-Tech Entrepreneurs? *Journal of Business Venturing*, 5, 77-89
- Freshfields. (2014). Into Africa: *The Rise of Private Equity*. Retrieved 10th November, 2016, from
- http://www.freshfields.com/uploadedFiles/SiteWide/News\_Room/News\_/01795\_MKT\_WWW\_PE\_Growth\_In\_Africa\_INTERACTIVE\_AW.PDF
- Fried, V. H., & Hisrich, R. D. (1994). Toward a model of venture capital investment decision making, *Financial Management*, 23(3), 28-37.
- Fried, V. H., & Hisrich, R. D. (1995). The venture capitalist: A relationship investor. *California Management Review*, 37(2), 101-113.
- Frontier Economics (2013). *Exploring the impact of private equity on economic growth in Europe*. Retrieved 01 November, 2015, from http://www.investeurope.eu/media/61219/Frontier Economics Report.pdf
- Fry, W. (1995). Money, Interest, and Banking in Economic Development. *Canadian Journal of Development Studies*, *16*, 312-312.
- Gaston, R. J. (1989). The scale of informal capital markets. *Small Business Economics*, 1: 223-230.
- Gompers, P. (1995). Optimal investment, monitoring and the staging of venture capital. *Journal of Finance*, 50, 1461-89

- Gompers, P. A., & Lerner, J. (1999). What drives venture capital fundraising? (No. w6906). National Bureau of Economic Research: Chicago Tian, X. (2011). The causes and consequences of venture capital stage financing. *Journal of Financial Economics*, 101(1), 132-159.
- Gompers, P., & Lerner, J. (2001). The Venture Capital Revolution. *Journal of Economic Perspectives*, 15(2), 145-168
- Gorman, M., & Sahlman, W. A. (1989). What do venture capitalists do? *Journal of Business Venturing*, 4(4), 231-248.
- Grant, R. M., & Baden-Fuller, C. (2004). A knowledge accessing theory of strategic alliances. Journal of management studies, 41(1), 61-84. Greenwood, J. and Jovanovic, B. (1990). Financial development, growth, and the distribution of income, *Journal of Political Economy*, 98, pp. 1076–1107.
- Gupta, A. K., & Sapienza, H. J. (1988). The pursuit of diversity by venture capital firms: antecedents and implications. *Frontiers of Entrepreneurship Research*, *8*, 290-302.
- Gupta, A. K., Sapienza, H. J. (1992). Determinants of venture capital firm's preferences regarding the industry diversity and geographic scope of their investments. *Journal of Business Venturing*, 7, 347-362
- Haar, N. E., Starr, J. and MacMillan, I C. (1988). Informal risk capital investors: Investment patterns on the East Coast of the USA. *Journal of Business Venturing*, 3: 11-29
- Harrison, R. T. & Mason, C. M. (2000). Venture capital market complementarities: The links between business angels and venture capital funds in the UK. *Venture Capital: An International Journal of Entrepreneurial Finance*, 2, 223- 242.
- Harrison, R. T., & Mason, C. M. (2007). Does gender matter? Women business angels and the supply of entrepreneurial finance. *Entrepreneurship Theory and Practice*, 31(3), 445-472.
- Hause, J. C., & Du Rietz, G. (1984). Entry, industry growth, and the microdynamics of industry supply. *The Journal of Political Economy*, 733-757.
- Hellmann, T. (1998). The allocation of control rights in venture capital contracts. The Rand Journal of Economics, 57-76.
- Hellmann, T., & Puri, M. (2000). The interaction between product market and financing strategy: The role of venture capital. *Review of Financial Studies*, 13(4), 959-984.
- Hellmann, T., & Thiele, V. (2015). Friends or foes? The interrelationship between angel and venture capital markets. *Journal of Financial Economics*, 115(3), 639-653.
- Hesse, H. (2008). Export diversification and economic growth. Working Paper No. 21, Commission on growth and Development.

- Hofer, C. W., & Sandberg, W. R. (1987). Improving new venture performance: Some guidelines for success. *American journal of small business*, 12(1), 11-25.
- Hox, J. J., & Boeije, H. R. (2005). Data collection, primary vs. secondary. Encyclopedia of social measurement, 1, 593-599.
- Hsu, D.H. (2006). Venture capitalists and cooperative start-up commercialization strategy. *Management Sciences*, 52, 204–219
- Imbs, J., & Wacziarg, R. (2003). Stages of diversification. *American Economic Review*, 93(1), 63-86.

Investor Pulse. (2003). Investor Pulse UK Angel Attitude Survey: A Qualitative Survey into UK Business Angel Attitudes, Preferences Views in 2002 and 2003. Retrieved 10<sup>th</sup> November, 2016, from

http://www.angelcapitalassociation.org/data/Documents/Resources/AngelGroupResarch/1d%20-%20Resources%20-

%20Research/21%20Research\_InvestorPulse.pdf

- JEC. (1985). A Study Prepared for the Use of the Joint Economic Committee of the U.S. Congress. Washington DC, U.S. Government Printing Office.
- Jelic, R., Saadouni, B., & Wright, M. (2005). Performance of private to public MBOs: the role of venture capital. *Journal of Business Finance & Accounting*, 32(3-4), 643-682.
- Jeng, L. A., & Wells, P. C. (2000). The determinants of venture capital funding: evidence across countries. *Journal of corporate Finance*, 6(3), 241-289.
- Johnson, D. A. (2013). Private Equity in Africa: An Evolving Market. Retrieved 10th January, 2016, from <a href="https://www.johnson.cornell.edu/portals/32/EMI%20Docu/Private%20Equity%20in%20Africa%20-%20An%20Evolving%20Market.pdf">https://www.johnson.cornell.edu/portals/32/EMI%20Docu/Private%20Equity%20in%20Africa%20-%20An%20Evolving%20Market.pdf</a>
- Ladekari, J. and Zervos, S. (2004). Housekeeping and plumbing: the investability of emerging markets. *Emerging Markets Review*, 5(3), 267-294.
- Lall, S., Weiss, J., & Zhang, J. (2006). The "sophistication" of exports: a new trade measure. *World Development*, 34(2), 222-237
- Lall, S. (2005). Is African industry competing? Working Paper 121. Queen Elizabeth House, University of oxford

Landström, H. (1993). Informal risk capital in Sweden and some international comparisons, *Journal of Business Venturing*, 8, 525-540.

Landström, H., (1992). The relationship between private investors and small firms: an agency theory approach. *Entrepreneurship and Regional Development*, 4, 199-223.

Lerner, J. (1994). The syndication of venture capital investments. Financial management, 16-27.

Lengyel, Z. and Gulliford, J., 1997, *The Informal Venture Capital Experience*. London: Local Investment Networking Company

Levine, R. (1997). Financial development and economic growth: views and agenda. *Journal of Economic Literature*, 35(2), pp. 688-726.

Lin J and Chang H (2009). Should industrial policy in developing countries conform to comparative advantage or defy it? A debate between Justin Lin and Ha-Joon Chang. *Development Policy Review*. 27 (5):483–502.

Lin J Y and Monga C. (2010). *Growth Identification and facilitation – The role of the state in the dynamics of structural change*. The world Bank Policy Research working Paper 5313. World Bank. Washington, D.C.

Lindsey, L. (2008). Blurring firm boundaries: The role of venture capital in strategic alliances. *Journal of Financial Economics*, 63, 1137-1168

Lingelbach, D. C., Murray, G. C., & Gilbert, E. (2009). The rise and fall of South African venture capital: A coproduction perspective. Available at SSRN 1459175.

Ltenburg, T. (2011). Industrial policy in developing countries: overview and lessons from seven country cases. *Discussion Paper 4/2011*. German Development Institute

Lumme, A., Mason, C. and Suomi, M. (1998). *Informal Venture Capital: Investors, Investments and Policy Issues in Finland*. Dordrecht: Kluwer Academic Publishers.

Kaulich, F. (2012). Diversification Vs Specialization as Alternative Strategies for Economic Development: Can we settle a debate by looking at the empirical evidence? Retrieved 10<sup>th</sup> May, 2016, from

http://www.unido.org//fileadmin/user\_media/Publications/Research\_and\_statistics/Branch\_publications/Research\_and\_Policy/Files/Working\_Papers/2012/WP032012\_Ebook.pdf

Klapper, L., Laeven, L., & Rajan, R. (2006). Entry regulation as a barrier to entrepreneurship. *Journal of Financial Economics*, 82, 591-629.

Kortum, S., & Lerner, J. (2000). Assessing the contribution of venture capital to innovation. *RAND Journal of Economics*, 674-692.

Kuznets, S. (1971). Lecture to the memory of Alfred Nobel, December 11; Solow R. (1956). A contribution to the theory of economic growth. Quarterly Journal of Economics, 70, 65-94.

Madill, J. J., Haines, Jr, G. H., & Rlding, A. L. (2005). The role of angels in technology SMEs: A link to venture capital. *Venture Capital*, 7(2), 107-129.

Mack, N., Woodsong, C., MacQueen, K. M., Guest, G., and Namely E., (2005). Qualitative Research Methods: A Data Collector's Field Guide. FHI360, Family Health International, North Carolina

Mason C. M. (2006). Informal Sources of Venture Finance. *International Handbook Series of Entrepreneurship*, 3, 259-299.

Mason, C. M. and Harrison, R. T., 2000a, Informal Venture Capital and the Financing of Emergent Growth Businesses. In, edited by D. In Sexton and H. Landström (Eds.), *the Blackwell Handbook of Entrepreneurship* (pp 221-239).

Oxford: Blackwell.

Mason, C. M. and Harrison, R. T. (2000b). The size of the informal venture capital market in the United Kingdom. *Small Business Economics*, 15: 137-148.

Mason, C. M. and Harrison, R. T. (2002). Is it worth it? The rates of return from informal venture capital investments. *Journal of Business Venturing*, 17,211-236.

Mason, C. M. and Harrison, R. T. (2004a). Improving access to early stage venture capital in regional economies: A new approach to investment readiness. *Local Economy*, 19, 159-173.

Mason, C. M., & Harrison, R. T. (1994). Informal venture capital in the UK. *Finance and the Small Firm*, 64-111.

Mason, C. and Rogers, A. (1997). The Business Angel's Investment Decision: An Exploratory Analysis. In D. Deakins, P. Jennings and C. Mason (Eds.), *Entrepreneurship in the 1990s* (pp. 29-46). London: Paul Chapman Publishing.

Matusik, S. F., & Fitza, M. A. (2012). Diversification in the venture capital industry: Leveraging knowledge under uncertainty. *Strategic Management Journal* 33(4), 407-26.

Metrick, A., & Yasuda, A. (2010). *Venture Capital and the Finance of Innovation* (Second ed.), John Wiley and Sons.

Montgomery, C. A. & Wernerfelt, B. (1998). Diversification, Ricardian rents, and Tobin's q. *RAND Journal of economics*, 19, 623-632

Muchai, J, (2013). Assessing the finance – growth channel in Kenya: a VAR analysis. *The African Finance Journal*, 15(2), 66-84.

Nayar, S. K. (1992, June). Shape from focus system. In Computer Vision and Pattern Recognition, 1992. Proceedings CVPR'92. 1992 IEEE Computer Society Conference on (pp. 302-308). IEEE: Chicago

Norton, E., & Tenenbaum, B.H. (2003). Economic development as self-discovery. *Journal of Development Economics*, 72(2), 603-633.

Ngugi, R., Amanja, D., & Maana, I. (2009). Capital market, financial deepening and economic growth in Kenya. Unpublished Capital Markets Paper. Last accessed 10th December, 2015, from

http://www.csae.ox.ac.uk/conferences/2009-EDiA/papers/513-Isaya.pdf

Ojah, K. (2009): The Right Private Equity Market for African Economies. *Africa Growth Agenda*, 6, pp. 6-9.

Ojah, K. (2011). Is the enterprise creation importance of venture capital in an emerging market real? Answers from Johannesburg Securities Exchange's IPOs. *African Finance Journal*, 13(2), 1-24.

Ojah, K., Karemera, D., & Cole, J. A. Random walks and market efficiency tests: evidence from emerging equity markets. *Review of Quantitative Finance and Accounting*, 13 (2), 171-188

Ojah, K., & Kodongo, O. (2015). Financial markets development in Africa: reflection and the way forward. OUP Uncorrected Proof- First Proofs, (401-423).

Ojah, K., and Mokoaleli-Mokoteli, T. (2010). Possible effective financing models for entrepreneurship in South Africa: guides from microfinance and venture capital finance. *The African Finance Journal*, 12(1), 1-26.

Ollor, W. G., & Dagogo, D. W. (2009). The effect of venture capital financing on the economic value added profile of Nigerian SMEs. *African Journal of Accounting, Economics, Finance and Banking Research*, 5(5), 37-51.

Ostrom, L. T., & Cheryl, A. (2012). Wilhelmsen Risk Assessment: Tools, Techniques, and Their Applications. New Jersey: John Wiley and Sons.

Oyefuga, I. O., Siyanbola, W. O., Afolabi, O. O., Dada, A. D., & Egbetokun, A. A. (2008). SMEs funding: an assessment of an intervention scheme in Nigeria. *World Review of Entrepreneurship, Management and Sustainable Development*, 4(2-3), 233-245.

Park, S. and Bae, Z. (2004). New venture strategies in a developing country: Identifying a typology and examining growth patterns through case studies. *Journal of Business Venturing*, 19, 81-105.

Porter, M. (1990). The Competitive Advantage of Nations, New York. Fowell WW, 1987: Hybrid organizational Arrangements: New Form or Transitional Development. *California Management Review*, *30*, 67-87.

Porter, M. E. (1998). Cluster and the new economics of competition.

Preqin, (2014). Private Equity in Africa. Retrieved 10th September, 2016, <a href="https://www.preqin.com/docs/reports/Preqin-Private-Equity-in-Africa-October-2014.pdf">https://www.preqin.com/docs/reports/Preqin-Private-Equity-in-Africa-October-2014.pdf</a>

Prowse S. (1998). Angel investors and the market for angel investments. *Journal of Banking & Finance*, 22, 785-792.

Quindlen, R. (2000). Confessions of a venture capitalist: inside the high-stakes world of start-up financing. Grand Central Publishing.

Rattso J and Torvik R (2003). Interactions between agriculture and industry: theoretical analysis of the consequences of discriminating agriculture in sub-Saharan Africa. *Review of Development Economics*. 7(1):138–151.

Reynolds, P. D., (1997). Who starts new firms? Preliminary exploration of firms-in-gestation. *Small Business Economics*, 9, 449-462.

RisCura & EAVCA (2016). East Africa Private Equity Deal Dashboard 2016. Retrieved 30th January, 2016, from

http://www.eavca.org/RisCura\_EAVCA\_EastAfrica\_Private\_Equity\_Deal\_Dashboard.pdf

RisCura. (2013). Bright Africa. Retrieved 10<sup>th</sup> November, 2016, from <a href="http://www.eavca.org/RisCura\_Bright%20Africa\_June13.pdf">http://www.eavca.org/RisCura\_Bright%20Africa\_June13.pdf</a>

R. and Esiri, M. (17-19 November, 1993). *Informal Investment – Investor and Investee Relationships*. Paper presented at the 16th National Small Firms Policy and Research Conference, Nottingham

Robertson, J. (2009). Private Equity Funds. New Political Economy, 14(4), 545-555.

Robinson, R. B., (1987). Emerging strategies in the venture capital industry. *Journal of Financial Economics*, 63, 1137–1168

Rodrik, D. (2007). Industrial Development: Stylized Facts and Policies. In: United Nations, *Industrial Development for the 21st Century*. United Nations: New York

Sahlman, W. (1988). Aspects of financial contracting in venture capital. *Journal of Applied Corporate Finance*, 1(2), 23-36.

Sahlman, W. (1990). The structure and governance of venture-capital organizations. *Journal of Financial Economics*, 27(2), 473-521.

Sandberg, W. R., & Hofer, C. W. (1988). Improving new venture performance: The role of strategy, industry structure, and the entrepreneur. *Journal of Business venturing*, *2*(1), 5-28.

Sapienza, H. J. (1992). When do venture capitalists add value? Journal of Business Venturing, 7, 9-27

SAVCA. (2015). Three decades: an account of rise and establishment of South African private equity. (1-54). SAVCA, Johannesburg.

SAVCA, & DBSA. (2014). The Economic Impact of Venture Capital and Private Equity in South Africa. (1-15). SAVCA, Johannesburg.

Schilit, W. K. (1997). The nature of venture capital investments. The Journal of Private Equity, 1(2), 59-75.

Schumacher, R. (2012). Adam Smith's theory of absolute advantage and the use of doxography in the history of economics. *Erasmus Journal for Philosophy and Economics*, 5(2), 54-80.

SF, S. M., Gakure, W. R., & Karanja, K. (2012). Venture capital (VC): Its impact on growth of small and medium enterprises in Kenya. *International Journal of Business and Social Science*, *3*(6).32-38.

Shane, S. (2008). The importance of angel investing in financing the growth of entrepreneurial ventures. Retrieved 20<sup>th</sup> January, 2016, from <a href="http://signallake.com/innovation/AngelInvestingSept08.pdf">http://signallake.com/innovation/AngelInvestingSept08.pdf</a>

Sikhakhane, Z. (21 February, 2016). Give yourself a break with Section 12J. *Business Times*. South Africa

Sohl, J. E., van Osnabrugge, M. and Robinson, R. J. (2000). *Models of Angel Investing: Portals to the Early Stage Market.* Paper to the Babson-Kauffman Entrepreneurship Research Conference, Babson College: MA.

Soludo, C. C., Ogbu, M. O., and Chang, H. (2004). *The Politics of Trade and Industrial Policy in Africa: Forced Census*. Trenton: Africa world Press.

Sørheim, R. (2003a). Business angels as facilitators for further finance: an exploratory study. *Journal of Small Business and Enterprise Development*, 12, 178-191.

Sørheim, R. (2003b). The pre-investment behavior of business angels: A social capital approach. *Venture Capital: An International Journal of Entrepreneurial Finance*, 5, 337-364.

Stinchcombe, A. L., & March, J. G. (1965). Social structure and organizations. *Advances in Strategic Management*, 17, 229-259.

Stinchcombe, A. L. (1990). Information and Organizations (Vol. 19). California: University of California Press

Stuart, T.E., Hoang H., Hybels R. 1999. Interorganizational endorsements and the performance of entrepreneurial ventures. *Administrative Science Quarterly*, 44, 315–349

Szirmai A (2009). Industrialization as an engine of growth in developing countries. UNU- Merit working Papers 2009–010.

Terungwa, A. (2012). Risk management and insurance of small and medium scale enterprises (SMEs) in Nigeria. International Journal of finance and Accounting, 1(1), 8-17.

Timmons, J. A., & Bygrave, W. D. (1986). Venture capital's role in financing innovation for economic growth. *Journal of Business venturing*, *1*(2), 161-176. Tyebjee, T. T., & Bruno, A. V. (1984a). Venture capital: investor and investee perspectives. *Technovation*, *2*(1), 185-208.

Tyebjee, T. T., & Bruno, A. V. (1984b). A model of venture capitalist investment activity. *Management Science*, 30(9), 1051-1066.

UNIDO (2009). Industrial Development Report, 2009: Breaking In and Moving Up: New Industrial Challenges for the Bottom Billion and the Middle-Income Countries. 2009.

https://www.unido.org/fileadmin/user\_media/Publications/IDR\_2009\_print.PDF

UNIDO & UNCTAD (2011). Economic Development in Africa Report, 2011: Fostering industrial development in Africa in the New Global Environment. Retrieved 02<sup>th</sup> January, 2016, from

http://unctad.org/en/docs/aldcafrica2011 en.pdf

Varadarajan, p. & Ramanujan, V. (1987). Diversification and performance: A reexamination using a new two-dimensional conceptualization of diversity in firms. *Academy of Management journal*, 30, 380-397.

Wang, S., & Zhou, H. (2004). Staged financing in venture capital: moral hazard and risks. *Journal of Corporate Finance*, 10, 131-155.

Wetzel, W. E. (1983). Angels and informal risk capital. *Sloan Management Review*, 24(4), 23-34.

Wetzel, W.E. jr. (1987). The informal risk capital market: Aspects of scale and efficiency. *Journal of Business Venturing*, 2, 299-313.

Wilkinson, D., & Birmingham, P. (2003). Using Research Instruments: A Guide for Researchers. London: Routledge Falmer

Winton, A. (1999). Don't put all your eggs in one basket? Diversification and specialization in lending. *Working Paper*, last date accessed 10th January, 2016 from

http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.195.6620&rep=rep1&type=pdf

Winton, A., & Yerramilli, V. (2008). Entrepreneurial finance: Banks versus venture capital. *Journal of Financial Economics*, 88(1), 51-79.

Wong, A., Bhatia, M., and Freeman, Z. (2009). Angel finance: The other venture capital. *Strategic Change*, 18, 221-230.

Zacharakis, A. L., & Meyer, G. D. (1998). A lack of insight: Do venture capitalists really understand their own decision process? *Journal of Business Venturing*, 13(1), 57-76.

Zhang, P. (2013). Understanding diversification strategy in venture capital market. *Entrepreneurship Research Journal*, 4(3), 277-296.

#### 7 APPENDICES

#### APPENDIX A VC FOR AFRICA RESEARCH METHODOLOGY

### RESEARCH

Every year VC4Africa reaches out to entrepreneurs who are part of the community to find out more about their progress. Specifically, this report looks at their organizational advancement as measured by growth in revenue and the number of new Jobs created over time. This feedback underpins an annual benchmark for the companies listed on the platform, and offers tangible evidence of their impact.

The report breaks down insights across 5 parameters: employment, performance, investments, investors and ecosystem. If you would like to have more specific insights on certain regions or other findings please contact the research team:

e-mail: service@vc4africa.biz, tel: +31 20 779 55 74



#### **METHODOLOGY**

The research team is in constant communication with members and conducts a regular series of surveys, interviews, focus groups, design sessions and brainstorms. For this report, the data is pulled from two main sources i) an annual survey conducted with the ventures registered on the platform and ii) the investors who are part of the community.

#### VENTURES

Entrepreneurs with a venture profile were asked to participate in an online survey. The survey was sent to 1300 entrepreneurs and 257 entrepreneurs responded, a 20% response rate. Entrepreneurs were asked to report on their revenue, profit, and change in team size over time. They were also asked to report on their capital requirements and progress fundraising. In recognition of their positive contribution to society, participants received the 'Entrepreneurs Rule' badge.

#### **INVESTORS**

600 investors part of the community were asked to participate in an online survey. 71 responded, a 12% response rate. Investors were asked to provide feedback on their level of activity, the amount of capital available, their intentions to invest, and the considerations they make when allocating.

#### LIMITATIONS

The data sets are limited and by no means do they represent the African investment space. At the same time, there is little information available on this emerging segment and there are few comparative studies. Any conclusions should take the limited amount of data into consideration while recognizing that as the community continues to grow these insights will improve over time.

2015 VENTURE FINANCE IN AFRICA

#### APPENDIX B VENTURE CAPITAL FIRM SURVEYS

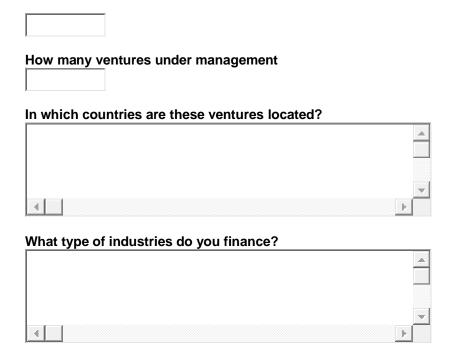
Wh	at type of Private Equity (PE) platform?
	Venture Capital

also LBO/MBO
 Other:

Where are your offices situated? (Branches, countries)

	our firm:
y y	Independent
	Captive (Government fund)
	Captive (Family office)
	Captive (corporate venturing)
	Captive (single sponsored fund)
	Other:
y	our firm a subsidiary of a bigger corporation?
ou	rce of funds (type)
	Debt
	Equity
	Both Debt and Equity
	Other:
yp [	e of limited partners involved
	Government
1	Endowments
1	Banking Institutions
1	Pension funds
1	FDI (foreign direct investments)
∕he	Other: Other venture capital firm start?
un	nber of years the firm holds a typical investment
un	iber or years the min noids a typical investment
ow	many managers?

Funds currently under management (please specify currency)

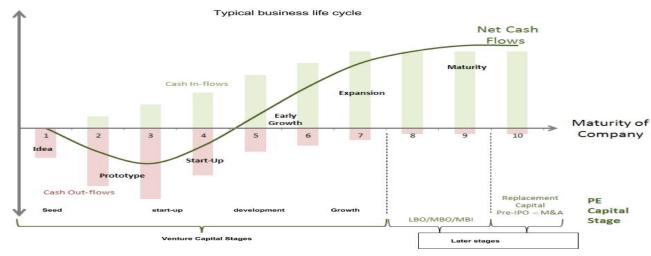


## Geographical, industry and stage development

These questions are about the preferences of your firm How long does it take to decide on an investment (typical?)

		5	( ) !
•		Less than a month	
•		between 1 month and 2 month	
•		between 2 and 3 months	
•		more than 3 months	
•		Other:	
	How	far are the ventures from their managers?	
•		a few hours away	
•		a province away	
•		a country away	
•		Other:	

Following questions are based on this image



#### What stages do you finance?

•		Seed
•		start-up
•		development
•		growth
•		later stages
•		Other:
	V	

#### Your preference on geographical proximity

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Early stage venture should be closer	0	0	0	0	0
Late stage venture should be closer	0	0	0	0	0
It does not matter which venture is close	0	0	0	0	0

**Industry preference** 

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	
We invest in one industry	0	O	0	0	o	
We invest in in different but related industries	0	0	0	0	O	
We invest in unrelated industries	0	O	O	0	c	
Add item						
After page 2						
Continue to next page						
Page 3 of 3						

# More on preferences

### Industry and geographical proximity to managers

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Ventures in related industries are close	0	0	0	0	0
Ventures in unrelated industries are far	0	0	c	O	0

Industry and stage preferences

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Early stage ventures are in one industry	0	0	0	0	0
Early stage ventures are in different but related industries	0	0	c	0	O
Early stage ventures are in unrelated industries	0	0	0	0	0
Late stage ventures are in one industry	0	0	c	0	c
Late stage ventures are in different but related industries	О	О	O	O	c
Early stage ventures are in unrelated industries	0	0	0	0	0
It doesn't matter what industry	0	O	0	0	C

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
in what stage.					
	tures have succee your patience. An	·	ed in your portfolio	S	
			_		
1			Þ		

# APPENDIX C SURVEY FOR VENTURE CAPITALISTS AND ANGELS

What ty	oe of i	nvestor
---------	---------	---------

•		Angel Venture capital manager Both
•	Rac	ce
	Gen	der
•	•	Male
•	Occ	Female upation

## Experience

•		less than 5 years in the same field
•		less than 5 years in different fields
•		More than 5 years in different fields
•		More than 5 years in different fields
•		Other:
	App	roximated annual income and please specify currency (salary + other income)
	0	
	Sou	rce of money invested into the businesses
•		Salary income
•		Savings
•		Pension money
•		Inheritance
•		Excess cash
•		Debt
•		Other:
	Rea	sons for investing in these businesses
•		Returns (profits)
•		Social development
•		Fun and interest
•		Other:
	If yo	ou provide angel finance, have you collaborated with other investors?
	If yo	ou are a venture capitalist, under which category?
•		Angel
•		Independent
•		Captive (government)
•		Captive (family)
•		Captive (Corporate venturing)
•		Captive (single sponsored fund)
•		Other:

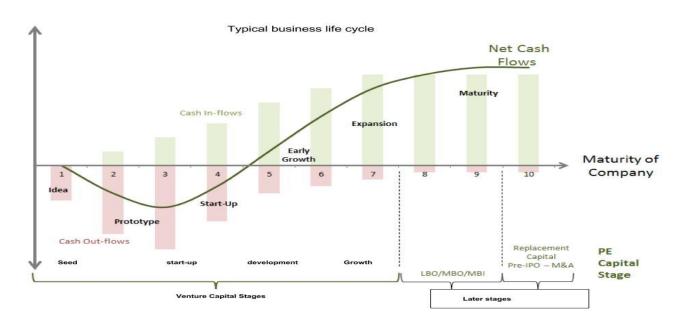
# Geographic scope of your investments

These	e questions or	nly refer t	o busii	nesses	in the	Africa	n region	
How	many busine	sses ha	ve you	ı inves	ted in	so fai	?	_
How	long does it t	take for	you to	make	a fina	l decis	sion to pursue an investment?	
	e when did yo						rial businesses?	
On a	verage, now (	ciose are	е шеу	IIOIII W	niere ,	you ii	ver	
		1	. 2	3	4	5		
	close (same to		0	0	0	0	Very far (different continent)	
П	All in the same		, but d	lifferent	nrovi	200		
	All in the same	·			•	1003		
	In different co	untries						
Give	n an opportur	nity, woı	ıld yo	u inves	st in o	ther c	ountries different from the curre	ent one
0	Definitely							
0	Maybe							
0	Novor							

Investment stages and investment industries

There is an image provided to help with the answers, please use it as reference.

#### **Venture capital stages**



#### In which stages have you invested?

•	Seed (S)
•	Start-up (Su)
•	Development (D)
•	Growth (G)
•	Other:

In what industries have you invested? Also write match them with their stages and amount. (E.g. mining (G), web design (other)) if not S, Su, D or G, please write other.



How much experience do you have in the industries in which you have invested?

0 1 2 3 4 5

No experience C	0 0 0 0	Advanced	
Are there any of the	businesses in which have	e invested, successfully entere	ed the later stages?
Yes, all of them			
Not yet			
Some have	_		
Other:  Any of your the busi possible)	nesses in which you inve	ested ever failed? (No or yes	provide a reason if
Any new industries o	discovered during the co	urse of your investments (nam	e it if possible)
Are you interested to	o invest in?		
Other regions of			
Other industries			
My business inverse choose your	estments are enough. preference		
	Agree	Maybe	Disagree
Better to			
manage	0	0	0
more industries			
Better to			
	0		0
manage one	0	c	0
manage one industry	0	c	0
manage one industry  Diverse			
manage one industry	0	0	0

	Agree	Maybe	Disagree
Specific knowledge is better	0	0	0
Better to invest in different regions	C	0	c
Better to focus in one region	0	0	0
It does not matter how and where you invest	0	0	C
	ime. Are there any comm	e capital industry in total  ents or interests that have to do	o with venture

#### APPENDIX D INTERVIEW QUESTIONS

The interview questions below aim to understand your background, why you invest in this industry, your relationship with your ventures, the value that add to the ventures, and how successful you have been in this industry. On the comment section that where I need your opinion of how you think the venture capital industry can grow, and what type of businesses you think are to be pursued.

It is up to you how answer these questions. Usually if it were me conducting the interview I would record, and write a few notes. Anything that is convenient for you is accepted.

Background information		
Company Name:	Date:	Time:
Interviewee Name:		
No. of years in the		
VC industry: Citizenship (and province):		/ince):
Occupati		
on/		
experien		
ce (in		
terms of		
fields,		
years etc.):		
C10./.		
Angel/ VC/Bath?		
Where are you located		
If you are also an angel investor, do you inve	est alone, or join with other investors?	

### Section 1- Choice of Ventures

Venture name (optional) & Year it started	Industry (Be very specific)	Geographical location (country & province)	Stage of venture development (seed, startup, development, growth, or later stages)	The success of the company from a scale 15 (poor to exceeded expectations

## Section 3- Reasons for investing in these ventures

Why do you invest in the venture capital industry? (in terms of returns, business, social development, fun or interest)
Answer:
Please comment of the success and the failure of these venture. (why the successful have succeeded and why the failed ones have failed)
Why these industries specifically? Why not any other industries?
Answer:

Have you ever thought of investing in other industries, stages and geographical locations different from the ones you currently invest in?
Answer:
Do you have relevant experience for all these ventures? (for example maybe in some you might not need to have experience if not that involve, or provide some other type of guidance)
Answer:

# **Additional Comments**

AII	y comments	on now the v	enture capitai	muusiry can bi	e improvea in in	e Amcan conunem?

Answer:		

### APPENDIX E VENTURE CAPITAL FIRMS

Timestamp	2-4-2016 10:31:42	2-4-2016 15:41:56	2-5-2016 11:08:50
What type of Private Equity (PE) platform?	also LBO/MBO	Venture Capital	Venture Capital
Where are your offices situated (branches, countries)	Cape Town	Cape Town, South Africa	Stellenbosch, Western Cape
Is your firm:	Independent	Independent	Captive (Family office)
Is your firm a subsidiary of a bigger corporation?	No	no	Yes
Source of funds (type)	Equity	Equity	Equity
Type of limited partners involved	Banking Institutions, Individuals	FDI (foreign direct investments), Private Company	
When did the venture capital firm start?	2014	2011	2008`
Number of years years firm holds a typical investment	5-7	5 - 8	Underfined
How many managers?	2	5	4
Average experience of managers (in years)	15	10	20
Funds currently under management (please specify currency)	R100m	88 000 000	undisclosed
How many ventures under management	3	8	8
In which countries are these ventures located?	SA	South Africa	South Africa
What type of industries do you finance?	Renewable energy	Tech focussed, across industries	Most, except capital intensive such as Property. Gambling as well.
How long does it take to decide on an investment (typically)	more than 3 months	between 1 month and 2 month	more than 3 months
How far are the ventures from their managers?	a province away	a few hours away	a few hours away
What stages do you finance?	start-up, growth	Seed	development, growth
Your preference on geographical proximity [Early stage venture should be closer]	Agree	Strongly Agree	Agree
Your preference on geographical proximity [Late stage venture should be closer]	Neutral	Neutral	Agree
Your preference on geographical proximity [It does nit matter which venture is close]	Neutral	Disagree	Neutral
Industry preference [We invest in one industry]	Strongly Agree	Strongly Agree	Strongly Disagree
Industry preference [We invest in in different but related industries]	Disagree		Neutral
Industry preference [We invest in unrelated industries]	Disagree		Agree
Industry and geographical proximity to managers [Ventures in related industries are close]	Neutral	Neutral	Agree
Industry and geographical proximity to managers [Ventures in unrelated industries are far]	Neutral	Neutral	Disagree
Industry and stage preferences [Early stage ventures are in one industry]	Strongly Agree	Disagree	Neutral
Industry and stage preferences [Early stage ventures are in different but related industries]	Agree	Disagree	Neutral
Industry and stage preferences [Early stage ventures are in unrelated industries]	Strongly Disagree	Agree	Neutral
Industry and stage preferences [Late stage ventures are in one industry]	Strongly Agree	Neutral	Neutral
Industry and stage preferences [Late stage ventures are in different but related industries]	Agree	Neutral	Neutral
Industry and stage preferences [Early stage ventures are in unrelated industries]	Strongly Disagree	Agree	Neutral
Industry and stage preferences [It doesn't matter what industry in what stage.]	Strongly Disagree	Strongly Agree	Neutral
How many ventures have succeeded as expected in your portfolios	2	60%	No exits yet
Thank you for your patience. Any comments?			

### APPENDIX F VENTURE CAPITALIST AND ANGEL INVESTORS RESPONSES

Timestamp	1-28-2016 0:24:5	1-28-2016 8:55:2	8 2-16-2016 15:10:3	8 1-28-2016 21:08:4	8 1-28-2016 21:2
What type of investor	Angel	Venture capital manager	Venture capital manager	Angel	Angel
Citizenship	South African	South African	Botswana	Zimbabwian	Zimbabwian
Gender	Male	Male	Male	Male	Male
Race	Black	African	Black	Black	Black
Occupation	Entrepreneur	Entrepreneur	Investment Analyst	SAP Consultant (ICT)	CFO, Investor
Experience	less than 5 years in the same field	less than 5 years in the same field	less than 5 years in the same field	More than 5 years in different fields, More than 5 years in different fields	More than 5 years in different fields, More than 5 years in different fi
Approximated annual income and please specify currency (salary + other income )	R 300 000	R1500 000	BWP 216,000	More than R2 million a year	+-R4 million
Source of money invested into the businesses	Parents capital on debt bases	Business Income	Excess cash	Salary income	Investments
Reasons for investing in these businesses	Returns (profits)	Returns (profits)	Social development	Returns (profits)	Returns (profits)
If you provide angel finance, have you collaborated with other investors?	No, maybe in the future	Yes, in some businesses		Yes, in some businesses	Yes, in some businesses
if you are a venture capitalist, under which category?		Independent	Captive (Corporate venturing)	Angel	Angel
How many businesses have you invested in so far		1	2 more than 5	More than 2, but less than 5	more than 5
How long does it take for you to make a final decision to pursue an investment?	3 months	two months	8 to 12 Months	A month	2 Months
Since when did you start investing in entrepreneurial businesses?	201	4 5 years agao	201	1 200	9
On average, how close are they from where you live?		2	2	3	3
Where are they situated?	All in the same country, but different provinces	All in the same country, but different provinces	All in the same country, but different provinces	In different countries	In different countries
Name of the countries you have invested in		South Africa	Botswana	Zim and SA	SA and Zim
Given an opportunity, would you invest in other countries different from the current one?	Maybe	Definitely	Definitely	Maybe	Maybe
in which stages have you invested?	Start-up (Su)	Seed (S)	Start-up (Su), Growth (G)	Development (D), Growth (G)	Seed (S), Start-up (Su), Development (D)
in what industries have you invested? Also write match them with their stages and amount. (e.g. mining (G), web design (other!) if not S, Su, D or G, please write other.	Mining Su	Financial (Su)	Funeral Services (G); Crane Hiring Services (Su); Hospitality (Su) and (G); Steel Manufacturing (Su)	Automobile (D); Financial Institutions (G)	Electrical Engineering (S) Asset Management (Su); Brokerage (finance) (D)
How much experience do you have in the industries in which you have invested?		2	4	3	0
Are there any of the businesses in which have invested, successfully entered the later stages?	Not yet	Not yet	Not yet	Not yet	Not yet
Any of your the businesses in which you invested ever failed? (No or yes provide a reason if possible)	Yes, I underestimated the capital it would take to make it.	Yes, because of lack of proper business model	Yes	Because I did an adequate research before investing	One. There was insufficient oversight
Any new industries discovered during the course of your investments (name it if possible)	Export and import, and equipment finance	Yes, manufacturing		no	None
Are you interested to invest in:	Other regions of Africa, Other industries	Other regions of Africa, Other industries	Other regions of Africa, Other industries	Other regions of Africa, Other industries	Other regions of Africa, Other industries
Please choose your preference [Better to manage more industries]	Maybe	Maybe	Disagree	Disagree	Agree
Please choose your preference [Better to mange one industry]	Agree	Agree	Disagree	Agree	Disagree
Please choose your preference [Diverse knowledge is better]	Agree	Agree	Agree	Disagree	Agree
Please choose your preference [Specific knowledge is better]	Maybe	Maybe	Disagree	Agree	Disagree
Please choose your preference [Better to invest in different regions]	Maybe	Maybe	Agree	Agree	Maybe
Please choose your preference [Better to focus in one region]	Maybe	Maybe	Disagree	Disagree	Disagree
Please choose your preference [It does not matter how and where you invest]	Disagree	Disagree	Disagree	Disagree	Maybe
Thank you for your time. Are there any comments or interests that have to do with venture capital industry in A		No		The industry is in need more people with experience and knowledge.  There are many businesses that need investors, and investors are	A credible platform for investors and Investees is needed (information platform)