DETERMINANTS OF FINANCIAL PERFORMANCE OF VENTURE CAPITAL FIRMS IN KENYA

BY

SCOLINE ANYANGO OJUNG'A

A Research Project Submitted in Partial Fulfillment of the Requirements of a Master of Business Administration (MBA) degree, School of Business, University of Nairobi

November, 2011

DECLARATION

This research project is my original work and has not been presented for an award of a degree in any other University

Signed..... Date..... November 11, 2011

SCOLINE ANYANGO OJUNGA

D61/72347/2008

This research project has been submitted for examination with my approval as the University Supervisor.

Signed..... Date..... November 11, 2011

DR. SIFUNJO KISAKA

LECTURER

SCHOOL OF BUSINESS

UNIVERSITY OF NAIROBI

ACKNOWLEDGEMENT

I thank God for his grace and sustenance that has enabled me complete this paper successfully. This paper would not have been without the contributions and support from various individuals and institutions. I extend my sincere thanks to the university of Nairobi management especially the Department of Finance and Accounting for under the able chairmanship of Dr. Aduda, I was empowered by a study scholarship that enabled me attain this life dream.

Special thanks to my Supervisor, Mr. Kisaka Sifunjo, for his patience, support, objective criticisms and great advice without which I could not have come this far. I also wish to thank the respondents and their respective institutions, family, relatives and friends for their invaluable contributions. My sincere appreciation is extended to my dear husband, Duncan, who through this time offered nothing but selfless support.

DEDICATION

This study is dedicated to my dearest son, John (JB), my dear parents, John and Rachael, my dear sisters, Linda, Berryl, Ada, Edna, Candy and my dear brother Joe, who have all been an inspiration and given me unwithering support and unconditional acceptance.

ABSTRACT

Globally, entrepreneurs have ideas that require substantial financing to implement but lack the funds to finance these projects. Venture capitalists (VCs) represent one solution to financing high-risk, potentially high-reward projects. VCs typically identify, evaluate and invest in high risk investments that limited partners would otherwise find difficult to invest in directly. In Kenya, the VC industry has been in existence since the 1990s. However, operation volumes are still small in scale as VC firms account for a tiny share of the financial market thereby rising questions on what challenges constrain their growth/ development.

Though several factors have been put forward as major determinants of VC activity, there seems to be no agreement among various researchers. This survey on 12 Venture capital firms registered and licensed by CMA to operate in Kenya establishes the factors that determine financial performance of VC firms in Kenya as; portfolio company characteristics, Venture capital characteristics, Investment process, exit process, Portfolio Company management and external environmental factors. There are also some notable strong correlations between the independent variables themselves.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

LIST OF TABLES

LIST OF FIGURES

LIST OF ABBREVIATIONS

ARD	American Research Development
BPI	Business Partners International Limited
CMA	Capital Markets Authority
DEC	Digital Equipment Company
GDP	Gross Domestic Product
GHM	Grossman, Hart and Moore Model
IFC	International Finance Corporation
IPO	Initial Public Offer
LPs	Limited Partners
MIT	Massachusetts Institute of Technology
PE	Private Equity
SBIC	Small Business Investment Company
SEC	Security and Exchange Commission
SME	Small and Medium Enterprises
US	United States
VC	Venture Capital
VCs	Venture Capitalists

CHAPTER ONE
INTRODUCTION

1.1 Background of the Study

Entrepreneurs have ideas that require substantial financing to implement but lack the funds to finance these projects. Venture capitalists (VCs) represent one solution to financing high-risk, potentially high-reward projects (Gompers and Lerner, 2004). Venture capitalists typically identify, evaluate and invest in high risk investments that limited partners would otherwise find difficult to invest in directly (Pearce and Barnes, 2006). According to Pearce and Barnes (2006), the venture capital industry has evolved from an ad hoc collection of pioneering investors into a sophisticated, fast paced and highly specialized industry. During this period, venture capitalists have provided fuel for entrepreneurs to create a generation of companies that have changed the face of the planet. The growth of industries such as computing, communication, biotechnology and internet sector have placed the Venture Capital (VC) industry in the limelight.

More often than not, there is confusion in the use of the terms private equity (PE) and venture capital. Venture capital was an American phenomenon before emerging to other countries. According to Gompers and Lerner (2004), the term venture capital is used differently in Europe and Asia, where VC often refers to all private equity, including buyout, late stage, and mezzanine financing. In the Unites States, these are all separate classes with venture capital referring to early stage investment. According to Leeds and Sunderland (2003), VC is a subset of PE, which mainly focuses on funding of early stage companies. Most venture capital is still concentrated in the US and Europe, therefore any debate and analysis of this phenomenon is highly influenced by experts from these two regions. American venture capitalists perceive venture capital as a subset to private equity while their European counterparts perceive it as a later stage investment to finance business expansion (Pfeil, 2000). Gompers and Lerner (2001) define VC as independently managed dedicated pools of capital that focus on equity, or equity–linked investments in privately held, high growth companies.

VCs invest money from funds of capital provided by third-party investors who include high net worth individuals, pension funds, university endowments, as well financial institutions such as insurance companies (Sharpe, 2009; Pearce and Barnes, 2006). These investors agree to invest a

certain amount of capital into a fund for a given period of time, typically 10 years. The fund is managed by the VC fund managers also known as general partners. The third party investors are known as the limited partners (LPs) and are not involved in the daily management of the fund (Sharpe, 2009; Pearce and Barnes, 2006; Gompers and Lerner, 2004). Further, Pearce and Barnes (2006) opines that "a significant constituency of the LP community is now made up of "funds of funds"- these are themselves managed investment managed funds, which raise money from their own investors solely for the purpose of investment in other funds, such as VC funds". Sharpe (2009) and Gompers and Lerner (2004) assert that the limited partnership arrangement is the dominant model in the venture capital industry.

The modern VC industry has its roots in the United States. The first US VC firm, American Research Development (ARD) was established in 1946 by MIT President Karl Crompton, Harvard Business School George Doriot and other local business people keen to commercialise promising technology that was emerging from MIT (Gompers and Lerner, 2004). ARD was structured as a publicly traded closed-ended mutual fund and was marketed to and invested in primarily by individuals. If investors no longer desired to hold the investment, they could sell the shares on a public exchange. Since it was a liquid investment that could be freely traded, the Security and Exchange Commission (SEC) did not preclude any category of investors from holding the shares. According to Liles (as cited in Gompers and Lerner, 2001) the reason why it was marketed mostly to individuals is because institutional investors showed little interest in these funds' shares citing risks associated with such an unproven new style of investing. The ARD founders believed that investment in new technology based start-up ventures would make a good long term investment. And with the business advice ARD could offer the new firms along with capital infusions, these small firms would be able to develop into successful large firms. Then in turn would underpin sustained economic and employment development. ARD's fund proved to be a success despite some problems at the start. The majority of the return to the fund however resulted from $ 70,000 investment from Digital Equipment Company (DEC) in 1957 (Gompers and Lerner, 2001). Ultimately this investment grew in value to $335million (Gompers and Lerner, 2004). According to Sharpe (2009) this period of VC was referred to as "classic venture capital". This was VC focused on start-ups and providing business management in addition to capital.

In order to determine what factors cause the success or failure of VC fund investments, variables having direct as well as indirect effects on fund performance need to be analysed. Some researchers argue that differences in monitoring and control processes, levels of syndication and earlier performances are important differentiators for VC fund performance (e.g Gompers and Lerner, 2001; Hege, Palomino and Schwienbacher, 2003; Hsu, 2004). Other researchers suggest that more indirect institutional environmental factors such as market rigidities, efficiency of initial public offerings (IPO) markets, government programs for entrepreneurship, or fiscal environments, explain a significant share of the cross-country variations of VC performanaes (Jene and Wells, 2000; Marti and Balboa, 2001; Armour and Cumming, 2004). Some factors are to a high extent situation based, such as business cycles ob interest rate levels, and will vary orer time. Other factors cannot be changed, e.g. the geographical size of a market. Factors thap can be manipulated are obvimusly of primary interest to policy makers as well as to industry players, such as VC firms or VC fund investors, when seeking ways to improve the financial performances of local VC markets.

1.1.1 Venture Capital Industry in Kenya

Companies raise funds either through internal or external means. Not every company (especially the relatively small and medium enterprises – SMEs) has the opportunity to have an access to the stock exchange or the banks to raise funds. Unquoted firms usually rely on retained earnings, capital injections from the founders and bank borrowings but in most cases these are not enough to finance growth aspirations. Melicher and Leach (2009) observe that for this reason, between large firms with access to the stock market and small firms financed by internally generated funds and personal and bank loans, there is a financing gap. The financing gap confronts intermediate businesses, which find themselves too large or too fast growing to ask the individual shareholders for more funds or to obtain sufficient bank finance, and they are not ready to launch on the stock market. Gompers and Lerner (2001) underscore that the VC industry has developed as an important intermediary in financial markets, providing capital to firms that might otherwise have difficulty attracting financing.

The Kenyan VC equity industry is regulated by the Capital Markets Authority (CMA), a government agency, established in 1989 through the enactment of the Capital Markets Authority Act, Chapter 485A, 1989 (this was amended in 2000 and renamed Capital Markets Act.). It is

within the CMA's mandate to promote, regulate and facilitate the development of an orderly, fair and efficient capital markets in Kenya (Capital Markets Act, 2000). CMA licences, regulates and supervises the operators in the capital market (Capital Markets Authority, 2002). The key statute governing VC firms in Kenya is the Capital Markets (Registered Venture Capital Companies) Regulations, 2007, Legal Notice 183. These regulations provide for, among other things, the criteria for eligibility of registration as a venture capital firm, the registration procedure, eligible venture capital enterprises investments, appointment and role of venture capital funds managers, fund raising activities, and reporting obligations.

The Kenyan VC industry has been in existence since the 1990s. However, operation volumes are still small in scale. Venture Capital firms account for a tiny share of the financial market (Zavatta, 2008). Although, some private equity firms have shown interest in the Kenyan market, the Kenyan equity financing is not very developed. It is important to note that exact data on the Kenyan VC industry is not available.

According by Zavatta (2008), the Venture Capital firms operating in the country are mainly foreign owned. Private equity funds and fund managers registered with the Capital Markets Authority (CMA) as of year 2008 included Acacia Fund Limited, Aureos Kenya Managers Limited, and InvesteQ Capital Limited (Capital Markets Authority, 2008). Other players in the industry include Business Partners International Limited (BPI), Grofin East Africa, Acumen Fund, African Agricultural Capital, Miliki Ventures, Africa Invest Capital Partners and Fanisi Fund. There are also notable efforts by upcoming groups of local investors putting money in some of these funds. Notable local investors include Transcentury Kenya and Centum investments.

Zavatta (2008) observe that in terms of fundraising, capital is sourced by the VCs from international investors mainly development finance institutions and multilateral donors. Most of the Kenya's Venture capital funds come from international investors and especially the IFC. Other investors include the European Investment Bank, FMO, and CDC Plc among others. The state also provides equity financing through the Industrial and Commercial Development Bank, a

development institution whose shareholders include the regional governments and some private commercial banks.

There has been increasing awareness of the importance of VC in developing countries. Adongo (2006) note that there is an increasing trend towards developed country funds increasingly investing directly in transactions in the developing world. According to Dinkinson (2008), PE is drawing increasing attention as a niche and innovative vehicle for private sector development in the continent. While there is considerable evidence about private equity and venture capital in the developed countries, there is a general lack of information on its development in Africa, and in Kenya particularly.

1.2 Statement of the Problem

A number of studies (Zavatta, 2008; Kauffmann, 2005; Collier, 2009; Sacerdoti, 2009) concentrate on the SME financing gap in Africa and how the gap can be minimized by commercial banks lending more to SMEs. Very few studies if any have focused on VC as a probable source of long-term capital to SMEs in the developing countries.

Although research interest in venture capital has increased remarkably during the last years, little is still known about the performance characteristics of the asset classes and the factors that determine the performance especially in emerging economies like Kenya. The majority of existing VC research is focusing on North American markets whereby the US literature is the predominant source for the literature review, although available European research is included to a high extent when available. Zavatta (2008) note that the Kenyan VC industry has been in existence since the 1990s. However, operation volumes are still small in scale. Venture Capital firms account for a tiny share of the financial market. To explain the scarcity of studies in this theme, Barry (1994) argues that empirical evidence on VC is not easy to develop due to the private nature of VC firms and their investments.

Though several factors have been put forward as major determinants of VC activity, there seems to be no agreement among various researchers. For instance, Jeng and Wells (as cited in Gompers and Lerner, 2001) investigated the determinants of the PE/VC industry's size. They

identify the factors such as reduction in capital gains tax, entrepreneurship activity, GDP growth, labour rigidities, allowance for pension funds to invest in the asset class, quality of accounting standards, volume of IPOs and government programs/policy among others. Gompers and Lerner (2001) underline the importance of robust stock market for IPOs hence offering VCs a viable exit option. There are also mixed results as to the impact of IPOs. Jeng and Wells (as cited in Gompers and Lerner, 2004), observe that the IPO market does not influence commitments in early stage funds much as do later stage ones.

Soderblom (2006) attempt to explain the terms that venture capital performance and related success should be measured. From a political macro economic perspective, contributions such as employment growth, number of new companies or technological breakthroughs, are of significant importance. Several academic VC studies claim for example that entrepreneurial activity fosters innovation, patenting and growth performances (Kortum and Lerner, 1998; Engel, 2002; Hellman and Puri, 2002; Romain and van Pottelsberghe de la Potterie, 2004). From an entrepreneurial perspective VC firms' performances might be measured in terms of their ability to add value, in addition to capital infusions. Earlier research show for example that VC firms play an important role in; professionalizing the firms in which they invest; connecting them with potential clients and suppliers; and attracting additional funding (Sapienza, 1992; Rosenstein, et al., 1993; Barney, et al., 1996). From an investor perspective the most important measurement, however, is financial returns from VC fund investments. A longer-term lack of competitive returns will force investors to avoid VC investments, or only invest in funds with proven track records. A vital VC market with satisfactory financial returns is thus the guarantee for its future survival.

From the above studies, there seems to be no agreement on the determinants of VC industry growth, development and fund performance measures. A particular question is whether the identified factors impact the VC industry differently depending on the country's context. This study therefore seeks to contribute on the knowledge of the factors that influence the performance of VC funds in a developing country context with reference to Kenya. Further, considering that Ribeiro, et al. (2006) observes that the great success achieved by the VC model in fostering the US entrepreneurial sector has encouraged several countries to develop their own

VC industry. However, VC was tailored to perform in the American institutional environment hence, the extent to which this can be successfully be adapted to other countries, and especially the developing ones like Kenya remains a pertinent question.

1.3 Research Objective

This study aims to:

(i) Establish the factors that influence the performance of Venture Capital firms in Kenya.

1.4 Importance of the Study

The findings of this study will be significant to the ***government policy makers*** in formulating adequate legal and regulatory frameworks that encourage the growth and development of this infant industry useful for attainment of the development blue print. The other significant measure for policy makers are to nurture a competitive local technology stock market, establish efficient tax structures, and minimize labor market rigidities.

The study will also underscore the challenges encountered in the industry that would be useful to the key players who manage the VC funds especially the ***fund managers***. To the ***institutional investors,*** the findings of the research on the best performing venture capital funds is probably more important than anything else in order for them to gain excess returns.

It will further contribute to knowledge in terms of determinants of the performance of venture capital firms in developing countries like Kenya that elicits ***academic*** discourse and further research.

CHAPTER TWO
LITERATURE REVIEW

2.1 Introduction

This chapter focuses on review of literature on Venture Capital /Private Equity both from a theoretical and empirical perspective. Section 2.2 outlines the theoretical literature with sub-sections 2.2.1 on agency theory, 2.2.2 is the financial contracting theory and 2.2.3 is the control theory. It further reviews in section 2.3 the empirical literature which includes in sub-sections 2.3.1 the role of venture capital, 2.3.2 venture capital investing, and 2.3.3 determinants of venture capital development in developed and developing economies with a summary of the research gaps that the study attempts to address.

2.2 Theoretical Literature

There are a number of theories put forward that tend to explain the phenomena of VC/PE activity namely; agency theory, contacting theory and control theory.

2.2.1 Agency Theory

This theory was put forward by Alchian and Demsetz (as cited in Kim and Mahoney, 2005). This theory explains the relationship between a principal and its agent(s) and it is widely applicable in business. According to Smith (2005) the assumptions of agency theory are: that both investor and investee make rational decisions, future outcomes are predictable, both act in their own best interests, the investee has information advantage over the investor and that the investee is work and risk averse. Agency theory places great emphasis on economic incentives of contracting parties within the context of the principal-agency relationship (Kim and Mahoney, 2005), in order to maximize aggregate economic payoffs.

According to Eisenhardt (as cited in Kim and Mahoney, 2005), agency theory has been usefully applied in the areas of accounting, economics, finance, marketing, political science and strategic management. In VC process there are many potential principal-agent relationships. The two main ones are between the investors (limited partners) and the VC firm. In this case the VC firm is the agent while the investor is the principal. According to Barry (1994) VCs acting on behalf of third-part investors actively monitor the investments and sometimes assume managerial roles in

the investee firm. Secondly, there is the relationship between the VC firm and the entrepreneur/investee firm. The VC firm is the principal while the entrepreneur is the agent. Conflicts may arise because of information asymmetry, since the entrepreneur may have information that is not known to the venture capitalist, thus creating agency costs (Barry, 1994). Further, investee firms make choices that are not fully known by venture capitalists.

These relationships can play an important role in influencing the success of VC investing (Barry, 1994). In an empirical study on venture capital relationship, Smith (2005) found out there is general support for the assumptions of agency theory and that the agency framework provides a useful basis for analysing the relationship between a VC investor and investee.

2.2.2 Financial Contracting Theory

The financial contracting theory is associated with the seminal works of Grossman, Hart and Moore also know as the GHM model (as cited in Kaplan and Stromberg, 2003). The GHM poses the question of who should own what assets. "In the GHM model, because of potential contractual hazards due to the relation-specificity between separately owned assets, the residual control rights to these assets that make up a particular bundle of relation-specific assets must be concentrated in one contracting party (i.e. common ownership) The contractual party that retains ownership is the party that has the most to gain from this bundling of relation-specific assets. In these stylized models, rights to residual control over assets (and rights to residual returns) are equated with asset ownership that subsequently safeguards contracting parties from contractual hazards" (Kim and Mahoney, 2005).

According to Kaplan and Stromberg (2003), financial contracting theories assume that the entrepreneur and outside investors can observe firm output, but cannot write contracts on that output because output cannot be verified in court. Contracts may be contingent on subsequent financial performance, non-financial performance, dividend payments, future security offerings, etc. Consequently, contingencies may affect such rights as cash flow rights, voting rights, board rights, sale rights or future funding. In a study of 213 VC investments in 119 portfolio companies by 14 VC firms, Kaplan and Stromberg (2003) find that VC financing allow VCs to separately allocate cash flow rights, board rights, voting rights, liquidation rights and other control rights.

These rights are contingent on observable financial and non-financial performance measures. Allocation of control rights between the VC and the entrepreneur is a central feature of the financial contracts, suggesting that despite prevalence of contingent contracting, contracts are inherently incomplete (Kaplan & Stromberg, 2003). This is in support of the GHM model.

Barry (1994) says that contracting technology permits venture capitalists to manage their dual roles' as agents with respect to their limited partners and as principals with respects to entrepreneurs in their portfolio firms. Adverse selection is of great concern in a VC setting. Investors do not want to shirk, and contracting technology gives venture capitalists strong incentives to perform on behalf of the investors. On the other hand, VCs want to invest in successful ventures, and contractual mechanisms can assure that entrepreneurs have strong incentive to perform.

2.2.3 Control Theory

This theory is related to contracting theory and it tries to explain how an entrepreneur and an external investor allocate revenues and control among themselves in a VC relationship.

Kaplan and Stromberg, (2003) argue that board rights and voting rights give the controlling party the right to decide on any action that is not pre-specified in the original contract. Such rights are valuable in an incomplete contracting world, when it is not feasible or credible to specify all possible actions and contingencies in an ex ante contract. There is an assumption that actions are observable, but not verifiable. Output and monetary benefits may or may not be contractible. Hence, control rights that determine who chooses which action to take will be important.

The control theories predict that as agency problems and financial constraints become more severe, the contracts should change from entrepreneur control to state-contingent control to full VC control (Kaplan & Stromberg, 2003).

2.3 Empirical Literature

2.3.1 Role of Venture Capital Funding

Venture capital firms have some unique characteristics (Gompers and Lerner, 1999). Venture capitalists aim to rapidly grow businesses such that they earn a high rate of return from their investment. They raise money through venture funds that have a finite life. Gomper and Lerner

(1999) state that "almost all venture and buyout funds are designed to be "self-liquidating," that is, to dissolve after ten or twelve years". In order to reach the high investment returns required by the risk of their investment (30% per year is one benchmark) over a relatively short time-period, at least a subset of the startup companies in a venture fund need to have rapid growth at the operations level. In most cases, the liquidity events relied upon are either an initial public offering (IPO) or a trade sale. It is unlikely that either type of liquidity event for small companies will be able to attract the large considerations that translate in high venture fund returns. Venture capital firms have an interest in their startups growing fast.

Venture capitalists typically augment the skill set of the existing management team in a more proactive way than other financing methods (such as bank loans). From a governance perspective (Shleifer and Vishny, 1997), they take an active board role structuring the compensation of top managers (Kaplan and Stromberg, 1999) and periodically monitoring the evolution of the firm. They also bring a network of contacts with experienced infrastructure providers (such accounting firms, law firms, and public relations firms) and potential professional managers. These contacts facilitate access to external resources that mitigate the resource dependencies that startups experience (Pfeffer and Salancik, 1978).

Venture capitalists' knowledge of the industry and their business network also includes potential business partners for their startups. This strategic network (Gulati, et al., 2000) includes other startups as well as established companies and simplifies the search process for business partners—reducing both search costs and time. Venture capitalists themselves bring a reputation effect over and above a skill augmentation role for a startup. They receive many business plans and often invest in less than 1% of those plans. Their due diligence process, even for ventures passing early screenings, requires detailed analysis of the management team, their technology, products and the viability of their business plan (Gorman and Sahlman, 1989; Fried and Hisrich, 1995).

Successfully passing a venture capitalist screen and receiving funding (often in multiple rounds) is a powerful signal to multiple parties, both inside and outside the startup. It endows the startup with a higher reputation that reduces uncertainty and, accordingly reduces transaction costs

(Williamson, 1979). The combination of this skill augmentation and reputation signaling can result in a venture-backed startup having an advantage in attracting high quality employees, in gaining new customers, and in negotiating alliances and joint ventures with key players.

Venture-capital backed startups may also have lower agency costs, the reputation that the venture capitalist brings to the startup provides a positive signal to the labor market that reduces adverse selection (Eisenhardt, 1988). In addition, venture capitalists typically provide stock options to a broader set of employees than do owner-managed or debt-financed firms. Distributing ownership claims among these larger set of employees can be an effective means of reducing moral hazard problems that arise in settings where ownership is separated from control (Jensen and Meckling, 1976).

2.3.2 Venture Capital Investing

Venture capital is capital invested in high risky ventures. According to Gompers and Lerner (2001), VC has developed as an important financial markets intermediary providing capital to firms that might otherwise have found it difficult to raise finance. Most of these firms are small and you, coupled with high levels of uncertainty and information asymmetry, that is, large differences between what entrepreneurs and investors know. However, Barry (1994) points out that there is more to VC than making high-risk investments. VC entails an active and motivated working relationship in the VCs take on important roles within their portfolio firms in which they have invested. VCs act on behalf of their investors (limited partners), actively monitoring investments and assuming important managerial roles as well (Barry, 1994).

There are various forms of VC organisations ranging from publicly traded corporations, captive subsidiaries of large banks/corporations, Small Business Investment Corporations (SBICs) and private limited partnerships. The most important common form is the limited partnership, where the VCs serve as general partners and contribute about 1% of the funds raised (Barry, 1994). The limited partners consist of private individuals, pension funds, endowments as well as financial institutions like insurance companies (Pearce and Barnes, 2006; Sharpe, 2009). The limited partners generally rely on the general partners to make investment decisions and to monitor the same on their behalf. The partnership has a finite life (most common is 10 years), and the funds

must be distributed to the limited partners by the end of the period. Hence the continued activities of the VCs depend on creating a series of limited partnerships that can attract new investment funds. The common form of compensation is the annual management fee, which is based on the capital committed and a portion of carried interest (gains realized from the fund's investments) (Barry, 1994).

Gorman and Salman (as cited in Barry, 1994), surveyed VCs to know how they spend their time. They found that VCs spend half of their time monitoring an average of nine portfolio companies and the most frequent activity is assisting the firm in raising additional funds. VCs specialize by investing in particular industry, or by emphasizing a particular stage of development such as start-up or expansion stage. This specialization enables them to manage the monitoring process better (Barry, 1994). Gompers and Lerner (2001), underline that monitoring is very important as it helps VCs minimise information asymmetry. Some VC provides capital in stages. Gompers and Lerner (2001), say that this staged capital infusion is the most potent control mechanism that VCs can employ.

VCs also syndicate their investments that is VCs tend to invest with other VCs (Barry, 1994), so as to reduce the problem of adverse selection. Lerner (cited in Barry, 1994; Gompers & Lerner, 2001), investigated 651 rounds of investments in 271 biotechnology firms and found that syndication is common from the first investment round of investing, a fact that he argues is a part of the screening process. VCs are likely to invest in a deal when other VCs of similar experience are willing to invest as well. In addition, Gompers and Lerner (2001) say that syndication helps each VC firm invest in more projects and largely diversify firm-specific risk.

VCs realize returns when they exit from the investments. According to Barry (1994) the success of a venture capital firm is indicated by the realized rate of return in view of the riskiness of the investments in the venture fund. To make money on their investments, VCs need to turn illiquid stakes in private companies into realized return. The most common and profitable exit mechanism is the IPO (Gompers & Lerner, 2001). However, there are other exit options such as liquidation or share repurchase, and trade sale (Barry, 1994). Gompers and Lerner (2004) note

that successful exits are critical to ensuring attractive returns for investors and, in turn, to raising additional capital.

2.3.3 Determinants of Venture Capital Firm Performance

The factors influencing venture capital firm/fund performance can be split into two categories (Soderblom, 2006). The first category includes factors having a more direct effect on VC fund return. These factors often relate to the VC fund investors, the VC fund/firm itself, and the companies the VC firms invest in. The second category consists of institutional and environmental factors that eenerally have more indirect effects mn VC fund performanae. They are, however, of high importance in order to create and keep a vital VC industry alive. The factors in each country tends to be different and reflects among gther things varying economic and market conditions,□the involvement of government and entrepreneurial rpontan%ity (Klonowcki, 2006). Accordinf to Wright et al. (2005) the variation in the developmend of VC industries across countries,raises important questions concerning the faators driving these developments `nd the bdhaviour of VC in different markets. From a review o literature there are various factors behind the growth and success of a PE/VC industry. These factors include; vibrant stock mabket, favourable goverhment policy, adequate regulatory and legal framework, institudional factors, availabality skilled HR capital.

A vibrant stock market is a gnod facilitating factor for the industry. Szerb and Varga (2002) note that stock markets play a very important role as they provide a perfect place for initial public offers as this enables the venture capital investors to sell their ownership in the investee company. Gompers and Lerner (2001) underline the importance of robust stock market for IPOs hence offering VCs a viable exit option. Jeng and Wells (as cited in Gompers & Lerner, 2004), examined factors that influence VC fundraising in 21 countries and found that the strength of the IPO market to be an important factor in determining VC commitments. Exit strategy is a very important and critical part of making investments not only for private equity players but also even for strategic business partners (Nishith Desai Associates, 2009). A study by De Lima Ribeiro et al. (2006) emphasizes that a stock market is an import exit mechanism, showing that in Brazil 50% of IPOs in 2004-2005 were by private equity backed companies. The relatively well-developed IPO market in UK supports the largest venture capital industry in Europe (Hellman, 2000). However, Jeng and Wells (as cited in Gompers & Lerner, 2004) observe that

the IPO market does not influence commitments to early stage funds as much as to later stage ones. Further, Botazzi and Da Rin (as cited in Wright et al., 2005) show that high VC activity does not necessarily correspond with more IPOs.

Favourable government policy is also very fundamental if private equity activity has to thrive. The choices of the government can affect both the size and structure of the industry. Government policy can be in terms of measures taken to promote venture capital industry like in Singapore (Hellman, 2000), or specific programs with the aim of facilitating the industry's growth like the Small Business Investment Corporations (SBICs) in the US, the Yozma program in Israel (Pfeil, 2002) and the Canadian Labour-Sponsored Venture Capital Corporation (LSVCC) program (Cumming, 2007). Besides direct promotional efforts, government policy can also enhance growth of private equity through favourable tax policies that minimize taxes capital gains realized by investors exiting from private equity investments (Hellman, 2000; Dossani and Kenney 2002). Further, Jeng and Wells (as cited in Gompers & Lerner, 2004) find that government can have dramatic effect on the current and long-term viability of the VC sector. However, Armour and Cumming (as cited in Wright et al., 2005), in their 2004 study of 15 countries covering a 13 year period found that government involvement can hinder the growth of private equity.

Closely related to government policy is regulatory framework. An adequate regulatory does not only ensure a clear and favorable tax policy (Gompers & Lerner, 2001) but has also provisions that allow institutional investors like pension funds to invest in private equity funds. In Brazil, for example one of the factors that facilitated the industry was the allowance for pension funds to invest in the private equity asset class (De Lima Ribeiro et al. (2006). Adequate regulation is very important. In fact, in India there are clear-cut regulations for both local and foreign private equity firms and specific conditions governing the investment by particular categories of investors (Dossani and Kenney, 2002; Nishith Desai Associates, 2009).

Another important factor is legal infrastructure and enforcement as it ensures that all the players in the industry are well catered for from a legal perspective. Leeds and Sunderland (2003), comment that a major reason for problems faced by PE funds that entered emerging markets in

the 1990s was that legal framework did not provide adequate investor protection and dramatic differences in accounting standards, corporate governance and exit potential created problems. Leeds and Sunderland (2003) underscore that a proper legal system offers a reliable outlet for resolving disputes among the parties in a private equity transaction.

Opportunities or entrepreneurial activities are obviously very crucial and in fact, are pre-conditions for the development of private equity and specifically for venture capital. Dossani and Kenney (2002) examining differential development of VC markets in Asia, note the importance of investments opportunities, development of a technological industrial base supporting entrepreneurship. Venture capital occurs and thrives only where there is a constant flow of opportunities with great upside potential (Dossani and Kenney, 2002). Hellman (2000) supports this view underlining that venture capital can only thrive with an adequate supply of entrepreneurs.

Availability of competent human resources is another important factor. There is need to have highly skilled people both in the private equity firms and in the potential investee companies. Pfeil (2000) and Hellman (2000) agree that the venture capital industry needs skilled venture capitalists. Citing an example of Silicon Valley where most successful companies are run not by their original founders but by experienced professional managers Hellman (2000), says that availability of human capital is critical for the growth of new firms. Other factors that play a role in the success of private equity are institutional factors like stable business environment, political climate and adequate infrastructure (Wright et al., 2005).

2.4 Determinants of Venture Capital fund financial performance

2.4.1 Characteristics of Portfolio Companies

Soderblom (2004) note that portfolio companies in certain industry sectors, geographical areas or development stages, seem to yield better returns to investors than others. De Clercq and Dimov (2003) found that VC firm' specialization in terms of industry focus has a strong positive effect on performance. Giot and Schwienbacher (2005) showed that companies within the biotech and internet sectors tend to have the shortest route to IPO. Internet companies are also quickest to get into liquidation, while biotech companies are the slowest. Das et al. (2003) also found that there

is a high cross-sectional variation in the probability of an exit across different industries. According to Mason and Harrison (2004a) there is a widespread perception amongst investors in the UK, as well as in the rest of Europe, that investments in technology focused VC firms involve greater uncertainty and hence higher risks. Their study, exploring the performance of investments made by business angels in technology and non-technology companies, however demonstrated that the overall return profiles of the two types of investments are not significantly different. The authors argue that the reason for this may be that business angels often are better equipped than mainstream VC fund executives to manage the risks involved in investing in early stage tech investing, given their typically solid industrial and entrepreneurial backgrounds. Alternatively, it may reflect the fact that the risks related to investing in technology-based companies have been overstated. Investing in early phases are perceived to involve higher risks and thereby an unattractive risk-reward equation (Mason and Harrison, 2004). Manigart et al. (2002a) show that *early stage* VC firms require a significantly higher return for an investment than companies focusing on later phases. Cumming (2002) also found that early stage investments on average yield lower IRRs. This is supported by Hege et al. (2003) who show that a high rate of early stage VC fund investments, has a negative impact on the proportion of successful exits. Also Cumming and Walz (2004) show that later stage investments yield higher returns, and Murray (1999) concludes that the highest returns on the UK market have been generated by funds specialising on later stage investments.

De Clercq and Dimov (2003) found a negative correlation between portfolio companies age and performance, i.e. investing in older companies is associated with lower performance. In some sense, the findings support the theoretical claim made by Amit et al. (1990) that, because of VC firms preoccupation with limiting adverse selection in an environment laden with information asymmetry, the best companies would avoid applying for venture capital. Thus, the older companies in VC portfolios, i.e. those that better know their true worth, tend to be of lower quality.

2.4.2 Characteristics of VC Funds

Partnership structure; According to Gompers and Lerner (1999) the structure of venture capital organisations, in particular the reliance on limited partnerships of finite life with substantial profit sharing, has been identified as critical to VC success. This view is supported by McCahery and Vermeulen (2004), concluding that the limited partnership form, based on US experiences, offer substantial contracting benefits for investors and is crucial to the operation of a mature VC market. The structuring of VC firms seems, however, to vary between countries. According to Megginson (2002) European VC funds are less often organised as stand-alone limited partnerships sponsored by specialist VC firms staffed by technically trained professionals, as in the US model. Instead, funds are generally organised as investment companies under various national laws, and their approach to dealing with portfolio companies is much more akin to the reactive style of US mutual fund managers than to the proactive style of America's venture capitalists. According to Mayer et al. (2003) in the UK, however, limited partnerships is the most common form of VC organisations, which is in line with the findings of McCahery and Vermeulen (2004).

Specialisation; Gupta and Sapienza (1992), Manigart (1994), and De Clercq and Dimov (2003) found that VCs who specialise on a certain investment stage, e.g. early phase, and/or industry sector, build up a better understanding and thereby achieve a competitive advantage deriving from the accumulation of "hard to imitate" internal resources. According to Gupta and Sapienza (1992), a limited industry (or development stage) scope of investments, facilitates control over the VC management of these companies by the VC firm; i.e. it may be more difficult for portfolio companies to hide issues of management incompetence or other crucial information regarding company performance due to the VC firms more in-depth understanding of the industry (or development stage). Another reason why investments in similar types of portfolio companies may pay off is the increased possibility that subsequent investments lead to learning curve effects through the application of superior knowledge (e.g. Gupta and Sapienza, 1992; De Clercq, Goulet, Kumpulainen and Mäkelä, 2001). For instance, the ability to screen potential portfolio companies based on their likelihood of default, to structure a particular deal so as to minimize exposure to loss, to grasp the management problems related to a certain stage of development, or to understand the competitive specifics in a particular industry, may increase

(e.g. Wright and Robbie, 1998). Or, VC firms may become more efficient in dealing with resource suppliers for specific types of portfolio companies, such as investment bankers, law firms, accounting firms, and management recruiting firms (De Clercq and Dimov, 2003).

Continuous success and importance of brand; There is strong empirical evidence that successful VC firms outperform their peers over time (e.g. Kaplan and Schoar, 2003; Ljungqvist and Richardson, 2003a; Hsu, 2004; Laine and Torstila, 2004). That outperformance is not competed away indicates that experienced VC firms have core competencies that cannot be easily imitated (Fleming, 2004). Kaplan and Schoar (2003) show that VC firms who outperformed the industry benchmark with one fund are likely to outperform the industry with the next, and vice versa. Gottschalg et al. (2004) found in their study of European and US private equity funds that the funds' overall performance hides a great heterogeneity and skewness – while a quarter of the funds had returned less than a third of the capital invested another quarter had outperformed the public market portfolio.

Hsu (2004) evaluated the value of VC brand, and showed that better VC funds negotiate better deal terms, i.e. lower valuations. The author confirmed the proposition that entrepreneurs are willing to accept a discount on the valuation of their start-up in order to access the capital of VCs with better reputations. This implies that the VCs informal network and certification value may be more distinctive than their financial capital. Gompers and Lerner (1998) showed that VC firm performance and reputation positively impact the capacity to raise larger funds. Reputation concerns also affect the IPO timing decision of young VC fund managers (Gompers, 1996).

Fundraising; Laine and Torstila (2004) found that large fund management firms have significantly higher rates of exit success, perhaps due to a better reputation as quality certifiers, which is also supported by Hochberg (2004). Also Gottschalg et al. (2004) found that one of the main drivers for private equity fund underperformance are small fund sizes. However, the authors point out that larger VC funds may have more scope for opportunistic behaviours that does not benefit LPs. For example, large US venture funds are more likely to invest in certain buyout deals or in Europe to obtain a track record for these types of investments which brings both diversification and additional income to the VC firm at the cost of their LPs. An additional

downside of running a larger fund is that it increases the difficulty of finding good deals (e.g. Gompers and Lerner, 1999). There is also evidence that the best performing funds have limits for their growth. Given that most limited partners claim that the top funds are all highly oversubscribed, it seems likely that the better funds voluntarily choose to stay smaller (Kaplan and Schoar, 2003). Kaplan and Schoar (2003) also found evidence that private equity fund returns decline when partnerships grow their fund abnormally fast. Top performing funds grew less than proportionally while still keeping an increase in performance. By growing relatively less rapidly than the market on a performance adjusted basis, top funds are able to avoid moving into regions of diminishing returns. According to Bottazzi and Da Rin (2003) the US VC portfolio companies receive on average six times more funding than their European counterparts.

Related to fund size is the number of investments in a portfolio, where Schmidt (2004) shows that there is a high marginal diversifiable risk reduction of about 80% when the portfolio size is increased to include 15 investments. The author observe the real world average PE portfolio size to be somewhere between 20 and 28 investments. Jääskeläinen et al. (2002) show that the number of portfolio companies a venture capitalist manages and the total returns of the VC fund will exhibit an inverted U-shaped curve. Their data suggest that venture capitalists reach their respective optimum level slightly over 12 portfolio companies per partner of a VC firm (which makes it larger than is the actual number of investments per investment manager). They further show that syndication, however, moderates the relationship so that the higher the level of syndication, the higher the optimal number of portfolio companies per VC.

2.4.3 Investment Process

Deal generation; Deal flow, i.e. the generation of a continuous stream of high quality investment opportunities, is a critical concern for venture investors. It is crucial to obtain access to viable projects which can be funded at entry prices which will generate target rates of return. Ljungqvist and Richardson (2003) show that holding periods are shorter and the corresponding success rates are higher following improvements in the availability of investment opportunities. Analogously, investments are held for longer, and are less successful, when competition for deal flow is tougher.

The difficulties faced by VCs due to increases in competition between VCs, serve to highlight the importance of a deal generation strategy argues Megginson (2002). According to Hall and Tu (2003), an international VC investment focus may be a part of a strategy to secure higher returns by investing in opportunities in markets where there is lower competition and hence the ability to invest on more favourable deal terms. Investing in a successful firm with a high expected rate of return on equity is by no means equivalent to a high rate of return for the VC. If the high expected return is commonly expected, this implies that the VC has to pay a high price for a given number of shares, i.e. through this direction other than normal rates of returns are not possible (Cumming and Walz, 2004).

Due diligence and valuation; due diligence evaluations, or screening, is a determinant that seems to have significant impact on financial return. It covers background check of the founders; competitive assessment of market players; market research into the size, composition, and potential growth of the firm's target market; investigations into the financial representations of the company's position; and so on (Jensen, 2002). According to Hege et al. (2003) the US VCs have sharper screening skills than their European counterparts which lead to higher success rates. According to Landier (2001), US VCs spend a large amount of time learning about the technological aspects of an investment both pre and post first-time financing. European VCs, however, are traditionally less "hands on" and less strategically involved than their American counterparts. This finding is in line with earlier research (e.g. Sapienza, Manigart and Vermeir, 1996).

Since the majority of VC portfolio returns are dependent on a few number of investments, Schmidt (2004) finds that high average portfolio returns are generated solely by the ability to select a few extremely well performing companies. Also Diller and Kaserer (2005) found that superior performance is caused by superior selection abilities. An important step in the negotiation process is to determine the current value of the company. The valuation process is an exercise aimed at arriving at an acceptable price for the deal. Manigart et al. (2000) showed that the information used for the pre-investment valuation and valuation methods used by VC investors differs between countries due to corporate governance mechanisms or the level of development of the VC market. The most popular valuation techniques are prospective historic

price/earning multiples in the UK, EBIT multiples in the US, while DCF calculations seem to be predominant in the Continental European countries.

Deal structuring; Appropriate structuring of VC investments seems to have significant implications on the VCs possibilities to earn their target rates of return. Financial contracts are written to assign cash flow, board, liquidation and other control rights between contracting parties, e.g. a private equity group and an entrepreneur. And VC firm skill in structuring shareholders agreements turns out to be important. Kaplan et al. (2003) show differences in the use of financial contracts in the US and non-US countries (primarily European) and found that those VCs who use US-style contracts fail significantly less often. They showed that none of the VC firms that had used US style contracts had failed, whereby 34% of the firms that didn't had not survived. More experienced VCs were able to implement US-style contracts regardless of country specific legal regime. Landier (2001) argues, however, that debt-like contracts provide the optimal contract form in Europe, while equity-like contracts is optimal in the US.

Hege et al. (2003) show that performance is positively correlated with the use of convertible securities, which is consistent with other academic VC research indicating that convertible preferred equity is the optimal security (e.g. Sahlman, 1990; Cumming, 2002; Megginson, 2002; Kaplan et al., 2003; Cumming and Walz, 2004). Kaplan and Strömberg (2003) identify the use of convertible preferred securities as a way for VC firms to maintain control rights without a majority ownership in the portfolio company. According to Megginson (2002), the primary rationale for using convertible securities is to give the VC firm a claim on the portfolio company's earnings and market value in the event the firm is highly successful. Hege et al. (2003) find that VC firms in the US more systematically use convertible securities in order to also convey residual control in case of poor performance. According to Schwienbacher (2002) convertible securities are three times less often used by European VCs as compared to their US counterparts.

Syndication; Venture capital firms frequently engage in collaborative relationships with other venture investors because investment syndication is common in the industry. Syndicates are typically formed by a lead investor who contacts other potential investors and records their

commitments to invest. Syndication has turned out to have a positive impact on performance and serves multiple tools.

According to Manigart et al. (2002b) young VC firms syndicate more than older, large VC firms syndicate more than smaller, and the more a VC firm is specialised in terms of industry sector, the higher its propensity to syndicate in general. Schwienbacher (2002), however, found in contradiction to the result presented by Manigart et al., that younger VC firms syndicates less often than older VCs. Jääskeläinen et al. (2002) showed that syndication frequency has positive effect on VC firm's performance. Also Cumming and Walz (2004) found that syndicated investments do yield significantly higher IRRs for the VCs. The position in the syndication seems, however, to matter. Taking the role of lead investors allows a VC firm greater access to information and better control over the portfolio company and is thus associated with lower required return in early phases according to Manigart et al. (2002a). Also Seppä and Jääskeläinen (2002) found evidence of a positive relationship between the centrality of a VC firm in its network of syndicate partners and its current and future performance. Deals that are less syndicated are more likely to remain longer in the portfolio of VC funds (Giot and Schwienbacher, 2005).

There is, however, research that contradicts the overwhelming positive finding about VC syndications. Fleming (2004) examines returns to venture capital in Australia and found that syndicated investments generated lower returns, although the author maintains that the underdeveloped VC market might have significant impact. De Clercq and Dimov (2003) found that the degree of syndication at the initial investment round has a negative impact on investment performance. The authors however found, all else being equal, that the more co-investors are involved with a particular portfolio company across all investment rounds the higher investment performance.

2.4.4 Management of Portfolio Companies

VC experience and competence; Some researchers as well as practitioners conclude that the most important success factors are about experience and competence in several dimensions but not least when providing added value to portfolio companies. Investment experiences in a

particular industry sector will over time increase VC firms' capabilities to support portfolio companies with e.g. extended contact networks, or sector specific competence. Rosenstein, et al. (1993), Sapienza, et al. (1996) and Manigart, et al. (2002) all found that experienced VC firms are perceived to add more value than inexperienced VCs to their portfolio companies. Gompers, et al. (2004) show that the VC firms with the strongest hands-on industry experiences increase their number of investments the most when industry investment activity accelerates. Gottschalg, et al. (2004) found that more experienced and skilled private equity firms survive and offer higher returns. Diller and Kaserer (2005) showed that VC fund returns are positively associated with VC management skills. It has often been noted, however, that VCs are intuitive decision makers, and that this intuition develops after making numerous venture investment decisions (Zacharakis and Shepherd, 2001). Megginson (2002) suggests that many senior partners at top US VC firms have become legendary for their skills in finding, nurturing, and bringing to market high-tech companies. Those partners and associates quite often are engineers or other technically trained professionals who themselves worked in high-tech companies before becoming full-time venture capitalists. Sapienza, et al. (1996) showed that the Continental European VC industry in general is more financially orientated, i.e. the investors often have a financial or banking background, compared to their counterparts in the US and UK.

Shepherd, et al. (2003) present an alternative argument that experience may not always improve the venture capitalists decision making processes. These authors show that experienced decision makers may rely upon various heuristics and short cuts, derived from a deep experience that means that higher returns are not always guaranteed. This is supported by Fleming (2004) who found that inexperience is not penalised in a developing market; experienced VC firms in Australia do not realise investments at returns different from inexperienced VC firms. Lower experience levels and youth seem to have other effects as well. Compared to older ones, younger VCs tend to; invest more regionally, more in seed and start-up phases, use less convertible securities, less often replace former entrepreneurs, have less syndication partners and less often syndicates (Schwienbacher, 2002). De Clercq and Dimov (2003) found that VC firms age negatively effects performance. Gompers (1996) found that less experienced VC firms are more likely to "grandstand", i.e. bring their portfolio companies to the public market as soon as possible in order to gain reputation within the investment community.

Replacement of entrepreneurs; A factor related to portfolio control is the possibilitx for VC firms tm replace□portbolio companies' managements. Hellman (1998) has shown thaT the VC firms' decision to replace the founding ent2epreneur ma9 be efficient. When VCr have control, they provide greater effort in finding professional manacers that increase the value of the company. Hege et al. (2003) `oint to the dAct th`t US VC firms, in comparison with European firms, more often take replacement decisions and terminate projects. The authors argue that more frequent CEO replacement decisions in Europe would have a positive impact on the number of successful exits.

2.4.5 Exit Process

There are five principle types of VC exits Cumming and MacIntosh (2003) identify them as: listing the company through an IPO, in which a significant portion of the firm is sold into the public market; an acquisition by industrial trade buyers, in which the entire firm is bought by a third party; a secondary sale, often financial buyout by other private equity firms; a buyback, in which the VCs shares are repurchased by the entrepreneurs; and, a write-off, in which the VC walks away from the investment. Ideally, investments are realised through an IPO, an industrial trade sale, or a secondary sale. The latter exit route has recently increased significantly. The climate for realising investments through IPOs or trade sales has fluctuated over time .

2.4.6 Institutional and Environmental Factors

The institutional and environmental factors relate to areas outside VC firms or their portfolio companies. The vast majority of these factors such as state of stock markets, capital gains taxation, regulation of pension funds, the growth of market capitalisation, returns on investment in quoted companies, the rigidity of the labour markets, GDP growth, etc. influence the supply of or demand for venture capital. The effects on VC fund performance are therefore of a more of indirect nature (Soderblom, 2006).

2.5 Empirical Evidence of Venture Capital Development in Africa

There is an increasing public awareness and interest all over the world on the roles of private equity and entrepreneurship in contributing to economic growth through the development of successful businesses. In its most basic form, private equity, and more specifically venture

capital, combines the provision of finance with active support of governance and mentoring of start-up companies (Zaaruka et al. 2005). Recognising the importance of venture capital in the growth process, many countries, including developing economies in Africa, have initiated the development of this industry in their countries.

The South African experience shows that institutional investors had been generally reluctant in invest in the VC industry. A major reason for this had been the reluctance of insurance companies and the pension fund trustees to allow much investment of this type as the returns are had to measure and investments may be un-saleable for several years. Surprisingly, the largest source of funds for the VC industry in South Africa is captive funds of larger commercial banks (Zaaruka, et al. 2005).

Independent funds, those funds that generally manage third party funds, are becoming an increasingly important segment of the South African VC industry. This sector is mainly dominated by the larger buy-out focused funds. Independent funds make up 37 percent of funds under management at 31 December 2003. The continuing challenge facing the VC industry in South Africa is the one of convincing institutional investors' trustees that venture capital represents a suitable asset class for long-term sustainable growth (Zaaruka, et al. 2005)

More recently, various players in Namibia have also realised the importance of the VC industry to finance companies with high growth potential, particularly in the SME sector. Some new initiatives to cultivate this industry have been witnessed. While the industry remains minuscule compared to other corporate financing sources such as bank lending, it is believed that it could have a role to play in improving the overall efficiency of business financing by not only providing a source of funding for smaller and riskier companies with a great potential to grow and which may face difficulty in raising funds in public markets, but also mentoring and management support (Zaaruka et al. 2005)

It is unlikely that venture capital could play a decisive role in a majority of small and poor developing countries in Africa. First, many countries lack a functioning stock market or access to it. A stock market is a key precondition for venture capital because venture capitalists need to

float their company to cash in gains in the end. Secondly, few countries have enough highly-skilled people who can generate ideas that are marketable. If highly-educated people in developing countries come up with an idea it will be rather them going to the US or Europe than venture capital flowing into their countries. Thirdly, most developing countries or even transition economies lack a stable business environment that venture capitalists thrive on. It would be inconceivable to think of venture capital in Burkina Faso (Pfeil, 2000).

The Kenyan VC industry has been in existence since the 1990s. However, operation volumes are still small in scale. Venture Capital firms account for a tiny share of the financial market (Zavatta, 2008). Although, some private equity firms have shown interest in the Kenyan market, the Kenyan equity financing is not very developed. It is important to note that exact data on the Kenyan VC industry is not available.

2.6 Summary

Empirical literature concur that there is a financing gap in Africa for SMEs that should be addressed by financial sector intermediaries. However, very few studies if any have focused on VC as a probable source of long-term capital to SMEs in Africa. While explaining the scarcity of studies in this theme, Barry (1994) argues that empirical evidence on VC is not easy to develop due to the private nature of VC firms and their investments.

Several factors have been put forward as major determinants of VC activity with no consensus amongst the various research propositions. Jeng and Wells (as cited in Gompers and Lerner, 2001) investigated the determinants of the PE/VC industry's size and identified factors such as reduction in capital gains tax, entrepreneurship activity, GDP growth, labour rigidities, allowance for pension funds to invest in the asset class, quality of accounting standards, volume of IPOs and government programs/policy. Gompers and Lerner (2001) underline the importance of robust stock market for IPOs hence offering VCs a viable exit option. Jeng and Wells (as cited in Gompers and Lerner, 2004), posit that the IPO market does not influence commitments in early stage funds much as do later stage ones.

With the ongoing, there seems to be no agreement on the determinants of VC industry growth and development in a developing country context like Kenya. Further, considering that the VC

concept was tailored to perform in the American institutional environment, the extent to which it can be successfully adapted to other countries with diverse challenges especially the developing ones like Kenya remains a pertinent question.

CHAPTER THREE
REARCH METHODOLOGY

3.1 Introduction

This chapter presents the research methodology that was employed in this study. It encompasses sections 3.2 which is the research design, 3.3 is the population of the study and sample size, 3.4 outlines the research models, 3.5 is the data collection methods and research procedures, and 3.5 is on data analysis and presentation of results.

3.2 Research Design

According to Tromp (2006), a research design can be regarded as an arrangement of conditions for collection and analysis of data in a manner that aims to combine relevance with the research purpose. In this regard, the researcher used a descriptive cross-sectional survey which sought to report the state of the Kenyan venture capital industry. This approach has been adopted by Wright et al. (2005) in their study on International VC research. Similarly, De Lima Ribeiro et al. (2006) applied the same design to study the Brazilian PE/VC experience. Further, the study employed a correlational design. Orodho (2003) explains that this type ofcorrelational design enables the researcher to assess the relationship that exists between two or more variables. It analyzes the correlation between two or more variables.

In correlational research, the relationships between two or more quantifiable variables are studied without making any attempt to influence them. In their simplest forms, correlational studies are generally intended to answer three basic questions about the variables under investigation; is there a relationship between the two variables? what is the direction of the relationship? and what is the magnitude of the relationship? (Mbwesa, 2006).

3.3 Population and Sample

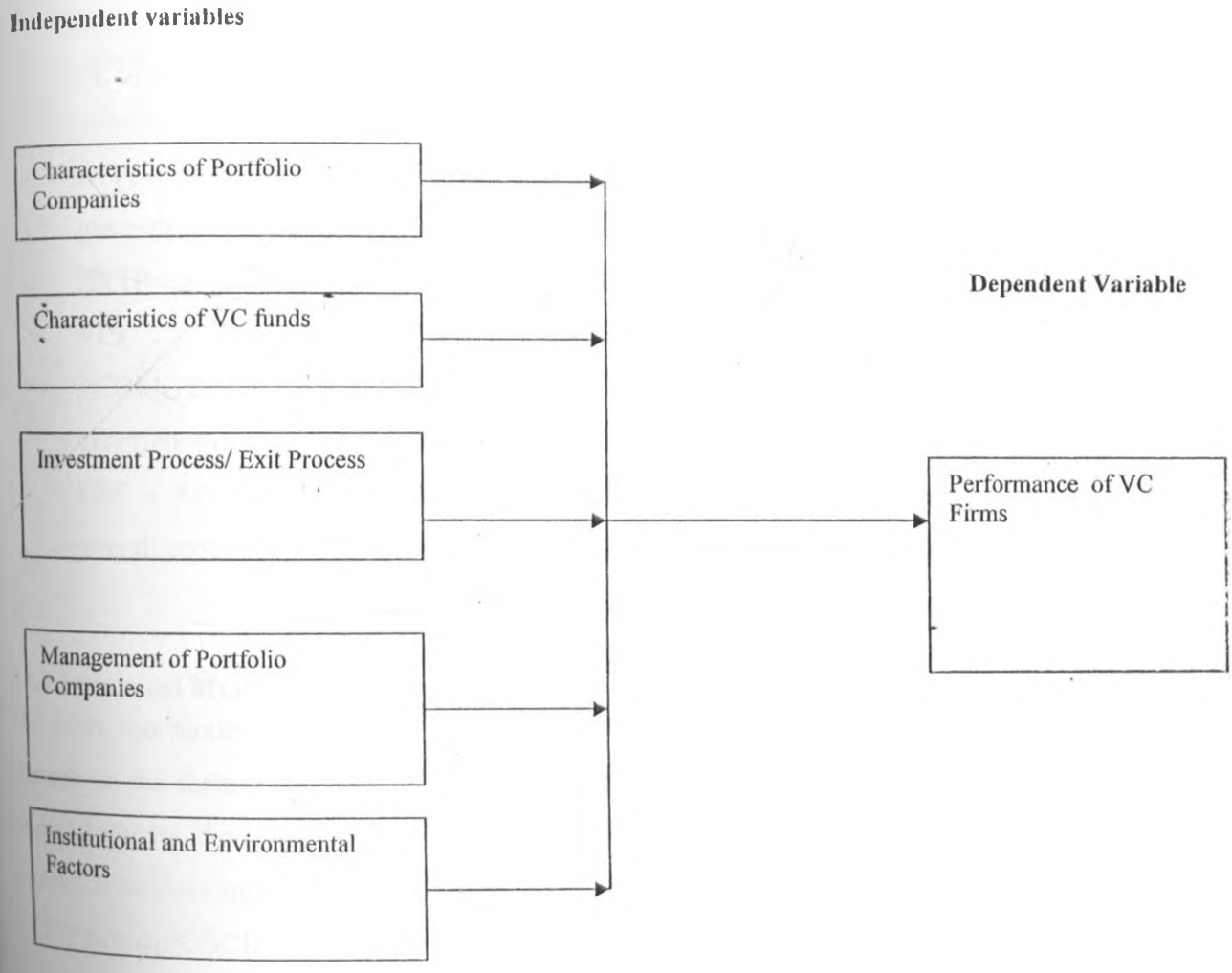
The population of interest comprised all the venture capital firms operational in Kenya. To identify, the population, the researcher relied on information from Capital Markets Authority and the Africa Venture Capital Association (AVCA) that indicate twelve active Venture Capital Firms in Kenya. These funds are; Acacia Fund Limited, Aureos Kenya Managers Limited, InvesteQ Capital Limited, Business Partners International Limited (BPI), Grofin East Africa, Acumen Fund, African Agricultural Capital, Miliki Ventures, Africa Invest Capital Partners,

Fanisi Fund, Transcentury Kenya and Centum investments also attached as appendix four. Considering that the target population is not big enough to warrant the use of a sample, the researcher did not undertake any sampling on the population.

3.4 Research Models

3.4.1 The Conceptual Framework

From the literature, various factors influence the performance of VC/ PE. This relationship has been conceptualized as:



(Author, 2011)

3.4.2 Conceptual Model

This sought to establish the links between the dependent and independent variables as:

VCP = f (PCOCH, VCCH, INVP, EXTP, PCOMGT, EEF).....eqtn 1.

Where:

VCP – is venture capital performance measured by IRR calculated as an annualised effective compounded rate of return, using monthly cash flows and annual valuations for non-realised investments, which can be calculated in gross terms (at fund level excluding fees) or net to LPs as used by Diller and Kaserer (2005).

PCOCH – is the Portfolio Company Characteristics proxied by the Portfolio Company age

VCCH – is the Venture Capital fund Characteristics measured by the volume of investments in the portfolio

INVP – is the Investment process that will be measured by the average volume of deals generated and successfully negotiated

EXTP – is the Exit Process measured by the volumes of successful IPOs realized by the VCs.

PCOMGT – are the characteristics of Portfolio Company Management. The years of experience of the chief manager would proxy for the competence and experience.

EEF – Are the external environmental factors. This would be measured by proxy of overall economic performance -- the GDP.

3.4.3 Empirical Model

The study was modelled to test the sensitivity of the venture capital industry development to the changes in the factors. It used a linear regression analysis to test the dependence of Venture capital Industry development on the independent or explanatory variables. The applicable regression model employed is the generic:

$VCP = \alpha_0 + \alpha_1 PCOCH + \alpha_2 VCCH + \alpha_3 INVP + \alpha_4 EXTP + \alpha_5 PCPMGT + \alpha_6 EEF + e_t$.....eqtn 2.

Where:

VCP – is venture capital performance measured by IRR calculated as an annualized effective compounded rate of return, using monthly cash flows and annual valuations for

non-realised investments, which can be calculated in gross terms (at fund level excluding fees) or net to LPs as used by Diller and Kaserer (2005).

PCOCH – is the Portfolio Company Characteristics proxied by the Portfolio Company age and industry

VCCH – is the Venture Capital fund Characteristics measured by the volume of investments in the portfolio

INVP – is the Investment process that will be measured by the average volume of deals generated and successfully negotiated

EXTP – is the Exit Process measured by the volumes of successful IPOs realized by the VCs.

PCOMGT – are the characteristics of Portfolio Company Management. The years of experience of the chief manager would proxy for the competence and experience.

EEF – Are the external environmental factors. This would be measured by the proxy of the overall economic performance – the GDP.

α_i – Are the factor sensitivities.

e_t – An error term.

3.5 Data Collection

The researcher obtained primary data using interview guides (appendix 2 and 3). The instruments were used to collect both quantitative and qualitative data to answer the research questions using face to face interviews with fund managers and finance managers of VC beneficiaries. To supplement the primary data, Secondary data on economic performance (GDP) was acquired from the central bank and the libraries.

3.6 Data Analysis

Data analysis involves organizing, accounting for and explaining the data; that is, making sense of the data in terms of respondents' definition of the situation noting patterns, themes, categories and regularities (Gay, 1992). The data and information obtained through the questionnaire was first checked for completeness. The collected data was then coded and a roster prepared.

In determining the factors determining the performance of VC funds in Kenya, content analysis was applied. Content analysis examines the intensity with which certain words were used. A classification system was developed to record the information. In interpreting the results, the frequency with which a symbol or idea appears was interpreted as a measure of importance, attention or emphasis. Content analysis approach was used by Hellman and Puri (as cited in Gompers and Lerner, 2001) who distributed a questionnaire to a sample of 170 firms in Silicon Valley.

The study attempted to estimate and/or predict the average value of the dependent variable (Venture Capital financial performance) in terms of the independent variables (portfolio company characteristics, VC company characteristics, Investment process, Exit Process, Portfolio Company management characteristics and external economic environmental factors). The results were presented in the form of graphs, tables, charts before interpretations and conclusions were deduced. The relationship between the dependent and the independent variables was attained through linear regression on an excel worksheet for the model indicated as equation two. Excel is suitable for data analysis because of its versatility to manipulate quantitative data.

3.6.1 Operationalization of the Key Study Variables

The independent variables used in this study were: the portfolio company charactristics, venture capital fund characteristics, investment process, exit process, characteristics of portfolio company management and external environmental factors. The dependent variable is Venture capital financial performance which can be measured by IRR calculated as an annualised effective compounded rate of return, using monthly cash flows and annual valuations for non-realised investments which can be calculated in gross terms (at fund level excluding fees) or net to LPS as used by Diller and Kaserer (2005)

3.6.2 Pearson Product-Moment Correlation Coefficient

Inferential statistics was obtained using the Pearson Product-Moment Correlation Coefficient (PMCC). The PMCC (typically denoted by r) was used to measure the correlation (linear

dependence) between the five independent variables expected to give us a value between +1 and –1 inclusive.

3.6.3 Statistical tests of Significance

The researcher attempted to test the significance of the statistics of mean, proportions and variances using the t – tests. Herein, it tests a sample mean against a population mean and especially where the population variance is unknown and the number of objects is less than thirty.

3.7 Data Reliability and Validity

The bad news for communication research is all communication research has some error (Cooper and Schindler, 2009). These errors can take the form of interviewer error, participant error or response-based error. To obtain full participant cooperation, the researcher used a letter of introduction (attached as appendix One). The researcher took great care to record answers accurately and completely as well as to consistently execute interview procedures. The researcher also established an appropriate interview environment to deal with physical presence biases and inappropriate influencing behavior.

Participant errors were minimal because the respondents possessed the information, understood their role as respondents or interviewees and were given adequate motivation to cooperate. Response-based errors were outside the control of the researcher. However, only few errors emerged because the target respondents had the relevant skill, knowledge and ability to answer the questions.

CHAPTER FOUR
DATA ANALYSIS AND INTERPRETATION

4.1 Introduction

This chapter describes the data analysis and presents the results, within the framework of the research question and objectives. In section 4.2, it discusses the characteristics of respondents and response rate, section 4.3 outlines descriptive statistics of the independent variables, section 4.4 presents the results of Pearson's Product-Moment's Correlations Coefficient between the Independent Variables and Venture capital financial performance characteristics, and 4.5 outlines the regression analysis of determinants of venture capital financial performance.

4.2 Summary Statistics

This study targeted all the 12 venture capital firms in Kenya regulated by the CMA. Table 4.1 gives a breakdown of the questionnaires received from the target population.

Table 4.1: Summary of respondents and response rate

	Population	Questionnaires Distributed	Questionnaires Received	Response Rate
Venture Capital Firms	12	12	10	83.4%

Source: Research Data, 2011

Questionnaires could not be collected from 2 venture capital firms for lack of time to complete the questionnaire. The Venture capital firms are mainly foreign owned. In the final analysis, a total of 10 questionnaires were coded and analysed, representing 83.4 percent of the total population. This response rate was considered fair to conduct an analysis and draw conclusions from the findings.

4.2.1 Results of Pearson's Product-Moment's Correlations Coefficient between the Independent Variables and Venture capital financial performance

The PMCC matrix for the five variables is illustrated in table 4.2. From the results, we see that all variables were, as would be expected, positively correlated to venture capital firm performance. However, the level of significance of the correlations to Venture capital performance varied between the independent variables.

Table 4.2: Correlations between Dependent and Independent Variables

		VCP	PCOCH	VCCH	INVP	EXTP	PCOMGT	EEF
VCP	Pearson Correlation	1.000	.539	.220	.249	.223	.539	.507
	Sig. (1-tailed)	.	.157	.012	.008	.015	.157	.000
PCOCH	Pearson Correlation	.539	1.000	.045	.045	.380	0.380	.272
	Sig. (1-tailed)	.157	.	.332	.332	.000	.	.004
VCCH	Pearson Correlation	.220	.368	1.000	.475	1.000	.385	.373
	Sig. (1-tailed)	.012	.000	.	.000	.	.000	.000
INVP	Pearson Correlation	.249	.045	.380	1.000	.477	.045	.105
	Sig. (1-tailed)	.008	.332	.000	.	.000	.332	.000
EXTP	Pearson Correlation	.223	.105	.368	.477	1.000	.380	.368
	Sig. (1-tailed)	.015	.000	.000	.000	.	.000	.000
PCOMGT	Pearson Correlation	.539	.045	.385	.045	.380	1.000	.272
	Sig. (1-tailed)	.157	.330	.000	.332	.000	.	.004
EEF	Pearson Correlation	.507	.102	.365	.105	.368	.272	1.000
	Sig. (1-tailed)	.000	.000	.000	.000	.000	.004	.

Source: Research Data, 2011

The strongest correlation exists between the Portfolio company management characteristics, and portfolio characteristics and Venture capital performance with a statistically significant correlation at 1 percent level (r = 0.539, p = 0.157). Next in line was GDP growth rate with a statistically significant correlation at 1 percent level (r = 0.507, p = 0.000). There were also some strong correlations between the independent variables themselves. For example, investment process is correlated to exit process with a statistically significant correlation at 1 percent level (r = 0.477, p = 0.000) just like portfolio company management and exit process with a statistically significant correlation at 1 percent level (r = 0.380, p = 0.000). Similarly, external environmental factors and exit process were correlated with a statistically significant correlation at 1 percent level (r = 0.368, p = 0.000).

4.2.2 Regression Analysis Coefficients

The standard regression equation (ii) below shows the relationship between the dependent variable *(Venture Capital Performance)* and the six independent variables: *portfolio company characteristics* (β_1), *Venture capital characteristics* (β_2), *Investment process* (β_3), *exit process* (β_4), *Portfolio Company management* (β_5) *and External environmental factors* (β_6).

$VCP = \alpha_0 + \alpha_1 PCOCH + \alpha_2 VCCH + \alpha_3 INVP + \alpha_4 EXTP + \alpha_5 PCPMGT + \alpha_6 EEF + e_t$

The column headed "B" in Table 4.3 shows the unstandardized regression coefficients for the model. The regression coefficients are both individually and jointly statistically significant. From the values of the coefficients, we discern that the independent variables, *External environmental factors and portfolio company characteristics* influences venture capital firm performance the most (beta = 0.295), followed by *portfolio company management* (beta = 0.280), then *exit process* (beta = 0.258), *venture capital characteristics* (beta = 0.234), and then *investment process* (beta = 0.232). The equation was then reconstructed by substituting the unstandardised coefficients or beta's into equation (ii).

$$VCP = 1.2 + .234\ X_1 + .295\ X_2 + .232\ X_3 + .258\ X_4 + .280\ X_5 + .295\ X_6 + \varepsilon$$

Table 4.3: Regression Coefficients on dependent variables

	Unstandardized Coefficients			
	B	Std. Error	T	Sig.
(Constant)	1.2	.337	3.882	000
EEF	.295	.045	6.515	000
PCCH	.295	.045	6.515	000
PCPMGT	.280	0.077	3.627	000
EXTP	.258	.072	3.598	001
VCCH	.234	.070	3.327	001
INVP	.232	.072	3.627	000

a. Dependent Variable: Venture Capital Performance

Source: Research Data, 2011

4.2.3 Results of Analysis of Variance (ANOVA)

The ANOVA was used to corroborate the results of the regression analysis for the effect of the six predictor variables (i.e. *Portfolio Company characteristics, Venture Capital characteristics, Exit process, Investment process, Portfolio Company management* and *External environmental factors)* on venture capital performance. The ANOVA measured whether or not the equation represented a set of regression coefficients that, in total, were statistically significant from zero. The critical value for F in our model was 15.974, with degrees of freedom for the numerator equaling k or 6 (the number of independent variables) and for the denominator, $n - k - 1$, where n for the model is 60 observations. Thus, the degrees of freedom, d.f. = 53. The equation was thus statistically significant at less than the 0.05 level of significance.

Table 4.4: Results of Analysis of Variance

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	9.992	6	2.498	16.275	.000[a]
Residual	13.660	53	.153		
Total	23.652	93			

a. Predictors: (Constant), Portfolio Company characteristics, Venture Capital characteristics, Exit process, Investment process, Portfolio Company management and External environmental factors.

b. Dependent Variable: Venture Capital performance

Source: Research Data, 2011

4.3 Determinants of Financial performance

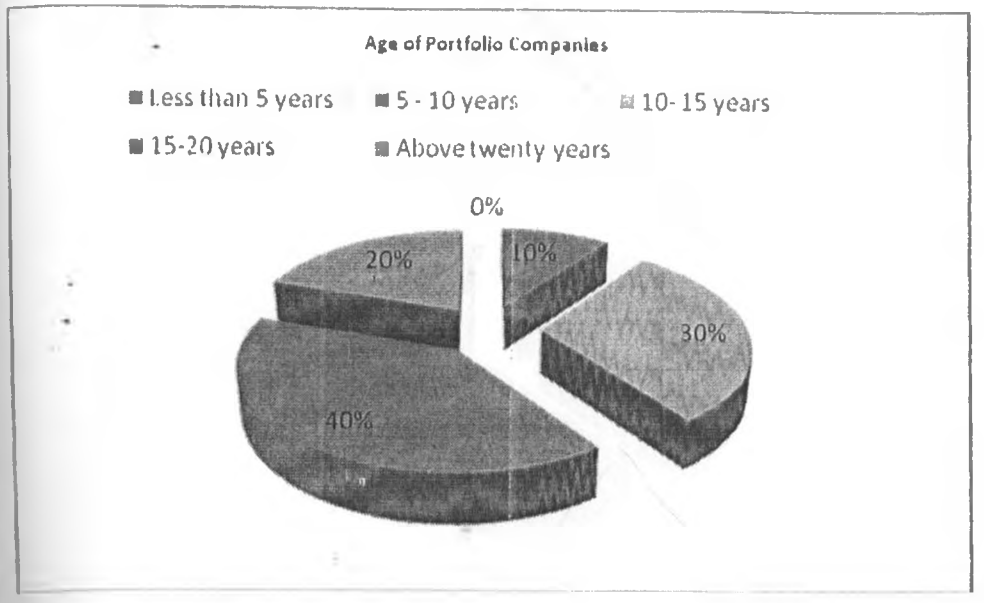
4.3.1 Factors that influence the performance of Venture Capital Firms

When asked their opinion on whether the factors identified as; portfolio company characteristics, venture capital fund characteristics, investment process, exit process, characteristics of portfolio company management, and external environmental factors influence the performance of Venture Capital firms, all respondents answered in the affirmative. The implication of this is that all the independent variables to a certain extent influence venture capital firm performance.

4.3.2 Portfolio Company Characteristics

Portfolio companies have diverse industry sector backgrounds, geographical areas or development stages. The study attempted to find the industry/ sectors and ages of the ten portfolio companies under consideration.

Figure 4.1: Age of the Portfolio Companies



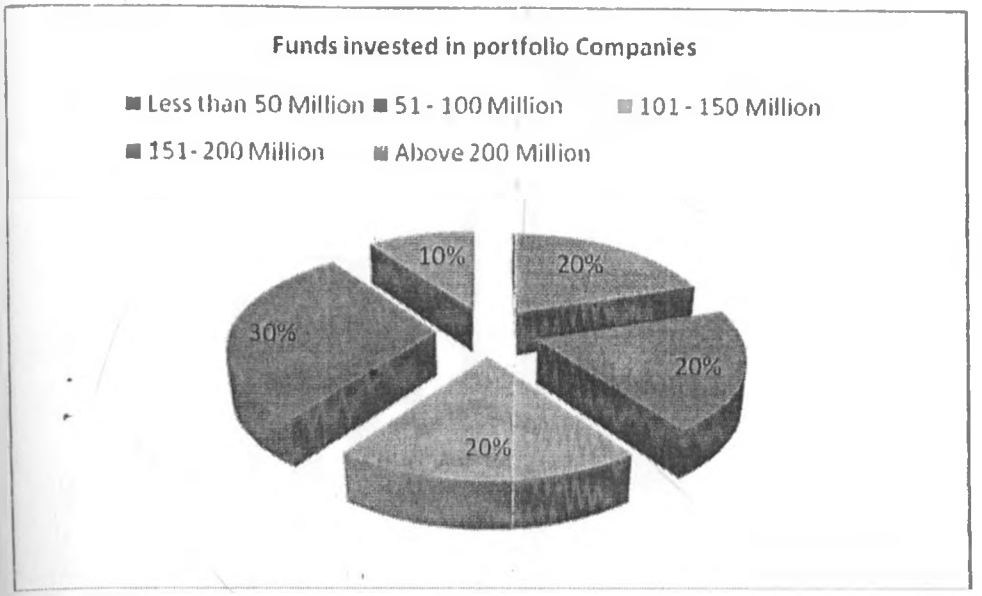
Source: Research data, 2011

As presented above, none of the venture capital firms invest in portfolio companies with less than 5 years age, 10% invest in portfolio companies whose ages are between 5 to 10 years, 30% invest in companies whose ages are between 10 to 15 years, 40% invest in portfolio companies whose ages are between 15 to 20 years while 20% invest in portfolio companies whose ages exceed 20 years. Generally, the portfolio companies that are considered in the study have interests that cut across all sectors of the Kenyan economy. Studies outline that focusing the VC investments on a limited number of industries has a positive effect on performance. By not investing in start up ventures, the VCs lock out potential beneficiaries from their services.

4.3.3 Venture capital fund characteristics

When asked their opinion on the influence of the volume of investments in the portfolio on the firm performance, all respondents answered in the affirmative. In the study, Venture Capital fund Characteristics is measured by the volume of investments in the portfolio.

Figure 4.2: Volume of Investment in Portfolio Companies



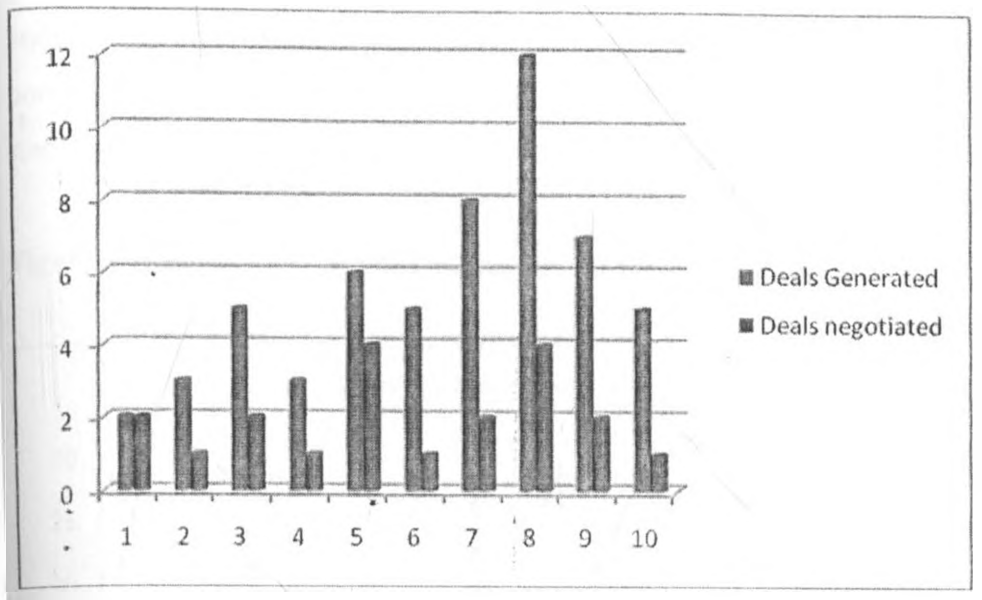
Source: Research data, 2011

As outlined above, 30% of the venture capital funds have invested between Ksh. 151 Million to 200 Million in the portfolio companies, 20% have invested Less than Ksh. 50 Million, Ksh. 50 Million to 100 Million and Ksh.101 to 150 Million respectively. 10% of the Venture capital funds have invested over Ksh. 200 Million in their portfolio companies.

4.3.4 Investment process

The researcher considered the investment process of the Venture capital funds by considering the number of deals generated and ones successfully negotiated.

Figure 4.3: Deal generation and Closure by Venture Capitalists



Source: Research data, 2011

The findings indicate that in general, all the venture capital funds have generated 56 deals since inception but have been able to successfully negotiate 21 deals. This indicates a 36% close out ratio. The generation of a continuous stream of high quality investment opportunities, is a critical concern for venture investors. It is crucial to obtain access to viable projects which can be funded at entry prices which will generate target rates of return.

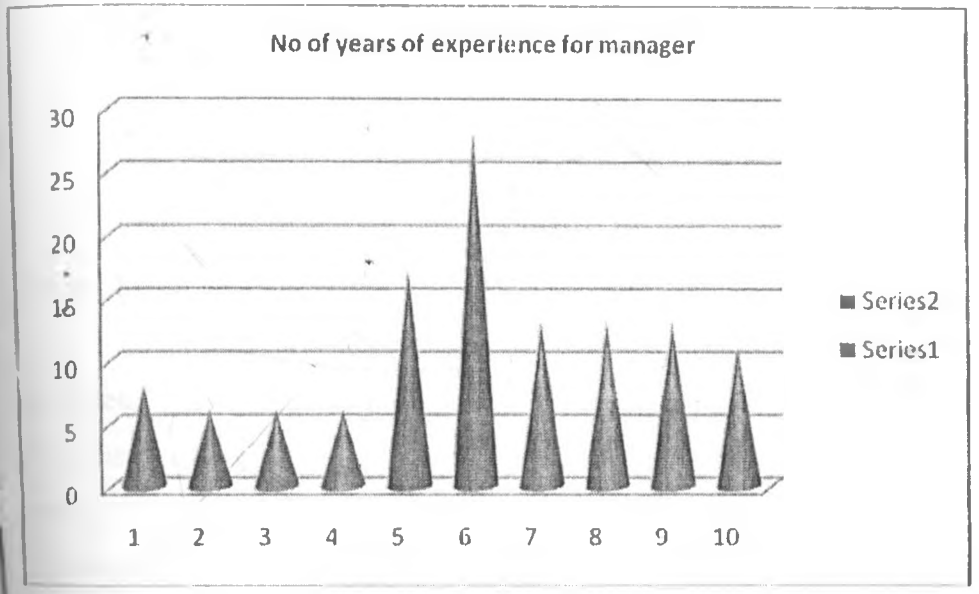
4.3.5 Exit Process

There are five principle types of VC exits: (i) listing the company through an IPO, in which a significant portion of the firm is sold into the public market; (ii) an acquisition by industrial trade buyers, in which the entire firm is bought by a third party; (iii) a secondary sale, often financial buyout by other private equity firms; (iv) a buyback, in which the VCs shares are repurchased by the entrepreneurs; and, (v) a write-off, in which the VC walks away from the investment. Ideally, investments are realized through an IPO, an industrial trade sale, or a secondary sale. None of the Venture capital entities in the study indicate a successful IPO realization since inception. The other exit methods have also not been recorded.

4.3.6 Portfolio Company Management Characteristics

Studies show that the VC firms' management skills are highly associated with fund performance and that older and larger VC firms generate significantly higher returns. Replacement of portfolio companies' management also seems to have a positive effect on performance. The study asked the average experience of the portfolio company managers.

Figure 4.4: Portfolio Company management Characteristics

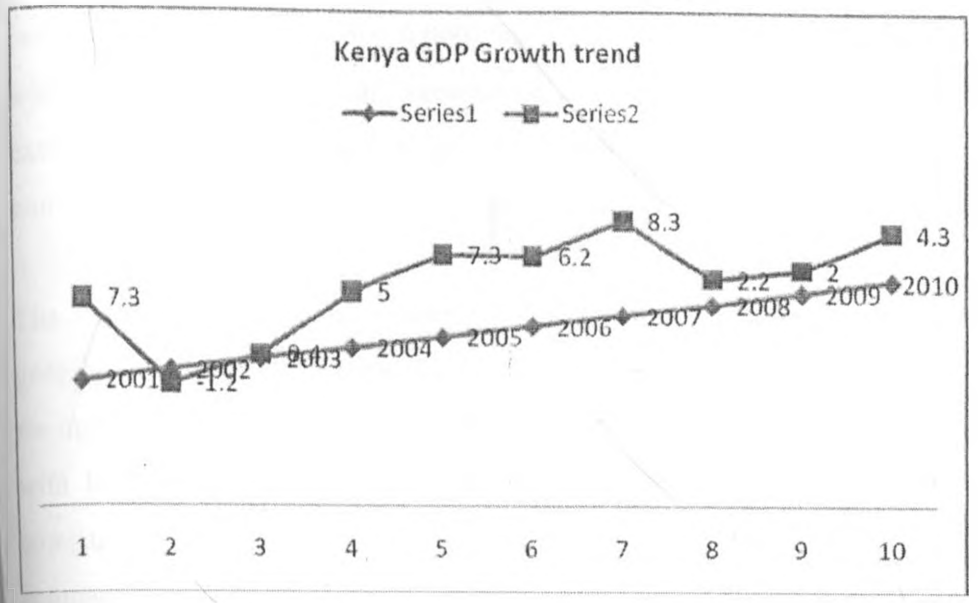


Source: Research data, 2011

4.3.7 External environmental factors

The institutional and environmental factors relate to areas outside VC firms or their portfolio companies. The vast majority of these factors such as state of stock markets, capital gains taxation, regulation of pension funds, the growth of market capitalization, returns on investment in quoted companies, the rigidity of the labor markets, GDP growth influence the supply of or demand for venture capital. The levels of GDP growth in Kenya for the period of study (2001 – 2010) exhibits.

Figure 4.5: GDP growth rate in Kenya



Source: Research data, 2011

4.4 Discussion of the Results

From the results, all the independent variables are, as would be expected, positively correlated to venture capital firm performance. However, the level of significance of the correlations to Venture capital performance varies between the independent variables. The strongest correlation exists between the Portfolio company management characteristics, and portfolio company characteristics and Venture capital performance with a statistically significant correlation at 1 percent level ($r = 0.539$, $p = 0.157$). This is followed by the GDP growth rate that proxy External environmental factors with a statistically significant correlation at 1 percent level ($r = .507$, $p = 0.000$), the investment process has a statistically significant correlation at 1 percent level ($r = 0.249$, $p = 0.008$), the exit process has a statistically significant correlation at 1 percent level ($r = 0.223$, $p = 0.015$) and venture capital characteristics statistically significant correlation at 1 percent level ($r = 0.220$, $p = 0.012$).

There were also some strong correlations between the independent variables themselves. investment process is correlated to exit process with a statistically significant correlation at 1 percent level ($r = 0.477$, $p = 0.000$) just like portfolio company management and exit process with a statistically significant correlation at 1 percent level ($r = 0.380$, $p = 0.000$). Similarly, external environmental factors and exit process were correlated with a statistically significant correlation at 1 percent level ($r = 0.368$, $p = 0.000$).

The Portfolio companies of venture capital firms have diverse industry sector backgrounds, geographical areas or development stages. However, there is an indication of strong preference for mature firms by the venture capitalists. None of the companies have invested in beneficiaries with less than a five year age since inception. A majority of the funds at 40% invest in companies that have between 15 and 20 years in age since inception. The lower participation in companies with 20 years and above age band can be explained by the findings of De Clercq and Dimov (2003) who found a negative correlation between portfolio companies age and performance, i.e. investing in older companies is associated with lower performance. In some sense, the findings support the theoretical claim made by Amit et al. (1990) that, because of VC firms' preoccupation with limiting adverse selection in an environment laden with information asymmetry, the best companies would avoid applying for venture capital. Thus, the older companies in VC portfolios, i.e. those that better know their true worth, tend to be of lower quality.

Generally, the funding for the projects and deal generation and successful completion seem low scale as only 56 deals have been generated in the past and 22 successfully concluded. Exit processes from these beneficiaries by the VCs seem non - existent leading to a review of the available avenues for VCs to exit from beneficiaries such as; listing the company through an IPO, in which a significant portion of the firm is sold into the public market; an acquisition by industrial trade buyers, in which the entire firm is bought by a third party; a secondary sale, often financial buyout by other private equity firms; a buyback, in which the VCs shares are repurchased by the entrepreneurs; and a write-off, in which the VC walks away from the investment.

4.5 Summary

The study sought to establish the factors that influence the performance of VC firms in Kenya. From the results, all the independent variables are, as would be expected, positively correlated to venture capital firm performance computed as the respective funds IRR. The independent variables considered are Portfolio Company characteristics, Venture Capital characteristics, Exit process, Investment process, Portfolio Company management and External environmental factors. However, the level of significance of the correlations to Venture capital performance varies between the independent variables. There were also some strong correlations between the independent variables themselves.

CHAPTER FIVE
DISCUSSION, CONCLUSSIONS AND RECOMMENDATIONS

5.1 Introduction

The final chapter summarizes the findings, draws conclusions and also sets out recommendations for the study. In Section 5.2, the summary of the findings are outlined, Section 5.3 outline the conclusions from the findings, and Section 5.4 provides recommendations. A suggestion for further research is provided at the end of the chapter in section 5.5.

5.2 Summary of the Study

The study sought to establish the factors that influence the performance of VC firms in Kenya. Based on the data analyzed and the results presented in chapter four, all the variables identified as determinants of VC firm performance namely; portfolio company characteristics, Venture capital characteristics, Investment process, exit process, Portfolio Company management and External environmental factors all explain levels of performance measured by the internal rate of return (IRR) with varying degrees of significance.

The Portfolio companies of venture capital firms have diverse industry sector backgrounds, geographical areas or development stages. However, there is an indication of strong preference for mature firms by the venture capitalists. None of the companies have invested in beneficiaries with less than a five year age since inception. A majority of the funds at 40% invest in companies that have between 15 and 20 years in age since inception. The lower participation in companies with 20 years and above age band can be explained by the findings of De Clercq and Dimov (2003) who found a negative correlation between portfolio companies age and performance, i.e. investing in older companies is associated with lower performance. In some sense, the findings support the theoretical claim made by Amit et al. (1990) that, because of VC firms' preoccupation with limiting adverse selection in an environment laden with information asymmetry, the best companies would avoid applying for venture capital. Thus, the older companies in VC portfolios, i.e. those that better know their true worth, tend to be of lower quality.

Generally, the funding for the projects and deal generation and successful completion seem low scale as only 56 deals have been generated in the past and 22 successfully concluded. Exit processes from these beneficiaries by the VCs seem non existent leading to a review of the available avenues for VCs to exit from beneficiaries such as; listing the company through an IPO, in which a significant portion of the firm is sold into the public market; an acquisition by industrial trade buyers, in which the entire firm is bought by a third party; a secondary sale, often financial buyout by other private equity firms; a buyback, in which the VCs shares are repurchased by the entrepreneurs; and a write-off, in which the VC walks away from the investment.

The regression coefficients are both individually and jointly statistically significant. From the values of the coefficients, the independent variables, External environmental factors and venture capital characteristics influences venture capital firm performance the most (beta = 0.295), followed by portfolio company management (beta = 0.280), then exit process (beta = 0.258), portfolio company characteristics (beta = 0.234), and then investment process (beta = 0.232).

5.3 Conclusions

From the study findings, the following may be noted; there is a relationship between venture capital performance and the explanatory variables considered in the study namely; portfolio company characteristics, Venture capital characteristics, Investment process, exit process, Portfolio Company management and External environmental factors.

There are also some notable strong correlations between the independent variables themselves. Investment process is correlated to exit process with a statistically significant correlation at 1 percent level ($r = 0.477$; $p = 0.000$), portfolio company management and exit process are correlated with a statistically significant correlation at 1 percent level ($r = 0.380$, $p = 0.000$). Similarly, external environmental factors and exit process were correlated with a statistically significant correlation at 1 percent level ($r = 0.368$, $p = 0.000$). The study answered the question of the determinants of VC firm performance and the levels of significance of the relationships.

5.4 Recommendations

From the study findings, there is an indication that a positive relationship does exist between Venture capital performance on one hand and portfolio company characteristics, venture capital characteristics, investment process, exit process, portfolio company management and external environmental factors on the other hand.

The study therefore recommends that for vibrant growth in this industry, the players should work on improving the necessary aspects that influence its vibrancy. There should be improved exit options avenues and stable socio political environment that spurs economic growth.

5.5 Limitations of the study

The study only captured 12 venture capital firms listed by CMA and operational in Kenya. Only 10 respondents participated which may not give a generalizable representative picture of determinants of venture capital firm financial performance. The study was also constrained by time and financial resources.

Also amply stated, the operation volumes of VC industry in Kenya are still small in scale. Venture capital firms account for a tiny share of the financial market. The venture capital industry is still in its early years of operation.

5.6 Suggestions for future Research

On further research, the study recommends that there is need to replicate the study to involve more venture capital corporations within the East African community. Future studies should attempt to use a larger sample so that the results can be generalized. There is also need to assess other potential determinants that determine firm performance like competitive strategies.

REFERENCES

Admati, A. and Pfleiderer, P. (1994). Robust financial contracting and the role of venture capitalists. *Journal of Finance, 49*(2), p. 371-402.

Amit, R., Glosten, L. and Muller, E. (1990). Entrepreneurial ability, venture investments, and risk sharing. *Management Science, 36*(10), p. 1232-1245.

Armour, J. and Cumming, D. (2004). The legal road to replicating Silicon Valley. *Working Paper No. 281.* ESRC Centre for Business Research, University of Cambridge.

Artus, P., Teïletche, J., Kaserer,C. and Diller, C. (2004). Performance measurement and asset allocation for European private equity funds. *EVCA Paper*, www.evca.com.

Avnimelech, G., Kenney, M. and Teubal, M. (2004). Building venture capital industries: Understanding the U.S. and Israeli experiences. *Working Paper Series No. 1059.* UCAIS Berkeley Roundtable on the International Economy, UC Berkeley.

Barnes, E. and McCarthy, Y. (2002). Grandstanding in the UK venture capital industry. *Working Paper*, EFMA 2002 London Meetings.

Barney, J., Busenitz, L., Fiet, J. and Moesel, D. (1996). New venture teams' assessment of learning assistance from venture capital firms. *Journal of Business Venturing, 11*(4), p. 257-272.

Barry, C. B. (1994). New directions in research on venture capital finance. *Financial Management, 23*(3), 3-15.

Black, B. and Gilson, R. (1998). Venture capital and the structure of capital markets: Banks versus stock markets. *Journal of Financial Economics, 47*(3), p. 243-277.

Black, B. and Gilson, R. (1999). Does venture capital require an active stock market? *Journal of Applied Corporate Finance, 11*(4), p. 36-48.

Bottazzi, L. and Da Rin, M. (2003). Financing entrepreneurial firms in Europe: Facts, issues, and research agenda. *Working Paper No. 958.* CESifo.

Brav, A. and Gompers, P. (1997). Myth or Reality? The long-run underperformance of initial public offerings: Evidence from venture and non-venture capital-backed companies. *Journal of Finance, 52*(5), p. 17911821.

BVCA (2004). *BVCA private equity and venture capital performance measurement survey 2003.* PriceWaterHouseCoopers and BVCA, www.bvca.co.uk.

BVCA (2005a). *BVCA private equity and venture capital performance measurement survey 2004.* PriceWaterHouseCoopers and BVCA, www.bvca.co.uk.

BVCA (2005b). *BVCA report on investment activity.* PriceWaterHouseCoopers and BVCA, www.bvca.co.uk.

Bygrave, W., Hay, M. and Reynolds, P. (2002). A study of informal investing in 29 nations composing the Global Entrepreneurship Monitor (GEM). *Frontiers of Entrepreneurship Research,* 2002 XII, Babson College.

Bygrave, W. and Hunt, S. (2004). Global Entrepreneurship Monitor (GEM): 2004 Financing report. *Frontiers of Entrepreneurship Research,* 2002 XII, Babson College.

Capital Markets Authority. (2003). Annual report and review of the capital markets operations for the period ended December 31, 2002. Retrieved from www.cma.or.ke/index.php?option=com_docman&task=doc

Capital Markets Authority. (2007). Capital Markets (Registered Venture Capital Companies) Regulations, 2007. *Legal Notice 183*, September 21, 2007

Capital Markets Authority. (2008*). List of Licensees approved institutions and approved Collective Investment Schemes– 2008 by the Capital Markets Authority* (July, 2009). Retrieved from *www.cma.or.ke/index.php?option=com_docman&task=doc*

Chen, P., Baierl, G. and P. Kaplan (2002). Venture capital and its role in strategic asset allocation. *Journal of Portfolio Management, 28*(2), p. 83-90.

Cochrane, J. (2005). The risk and return of venture capital. *Journal of Financial Economics, 75*(1), p. 3-52.

Cumming, D. (2002). Contracts and exits in venture capital finance. *Working Paper DC Meetings*, University of Alberta.

Cumming, D. and MacIntosh,J. (2003). A cross-country comparison of full and partial venture capital exits. *Journal of Banking and Finance, 27*(3), p. 511-548.

Cumming, D. and Walz, U. (2004). Private equity returns and disclosure around the world. *CFS Working Paper No 2004/05.*

Collier, P. (2009). Rethinking finance for Africa's small firms. *SME Financing in Sub-Saharan Africa. Private Sector & Development: PROPARCO'S Magazine*. Issue 1

Cumming, D. (2007). Financing entrepreneurs. Better Canadian policy for venture Capital. *C.D. Howe Institute Commentary,* No. 247, 1-23.

Das, S., Jagannathan, M. and Sarin, A. (2003). Private equity returns: An empirical examination of the exit of venture-backed companies. *Journal of Investment Management, 1*(1), p. 1-26.

Davila, A., Foster, G. and Gupta, M. (2000). Venture-capital financing and the growth of startup firms. *Research paper No. 1667.* Graduate School of Business, Stanford University.

De Clercq, D. and Dimov, D. (2003). A knowledge-based view of venture capital firms' portfolio investment specialization and syndication. *Frontiers of Entrepreneurship Research,* 2003 III, Babson College.

De Lima Ribeiro et al.(2006). *Private Equity and Venture Capital in an Emerging Economy: Evidence from Brazil.* Retrieved from www.ssrn.com/so3/papers.cfm?abstract_id=912523

Dickinson, T. (2008). Private equity: An eye for investment under African skies? *OECD Development Centre Policy insights, No.60.* Retrieved from www.oecd.org/dev/insights.

Diller, C. and Kaserer, C. (2005). What drives cash flow based European private equity returns? Fund inflows,skilled GPs, and/or risk? *Working Paper No. 015.* RICAFE - Risk Capital and the Financing of EuropeanInnovative Firms.

Dossani, R. & Kenney, M. (2002). Creating an environment: Developing venture capital in India. *BRIE Working Paper 143,* pp.1-57. Retrieved from *brie.berkeley.edu/publications/wp143 pdf.*

Emery, K. (2003). Private equity risk and reward: Assessing the stale pricing problem. *Journal of Private Equity, 6*(2), p. 43-50.

Engel, D. (2002). The impact of venture capital on firm growth: An empirical investigation. *Discussion PaperNo. 02-02*. ZEW, Rheinisch-Westfälisches Institut für Wirtschaftsforschung.

Fender, I. (2003). Institutional asset managers: Industry trends, incentives and implications for marketefficiency. *BIS Quarterly Review*.

Fleming, G. (2004). Venture capital returns in Australia. Venture Capital: An International. *Journal of Entrepreneurial Finance, 6*(1), p. 23-45.

Fried, V., Bruton, G. and Hisrich, R. (1998). Strategy and the board of directors in venture capital-backed firms. *Journal of Business Venturing, 13*(6), p. 493-503.

Fried, V. and Hisrich, R. (1994). Toward a model of venture capital investment decision making. *Financial Management, 23*(3), p. 28-37.

Gilson, R. J. (2003). Engineering a venture capital market: Lessons from the American experience. *StanfordLaw Review, 55*. p. 1067-1103.

Giot, P. and Schwienbacher, A. (2005). IPOs, trade sales and liquidations: Modelling venture capital exits using survival analysis. *Economics Working Paper No 0312006*. Archive at WUSTL.

Goldfarb,. B. and Henrekson, M. (2003). Bottom-up versus top-down policies towards the commercialization ofuniversity intellectual property. *Research Policy, 32*(4), p. 639-658.

Gompers, P. (1995). Optimal investment, monitoring, and the staging of venture capital. *Journal of Finance, 50*(5), p. 1461-1489.

Gompers, P. (1996). Grandstanding in the venture capital industry. *Journal of Financial Economics, 42*(1), p. 133-156.

Gompers, P., Kovner, A., Lerner, J. and Scharfstein, D. (2004). *Venture Capital Investment Cycles: The Role of Experience and Specialization.* (Unpublished Working Paper).

Gompers, P. and Lerner, J. (1998). What drives venture fundbaising? *Brookings Papers on Economic Activity Microeconomics*, p. 149-192.

Gompers, P. an$ Ldrner, J. (1999). An analysis of com`enration in the U.S. venture capital partnership. *Journal of Financial Economics, 51*(1), p. 3-44.

Gompers, P. and Lerner, J. (1999b). *The venture capital cycle*. The MIT Press: Cambridge, MA.

Gompers, P. and Lerner, J. (2000). Money bhasing deals? The impact of fund inflows on the valuation of private equity investments. *Journal of Financial Economics, 55*(2), p. 281-325.

Gompers, P. and Lerner, J. (2001a). *The money of invention: How venture capital creates new wealth.* HarvardBusiness School Press: Boston, MA.

Gompers, P., & Lerner, J. (2001). The venture capital revolution. *Journal of Economic Perspectives, 15*(2), 145-168

Gompers, P., & Lerner, J. (2004). *The venture capital cycle* (2nd Ed.). Cambridge, MA: MIT Press.

Gompers, P. and Metrick, A. (2001). Institutional investors and equity prices. *Quarterly Journal of Economics, 166*(1), p. 229-259.

Gorman, M. and Sahlman, W. (1989). What do venture capitalists do? *Journal of Business Venturing, 4*(4), p. 231-248.

Gottschalg, O., Phalippou, L. and Zollo, M. (2004). Performance of private equity funds: Another puzzle? *Working Paper*, INSEAD.

Gupta, A. and Sapienza, H. (1992). Determinants of venture capital firms: Preferences regarding the industry diversity and geographic scope of their investments. *Journal of Business Venturing, 7*(5), p. 347-362.

Hall, G. and Tu, C. (2003). Venture capitalists and the decision to invest overseas. Venture Capital: An International. *Journal of Entrepreneurial Finance, 5*(2), p. 181-190.

Hege, U., Palomino, F. and Schwienbacher, A. (2003). Determinants of venture capital performance: Europe and the United States. *Working Paper No. 001*. RICAFE – Risk Capital and the Financing of European Innovative Firms.

Hellman, T. (2000). *Developing a venture capital industry.* Comments prepared for the World Development Report Study Conference, February 2000, Villa Boersig, Berlin.

Hellman, T. (1998). The allocation of control rights in venture capital contracts. *Rand Journal of Economics, 29*(1), p. 57-76.

Hellman, T., Lindsey, L. and Puri, M. (2004). Building relationships early: Banks in venture capital. *NBER Working Paper No. W10535*. National Bureau of Economic Research.

Hellman, T. and Puri, M. (2002). Venture capital and the professionalization of start-up firms: Empirical evidence. *Journal of Finance, 57*(1), p. 169-197.

Hochberg, Y., Ljungqvist, A. and Lu, Y. (2004). Who you know matters: Venture capital networks and investment performance. *Working Paper*, Johnson School of Management, Cornell University.

Hsu, D. (2004). What do entrepreneurs pay for venture capital affiliation? *Journal of Finance, 59*(4), p. 1805-1844.

Huntsman, B. and Hoban, J. (1980). Investments in new enterprise: Some empirical observations on risk return, and market structure. *Financial Management, 9*. p. 44-51.

Jain, B. and Kini, O. (2000). Does the presence of venture capitalists improve the survival profile of IPO firms? *Journal of Business Finance and Accounting, 27*(9 and 10), p. 1139-1160.

Jeng, L. and Wells, P. (2000). The determinants of venture capital funding: Evidence across countries. *Journal of Corporate Finance, 6*. p. 241-289.

Jensen, M. (2002). Securing venture capital: Today's realities. *Financial Executive, 18*(6), p. 43-46.

Jones,C. and Rhodes-Kropf, M. (2003). The price of diversifiable risk in venture capital and private equity. *Working paper*, Collumbia University.

Jääskeläinen, M., Maula, M. and Seppä, T. (2002). The optimal portfolio of start-up firms in venture capital finance: The moderating effect of syndication and an empirical test. *Frontiers of Entrepreneurship Research,* 2002(XIII), Babson College.

Jääskeläinen, M., Maula, M. and Seppä, T. (2003). Allocation of attention and the performance of venture capitalist. *Working paper C24.* Helsinki University of Technology.

Kaplan, S. N., & Stromberg, P. (2003). Financial contracting theory meets the real world: An empirical analysis of venture capital contracts. *Review of Economic Studies, 70,* 281-315.

Kaplan, P., Martel, F. and Strömberg, P (2003). How do legal differences and learning affect financial contracts? *Working Paper,* University of Chicago.

Kaplan, S. and Schoar, A. (2003). Private equity performance: Returns, persistence and capital flows. *NBER Working Paper No. W9807.* National Bureau of Economic Research.

Kauffmann, C. (2005). Financing SMEs in Africa. *OECD Development Centre Policy Insights, No.7.* Retrieved from www.oecd.org/dev/insights

Kim, J., & Mahoney, J. (2005). Property rights theory, transaction costs theory and agency theory: An organisational economics approach to strategic management. *Managerial and Decision Economics, 26,* 223-342

Klonowski, D. (2006). Venture capital as a method of financing enterprise development in Central and Eastern Europe. *International Journal of Emerging Markets, 1*(2), 165-175.

Kortum, S. and Lerner, J. (1998). Does venture capital spur innovation? *NBER Working Paper No. W6846.* National Bureau of Economic Research.

La Porta, R., Lopez-de-Silanes, F., Shleifer, A. and Vishny, R. (1998). Law and finance. *Journal of Political Economy, 106*(6), p. 1113-1155.

Laine, M. and Torstila, S. (2004). The exit rates of liquidated venture capital funds. *Working Paper, Forthcoming in Journal of Entrepreneurial Finance and Business Ventures.*

Lakonishok, J., Schleifer, A., Thaler, R. and Vishny, R. (1991). Window dressing by pension fund managers. *American Economic Review, 81*(1), p. 227-231.

Landier, A. (2001). *Start-up financing: Banks vs. venture capital.* Mimeo, MIT.

Leeds, R., & Sunderland, J. (2003). Private equity investing in emerging markets. *Journal of Applied Corporate Finance, 1*(4), 8-16.

Leleux, B. and Surlemont, B. (2003). Public versus private venture capital: Seeding or crowding out? A pan-European analysis. *Journal of Business Venturing, 18*(1), p. 81-104.

Lerner, J. (1994). The syndication of venture capital investments. *Financial Management, vol. 23*(3), p. 16-27.

Lerner, J. (1996). The government as venture capitalist: The long-run impact of the SBIR program. *NBER Working Paper No. W5753.* National Bureau of Economic Research.

Lerner, J. and Schoar, A. (2004). The illiquidity puzzle: Theory and evidence from private equity. *Journal of Financial Economics, 72*(1), p. 3-40.

Lerner, J. and Schoar, A. (2005). Does legal enforcement affect financial transactions? The contractual channel in private equity. *Quarterly Journal of Economics, 120*(1), p. 23-2460.

Mayer, C., Schoors, K. and Yafeh, Y. (2003). Sources of funds and investment activities of venture capital funds: Evidence from Germany, Israel, Japan and the UK. *NBER Working Paper No. 9645*. National Bureau of Economic Research.

McCahery, J. and Vermeulen, E. (2004). Limited partnership reform in the United Kingdom: A competitive, venture capital oriented business form. *European Business Organization Law Reviews, 5*. p. 61-85.

Megginson, W. (2002). Towards a global model of venture capital? *Journal of Applied Corporate Finance,* fourthcoming.

Megginson, W. and Weiss, K. (1991). Venture capitalist certification in initial public offerings. *Journal of Finance, 46*(3), p. 879-903.

Murray, G. (1999). Early-stage venture capital funds, scale economies and public support. *Venture Capital: An International Journal of Entrepreneurial Finance, 1*(4), p. 351-384.

Nishith Desai Associates. (2009). *Private equity and strategic investments in India - An overview.* Retrieved from www.altassets.com/casefor/countries/2009/nz15588.php

Nowak, E., Knigge, A. and Schmidt, D. (2004). On the performance of private equity investments: Does market timing matter? *Working paper,* EFMA 2004 Basel Meetings Paper.

Pearce, R., & Barnes, S. (2006). *Raising venture capital.* West Sussex: John Wiley & Sons, Ltd

Pfeil, A. (2000). Venture capital. New ways of financing technology innovation. Second draft, *Human Development Report Office*

Porteba, J. (1989). *Venture capital and capital gains taxation.* In Lawrence Summers (ed.) Tax Policy and the Economy. Cambridge: MIT Press.

Powell, W., Koput, K., Bowie, J. and Smith-Doerr, L. (2002). The spatial clustering of science and capital: Accounting for biotech firm-venture capital relationships. *Regional Studies, 36*(3), p. 291-305.

Quigley, J. and Woodward, S. (2003). An index for venture capital. *Working Paper* E03-333. Economics Department, University of California, Berkeley.

Rigouzzo, L. (2009). Editorial. *SME Financing in Sub-Saharan Africa. Private Sector & Development: PROPARCO'S Magazine*. Issue 1.

Romain, A. and Van Pottelsberghe de la Potterie, B. (2004a). The determinants of venture capital: A panel analysis of 16 OECD countries. *Working Paper WP-CEB 04/015.* Université Libre de Bruxelles.

Romain, A. and Van Pottelsberghe de la Potterie, B. (2004b). The economic impact of venture capital. *Discussion Paper series 1. No. 18/2004.* Studies of Economic Research Center.

Rosenstein, J., Bruno, A., Bygrave, W. and Tylor, N. (1993). The CEO, venture capitalists, and the board. *Journal of Business Venturing, 8*(2), p. 99-113.

Sacerdoti, E. (2009). Credit to the Private Sector in Sub-Saharan Africa: Developments and Issues. *SME financing in Sub-Saharan Africa. Private Sector & Development: PROPARCO'S Magazine*. Issue 1.

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

Sapienza, H. (1992). When do venture capitalists add value? *Journal of Business , 7*(1), p. 9-27.

Sapienza, H., Manigart, S. and Vermeir, W. (1996). Venture capitalist governance and value added in four countries. *Journal of Business Venturing, 11*(6), p. 439-469.

Schmidt, D. (2004). Private equity-, stock- and mixed asset-portfolios: A bootstrap approach to determine performance characteristics, diversification benefits and optimal allocations. *Working Paper No. 2004/12*. CFS.

Schneeweis, T. and Pescatore, J. (1999). *The handbook of alternative investment strategies: An investor's guide*. Institutional Investor.

Schwienbacher, A. (2002). An empirical analysis of venture capital exits in Europe and in the United States. *Working Paper*, University of Amsterdam - Finance Group.

Sekaran, U. (2003): *Research Methods for Business: A Skill Building Approach*. John Wiley and Sons, Inc, 4th Ed., pp. 88.

Seppä, T. and Jääskeläinen, M. (2002). How the rich become richer in venture capital: Firm performance and position in syndication network. *Frontiers of Entrepreneurship Research*, 2002(XIII), Babson College.

Shepherd, D., Andrew, Z. and Baron, R. (2003). VCs' decision processes: Evidence suggesting more experience may not always be better. *Journal of Business Venturing, 18*(3), p. 381-401.

Smith, J.A. (2005). Empirical study of a venture capital relationship. *Accounting, Auditing & Accountability Journal, 18*(6), 756-783.

Soderblom, A. (2006). *Factors determining the performance of early stage high technology venture capital funds, a review of the academic Literature*, Stockholm school of Economics.

Sorenson, O. and Stuart, T. (2001). Syndication networks and the spatial distribution of venture capital investments. *American Journal of Sociology, 106*(6), p. 1546-1588.

Szerb, L. & Varga, A. (2002). *High tech venture capital investment in a small transition Country: The case of Hungary.* Paper presented at the International Conference on the theme jointly organized by UNU/INTECH and EU-DG Research at Brussels, November 7-8, 2002.

Tannon, J. and Johnson, R. (2005). Transatlantic private equity: Beyond a trillion dollar force. *Journal of Private Equity, 8*(3), p. 77-80.

Tromp, L. A. Delno and Kombo K. D. (2006) *Proposal and Thesis Writing: An Introduction.* Kolbe Press, Paulines Publications Africa: 16.

UNIDO. (2001). *Venture Capital for Industrial Development.* Note for the preparation of the Finance for Development Conference. Retrieved from www.arp.harvard.edu/AfricaHigherEducation/Reports/UNIDO-VC.pdf

Woodward, S. and Hall, R. (2004). Benchmarking the returns to venture. *NBER Working Paper No. W10202.* National Bureau of Economic Research.

Wright, M. and Robbie, K. (1998). Venture capital and private equity: A review and synthesis. *Journal of Business Finance and Accounting, 25*(5-6), p. 521-569.

Wright et al. (2005). International venture capital research: from cross-country comparisons to crossing borders. *International Journal of Management Review, 7*(3), 1-25.

Zaaruka, B. P., Uanguta, E., & Kadhikwa, G. (2005). Private Equity: Lesson for Namibia. *BoN Occasional Paper,* OP-2/2005

Zacharakis, A. and Shepherd, D. (2001). The nature of information and overconfidence on venture capitalists' decision making. *Journal of Business Venturing, 16*(4), p. 311-332.

Zavatta, R. (2008). Financing technology entrepreneurs & SMES in developing countries: challenges and opportunities. *An infoDev Kenya Countpy study.* Retrieved from www.infmdev.orc/en/Publications.546.html

APPENDICES

Appendix One: Letter of Introduction

17th August, 2011

Scoline A. Ojung'a
P. O Box 19478 – 00100,
Nairobi – KENYA.

Dear.Respondent,

RE: RESEARCH PROJECT

I am a graduate student at the School of Business, University of Nairobi. In partial fulfilment of the requirements for the award of a Master degree in Business Administration (MBA), I am conducting a research titled *Determinants of performance of Venture Capital Firms in Kenya.* You have been selected to assist in providing the required information as your views are considered important to this study. I am therefore kindly requesting you to fill this questionnaire/ interview guide.

Please note that any information given will be treated with utmost confidentiality and will only be used for the purposes of this study.

Thank you.

Yours faithfully,

Scoline A. Ojung'a

Appendix Two: Interview guide for Venture Fund Managers

PART A

General Information.

Please tick or fill as appropriate

1. Name .....(Optional)
2. Job Title.....
3. Department.....
4. Name of Institution/ Company.....
5. Year of establishment of the Institution/ Company.....
6. Ownesrhip/ Sponsor/ Promoter of the Institution/ Company.....

Relationship with Venture Capital Beneficiaries

7. How many venture Capital business proposals have you considered since inception?.....
8. What is the value of these proposals?.....
9. Of these proposals, How many have you funded?.....
10. What is the value of the funded proposals?.....
11. What number of years has your fund manager for each of the proposals have in related work experience?.....
12. What number of years has your fund had previous venture capital partnerships for each of the proposals funded?.....
13. What is the number of years of experience for the senior most manager in your fund portfolio company?.....
14. What are the respective years of experience in the lines of the business for the funded proposals of the beneficiary companies?.....
15. Your funds total interest in venture capital business is to what extent?.....
16. Does this exhaust your ability/ financial resources available? Yes ( ) No ( )

17. If no as above, what amongst the following factors are the challenges from channeling more funds in the market. (Tick appropriately)

Factor	Response	
	Yes	No
Stock exchange Vibrancy		
Government Policy		
Human Resource Competency in the beneficiaries		
Regulatory Framework		
Legal Framework		
Entrepreneurial opportunities		

18. Evaluate the extent To which the following factors affect the performance of the venture Capital firm/fund. (1 & 2 Minimal; 3 Moderate; 4&5 Very Much)

Write a number in the blank beside the statement, based on the following scale:

1----------2----------3----------4----------5

Minimal ***Moderate*** ***Very Much***

____ 1) Portfolio Company Characteristics

____ 2) Volume of Investments in the portfolio

____ 3) Volume of deals generated and successfully negotiated

____ 4) Availability of qualified Venture Capital personnel

____ 5) Availability of knowledgeable Venture Capital personnel

____ 6) Exit process

____ 7) Regulatory provisions of the Capital Markets authority on venture capital funds

____ 8) Registration requirements by the Capital markets authority on venture capital funds

____ 9) Legal provisions for investor protection

____ 10) Existence of viable business opportunities that interests the Venture Capitalists

____ 11) Overall economic performance

Thank you for your support.

Appendix Three: List of Venture Capital firms in Kenya

1. Acacia Fund Limited
2. Acumen Fund
3. African Agricultural Capital
4. Africa Invest Capital Partners
5. Aureos Kenya Managers Limited
6. Business Partners International Limited
7. Centum Investments
8. Fanisi Fund
9. Grofin East Africa
10. InvesteQ Capital Limited
11. Miliki Ventures
12. Transcentury Kenya

Source: Zavatta (2008)

Appendix Four: Research Data

vcp	pc	vc	in	pco	pco1	ex	ee	ee1	ee2	ee3	ee4	pcoch	vcch	invp	EXTP	PCOMGT	EEF
0.1572	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	5.00	4.00	4.00	4.00	4.00	4.00	4.33	4.13
0.1662	4.00	5.00	4.00	4.00	5.00	3.00	4.00	4.00	5.00	5.00	4.00	4.00	5.00	4.00	3.00	4.33	4.40
0.5115	4.00	4.00	5.00	4.00	5.00	3.00	3.00	4.00	5.00	5.00	4.00	4.00	4.00	5.00	3.00	4.50	4.13
0.2846	4.00	4.00	4.00	4.00	5.00	4.00	4.00	4.00	4.00	5.00	4.00	4.00	4.00	4.00	4.00	4.33	4.27
0.1158	3.00	3.00	3.00	3.00	5.00	3.00	4.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.83	3.40
0.1320	3.00	3.00	4.00	4.00	4.00	3.00	3.00	4.00	4.00	4.00	4.00	3.00	3.00	4.00	3.00	3.83	3.73
0.1208	3.00	4.00	3.00	4.00	4.00	3.00	3.00	4.00	4.00	4.00	4.00	3.00	4.00	3.00	3.00	3.75	3.70
0.2102	4.00	3.00	3.00	3.00	5.00	3.00	3.00	3.00	4.00	3.00	4.00	4.00	3.00	3.00	3.00	3.75	3.40
0.1926	4.00	3.00	3.00	3.00	4.00	3.00	3.00	4.00	4.00	4.00	4.00	4.00	3.00	3.00	3.00	3.13	3.60
0.1677	4.00	3.00	3.00	3.00	4.00	3.00	3.00	3.00	4.00	4.00	4.00	4.00	3.00	3.00	3.00	3.63	3.65