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FINANCING SMEs IN GHANA USING ISLAMIC VENTURE CAPITAL: STRUCTURING AND INVESTMENT PROTECTION

Presented by:

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For partial fulfilment of the requirement for Master of Science in Islamic Finance

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ABSTRACT

The main objective of the study is to explore how VC in an Islamic frame can be used to finance SMEs and start-ups in Ghana with focus on investment protection. The study is aimed at looking at how IVC can be structured and how *Shari'ah*-compliant instruments can be used to protect investments and attract investors which have been lacking in the literature. The findings of the research demonstrate that there are *Shari'ah*-compliant instruments available for IVC that can be used to protect investments and incentivise potential investors into IVC. Preference Shares, Perpetual *Mudharabah*, *Musharakah* with *Murabahah, Musharakah* with *Qard*, Negligence Clauses, Liquidation preference, Diminishing *Musharakah*, Warrants, and Supermajority Clauses can all be used with appropriate conditions to protect investors and offer incentives for them to invest in IVC. The trump card in the use of these instruments is that their application will not lead to *Riba* or guarantee of returns in respective contracts. The research concludes that IVC operations in Ghana will have an impact by stimulating job creation, driving technological innovation, improving financial inclusion and more broadly, will lead to economic growth. Recommendations are presented which will ensure that IVC ecosystem will be developed to support SMEs development for economic growth and development.

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LIST OF ABBREVIATIONS

AAOIFI	Accounting and Auditing Organisation of Islamic Financial Institutions
ADB	Agricultural Development Bank
AVFC	Activity Venture Finance Company
BOG	Bank of Ghana
DCF	Discounted Cash Flow
EFL	Ebankese Fund Limited
FCPL	Fidelity Capital Partners Limited
GAIN	Ghana Angel Investment Network
GAX	Ghana Alternative Market
GCSL	Gold Coast Securities Limited
GDP	Gross Domestic Product
GIRI	Ghana Institute for Responsible Investing
GLSS	Ghana Living Standard Survey
GVCTF	Ghana Venture Capital Trust Fund
IBBL	Islamic Bank Bangladesh Limited
IBES	Integrated Business and Enterprise Survey
IDB	Islamic Development Bank
IPO	Initial Public Offer
IVC	Islamic Venture Capital
IVCC	Islamic Venture Capital Company
MDG	Millennium Development Goals
MPB	*Mudharabah* Perpetual Bond
NBSSI	National Board for Small Scale Industries
NEIP	National Entrepreneurship and Innovation Plan
NIB	National Investment Bank
NSEZ	Northern as Savannah Ecological Zone
OIC	Organisation of Islamic Coorporation
PE	Private Equity

SADA	Savanah Accelerated Development Authority
SDG	Sustainable Development Goals
SEC	Security Exchange Commission
SMEs	Small and Medium Enterprises
TA	Technical Assistance
TRF	The Rockefeller Foundation
VC	Venture Capital
VCFCs	Venture Capital Finance Companies
VCP	Value Chain Projects
WB	World Bank

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DEDICATION

This thesis is dedicated to Almighty Allah for His Blessings in the pursuit of this Master's degree.

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CHAPTER 1

INTRODUCTION

1.1 Background

Economic development requires among others financial resources, and Islamic financial institutions have an important role to play as financial intermediaries to provide the needed financial credit to businesses for productive use. Expectations are that Islamic finance is superior to conventional finance because it is based on a comprehensive worldview and tied to religious ethos. As a consequence, it is expected that Islamic finance promotes economic development because of its multiple objectives better than the one-directional profit-driven conventional finance (Nienhaus, 2015).

Islamic finance continues to see significant growth over its 40-year existence with US$ 1.81 trillion in global assets as at 2014 with an annual growth rate of almost 10% over 2013. Total Islamic finance assets and are forecasted to reach US$3.25 trillion out of which total banking assets will be US$ 2.6 trillion by 2020(Thomson Reuters, 2016). This mega trends is recognized by many stakeholders in the global finance industry and some describe it as shifting from “a very esoteric asset class to one that’s more… global” (The Economist, 2014). This shows the acceptability of Islamic banking model in the world especially in the Middle East, North Africa and Asia.

On a closer look at the Islamic finance industry trajectory, it is observed that Islamic finance sector growth apart from some countries in Southeast Asia and the Middle East, is paralleled with a rise in poverty levels in many Muslim countries (Obaidullah and Khan, 2008). In addition to this, the target for the Millennium Development Goals (MDG) for the year 2015 was not reached, and in spite of the achievement chalked in a number of areas, the prime important target of reducing absolute poverty remains a distant dream in a number of Islamic Development Bank (IDB) member countries including African countries (IDB, 2009). While

Islamic banking and finance institutions have indisputably contributed to economic growth over the years, their impact on economic and social development is negligible (Asutay 2012).

It is observed anecdotally that significant number of Muslims in Sub-Sahara Africa countries are plagued with high rates of unemployment, scarcity of skills development programs, low per capita income, high population pressure, unduly large subsistence sector and low agricultural productivity. This observation is confirmed by IDB as most member countries are suffering from high levels of severe poverty (Shirazi, 2014). In some cases more than 50% of the population in some of these countries is living on less than $ 1.25 a day. Among these countries in Sub-Saharan Africa with respective percent of population under the poverty line are Niger (64.4%), Nigeria (64.4%), Burkina Faso (60%), Mozambique, (56.5%), Sierra Leone (53.4%), Uganda (51.5%) and Mali (51.4%), Benin (47.3 %), Guinea-Bissau (48.8 %). It is worth noting that the data presented here are based on the international poverty line of below income of US$ 1.25 a day, which is an overestimation of poverty incidence in some of the IDB member countries (Shirazi, 2014). Countries within this category include Mali, Mozambique, Benin, Burkina Faso, Uganda and Nigeria when compared to their national poverty lines (Shirazi, 2014). Although Ghana records a relative low rate of 28% of the population living under the poverty line, the percentage is higher in the Northern part[1] where 80% are Muslims (Please see figure 1 for the poverty distribution in Ghana).

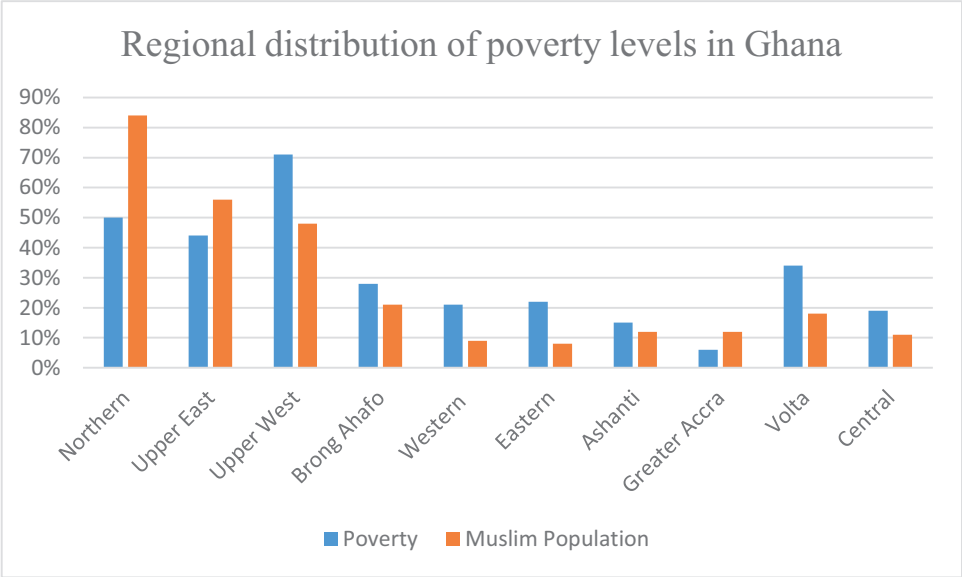
Access to finance is one of the antidotes of poverty as it creates an opportunity for people to access other essential social services. Among the numerous reasons that limit access to finance is the situation where some people are financially excluded due to religious beliefs such as *Riba* prohibition which makes some Muslims skeptical of using interest-bearing financial

[1] This consists of Northern, Upper East and Upper West regions.

instruments (FSA, 2000). This serves as an additional barrier for Muslims in Ghana to access finance to grow their businesses.

Islamic Venture Capital (IVC) is expected to play a role to spur entrepreneurship and business growth especially among Muslims in Ghana for poverty alleviation.

Figure 1 Regional distribution of poverty levels in Ghana



Source: GLSS, 2015

Critics observe that, after existing for several decades, the Islamic finance sector has done little as far as real innovation is concerned but rather mimic conventional financial products. This observation is confirmed by a number of studies including Gan, et al (2010) and Chong et al (2009) which show the correlation between profitability of Islamic banks and the change in the interest rates and monetary operations.

Niehaus (2015) opines that the practice of modern Islamic banking, has been driven by the ambition of businessmen to get the same financial services as from conventional banks, but in a *Shari'ah*-compliant form and contractual engineers with support from structuring departments of Western banks. Conventional finance practice implies a decoupling of finance from the real economy and this has been a major concern from a developmental point of view

which Islamic finance theorists argue to provide a better alternative through equity financing. Some authors questioned why there is that general distinction between the real sector and the financial sector, stressing that the distinction is unfortunate as it presupposes that the financial sector is something less than real (Todaro and Smith, 2015). This impression has been supported by the view that the financial sector should be seen as a supplement to the real economy. Joan Robinson, a famous economist asserts that "Where enterprise leads, finance follows" (Robinson, 1952). Todaro and Smith (2015) conclude that there is evidence that finance can also hinder economic development depending on how it is carried out. This highlights the danger of treating finance in parallel with real economy. Thus, for Islamic finance to make meaningful impact on economic development front, there is a need to shift the focus from mimicking conventional banks towards genuine innovative products that address the unique needs of patrons and Small and Medium Enterprises (SMEs) financing becomes critical in this regard.

According to Habib (2015), looking at the huge potential of Islamic finance, it can be used as a strategic tool in promoting financial stability, financial inclusion, shared prosperity and infrastructure development and all these can provide the anchor and needed environment for the timely implementation of Sustainable Development Goals (SDGs). Despite their strategic role in economic development, SMEs including start-ups of many economies are usually not supported by banks because of the perceived high risk these ventures come with.

Many studies including Beck and Demirgüc-Kunt (2006) and IFC (2012), demonstrate the many challenges impeding the growth of small enterprises and chiefly amongst them is the inadequate access to formal credit. From the banks' angle, it may be understandable because of the need to manage depositors' funds in a prudent way as SMEs financing comes with high risks. It is important for Islamic finance to develop non-bank financial institutions to cater for the sectors that Islamic banks will not typically lend to.

Venture capital (VC) is one of the forms of business finance that can be used to support SMEs to setup businesses and/or grow. Some empirical results show that VC has a significantly positive correlation with enterprise performance, which indicates that the participation of VC can promote the improvement of enterprise performance and business continuity (Yanga et al, 2016).

The research is aimed at exploring how VC in an Islamic frame can be used to finance SMEs and start-ups in Ghana. Venture capital which fundamentally is likened to the profit and loss sharing in Islamic finance which Islamic banks are shunning away from is seen as a potential driver that can be used to not only encourage equity investment but also help contribute to the non-bank Islamic finance sector development. Coming from the background of the difficulties SMEs contend with in accessing finance, it will be a worthy exploit in trying to come out with alternative models of financing such as Islamic financial products which is based on equity financing and this development has increased the interest of many European countries (Oseini et al, 2013). This shows the new paradigm and African countries and Ghana for that matter should not be left out.

Venture capital is chosen in the case of Ghana because Ghana's laws do not fully accommodate Islamic finance although the Banking Act, 2015 was amended to allow for non-interest banking. There is a constraining provision that limit banks from financing businesses in commercial, agricultural or industrial activities and immovable property and hence, the venture capital is seen as a viable alternative to explore how SMEs can be financed using Shari'ah compliant instruments (Banks and Specialised Deposit-Taking Institutions Act, 2015, Article 9 (1). This is possible because, the sector is less regulated and the VC business can configure their operations to comply with *Shari'ah* without any difficulty. Also there exist government VC fund that can be leveraged on.

1.2 Problem statement

SMEs and start-ups constitute over 90% of businesses in the private sector and account for more than half of employment and of GDP in most African countries (UNIDO, 1999). Small businesses in Ghana are characteristically part of the production sector and noted to contribute about 85% of manufacturing jobs in the country (Aryeetey, 2001).

Many studies attempt to diagnose the problems facing SMEs including those of Beck and Demirgüc-Kunt (2006) and IFC (2012), Levy, 1993, Parker et al., 1995). These studies demonstrate the many challenges impeding the growth of SMEs and inadequate access to formal credit is one of the key bottlenecks identified.

Using a year's growth rates in jobs as a measure of enterprise growth, World Bank data demonstrates that in developing countries including Africa about 15% of SMEs are high-growth firms.[2] However, the sources of financing this growth are markedly different. For example, 84% of investments in SMEs in Africa are financed through internal generated which is higher than 70% in other developing economies. Similarly, bank's financing share in Africa is 2% lower than the 11% in other developing countries. Further, the equity financing' share in Africa is less than 2%, whereas in other developing countries it stands at around 8% (World Bank Enterprise Surveys, 2012). The import of this data is that with comparable growth opportunities between businesses in Africa and other developing countries, Africa's businesses depend more on internal funds and are more inhibited in terms of getting access to credit and external financing.

Despite the vast natural resources and the relative young population of the country, Ghana is faced with underdevelopment with unemployment being one of the major challenges facing the country. This was a major campaign issue in the 2016 elections which saw President Akufo

[2] With one-year growth in employment greater or equal to 20% (OECD, 2008)

Addo, who campaigned on the major issue of job creation, elected. Therefore, supporting SMEs to grow remains an important task for many stakeholders in Ghana.

Some studies have argued that equity financing in SMEs is helpful to their growth and survival. This is evidenced by the study of Yang et al (2016) who carried out an empirical study which results show that VC has a significantly positive correlation with enterprise performance indicating that the participation of VC can promote organizational performance. Likewise, Barry and Milholf (2015) conclude that businesses backed by reputable venture capitalists perform better because VC can provide financial and managerial support for the enterprise, so as to promote growth.

At the broader level of Islamic finance's development, of all the various Islamic finance contracts available to Islamic financial institutions, Islamic scholars advocate for the non-debt mode of financing (see Azmat et al, 2015) with the assertion that equity financing is considered a blessing (Iqbal et al., 1998). Additionally, profit and loss sharing finance is believed to drive a more equitable distribution of wealth (Usmani, 2002). Despite the Islamic attractiveness of equity investments, in their study, Azmat et al (2015) argued that aside the Asymmetric information problem used as an explanatory cause of Islamic banks negligible use of equity financing on the asset side of their balance sheet as argued by Khan (2010), the issue of risk aversion amongst bank depositors, both conventional and Islamic needs to be considered. Islamic bank depositors who behave just like conventional banking depositors with risk-averse utility functions would prefer a stable return on their principal (Azmat et al, 2015). Consequently, they would patronise in Islamic banks whose financial asset side is dominated by fixed income assets. Moreover, even when they decide to invest in an Islamic bank with dominating equity investment, they would demand higher reward in a form of a high risk premium (Azmat et al, 2015). This narrative has led to Islamic bank with little incentive to use equity instruments in their asset allocation. The study concludes that Islamic banks are unlikely

to offer more equity investments contracts in the future because their current funding structure is highly unlikely to result in a marked level of joint venture financing if attitude of depositors remain same. Also, the study further concludes that there is a need to shift towards offering equity investments through VC and private equity (PE) structures. This would offer investors a clearer choice of risk and return. This will the requisite incentive for designing products that will be motivated to attract long terms investors, particularly institutional ones, and thus have some limitations on funds withdrawals. This conclusion concurs with (Asutay, 2007; 2012) who asserts that based on Islamic moral economic values, Islamic finance should develop capacities and empower individuals and societies, as the majority of the Muslim countries are in their development phase. Therefore, Islamic finance, acting as an alternative and ethical financing model, should be able to finance impact-oriented projects that have connection to the real economy. In in its current form and future direction of mimicking conventional commercial banks in their financial intermediation role, Islamic banks may not be able to provide such financing. Sequel to this, there is crucial need for the development of non-banking Islamic financial institutions and instruments to address the entrepreneurship and developmental needs of the societies (Marzban et al, 2014). This study is partly motivated by the need to develop the Islamic VC institution in this regard.

In the Ghanaian context, VC is not entirely new as there is government backed venture capital fund introduced in the late 1990s but the potential of the institution is still untapped as long term financing in terms of equity capital, needed by growth-oriented mainly SMEs, is virtually non-existent(Mensah, 2004). Only two commercial venture capital funds have been established in Ghana over the past 15 years but this provides limited equity financing using conventional VC instruments which some Muslims have reservations about because of the financing structure and conditions attached. These concerns are confirmed in Elseify (2014) study which concludes that the only challenge of conventional VC is that most of the tools used to protect

funds provider are deemed *Shari'ah* non-compliant and it's recommended for a future research to be focused on how to build an Islamic model of VC while avoiding the problems encountered. Even though VC appears to be a potent solution to boost equity investment in SMEs and start-ups, there has not been many studies in this area and more especially in Ghana. The aim of this study therefore is to provide alternative VC framework that is *Shari'ah* compliant to meet the expectations of entrepreneurs who are excluded from the limited conventional VC that is available in the country and also attract investors who may want to channel their funds in a *Shari'ah*-compliant investments.

Also, this research will attempt to address the problems pertaining to how Islamic VC can be structured. It will also provide useful insight and ways into how it can be made attractive by addressing how funds providers can protect their investments through *Shari'ah*-compliant investment protection mechanisms.

1.3 Significance of the study

The rationale of the study is to understand the status of Islamic venture capital in order to propose a framework for IVC that will serve as a catalyst for the need to shift away from relying on Islamic banks for equity investments to IVC. This study will also help to provide evidence based inputs into how financial inclusion policies can be broadly approached in Ghana with the aim of reducing poverty by considering entrepreneurs religious persuasions in accessing financing for their businesses. This is important because the current policy intervention does not consider religious reasons as one of the major causes of financial exclusions.

Additionally, the research will explore the extent of the impact of GVCTF on SMEs financing and how SMEs can leverage on other government support services such as the Ghana Eximbank SMEs support and SADA development initiative in the predominantly Muslim north of the country to structure VC financing. This will help address the financing and related needs

of SMEs in Ghana in order to increase the success rate and thus drive economic growth and development.

Furthermore, findings of this research will provide the needed framework for applying Islamic VC in the Ghanaian context by discussing how it can be structured and the various risks associated with its implementation and mitigation options. This will offer an opportunity for investors and entrepreneurs who are hitherto sceptical of conventional VC to have an alternative to participate in both VC funds supply and demand side. This will deepen financial inclusion in Ghana and will create a platform for inclusive economic growth and development.

1.4 Objective of the study

The main objective of the study is to explore how VC in an Islamic frame can be used to finance SMEs and start-ups in Ghana. The study is aimed at looking at how IVC can be structured and how *Shari'ah*-complaint instruments can be used to protect investments which have been lacking. The following specific objectives will be pursued:

1. To ascertain the performance of GVCF in supporting SMEs in Ghana
2. To explore the *Shari'ah* compliant tools that can be used in Islamic venture capital for investment protection
3. To find out how Islamic VC can be applied to finance SMEs in Ghana
4. To analyse the risks involved in IVC operations in financing of SMEs in Ghana and how those risks can be mitigated.
5. To find out to what extent IVC can impact financial inclusion and poverty reduction in Ghana

1.5 Queries of the study

In order to achieve the above objectives, the research will attempt to answer the following questions:

1. What is the state of Islamic finance in general and Islamic VC in particular in Ghana?
2. How has Ghana Venture Capital fund performed from 2006-2016 in supporting SMEs in Ghana?
3. What Islamic finance instruments are available to finance SMEs in a VC model in Ghana?
4. How can risks be managed in using Islamic finance instruments in financing SMEs through a VC?
5. Are there *Shari'ah* compliant instruments that can be used to protect investor's capital in SMEs VC financing?

1.6 Hypotheses of the study

On the basis of preliminary review of the literature the following hypotheses are formulated and set to be tested:

Among the reasons why people are financially excluded is the issue of religion (Demirgüç-Kunt and Klapper, 2012) and Global Financial Development Report, 2014) but Allen et al. (2012) classified religious reasons of financial exclusion as voluntary. From this it can be hypothesized that:

H1**:** Islamic VC will not impact financial inclusion among Ghanaians as religious orientation is considered a voluntary financial exclusion.

Some empirical results show that VC has a significantly positive correlation with enterprise performance, which indicates that the participation of VC can promote the improvement of enterprise performance and business continuity (see Yanga et al (2016) and Guo and Jiang (2013). Sequel to these findings, the hypothesis with respect to this is stated as:

H2**:** Venture-capital backed businesses in Ghana are not successful and IVC will not be able to operate in the Ghanaian environment.

Al-Suwailem (1998: 2002) discuss the principles of risk management from an Islamic perspective by linking risk and causality. He asserts that the Islamic approach to risk management would be to understand and control the causes of risks and then leave the final outcome to the will of God but concludes that venture capital practices regarding investment protection may not be Shari'ah compliant. Kahf (2006) concludes that "We have within the limits of Shari'ah a variety of means that makes the risk management in innovative Islamic financial engineering a challenging arena that does not leave room to resort to dubious and counterproductive tools of financing that very often contradict the essence and basic objectives "*Maqasid*" of the prohibition of interest and other regulations of Islamic financing". It can therefore be hypothesized that:

H3: There is no *Shari'ah* compliant ways of protecting investment or mitigating risk in IVC.

1.7 Limitation

The limitation of this study is that the literature may be sparse due to the limited quality research that has been done in this area and more especially for Ghana. Venture capital financing is well developed in US and Europe and most of the vast literature that the research will be referring to were conducted in these areas. Some of the conclusions may not be necessarily applicable to the Ghanaian context.

Also, the GVCF is the only institution that will be assessed to understand the performance of VC-backed firm's performance in Ghana because the private VC firms are not willing to open up to provide data for research. This may not be enough as GVCF is a public entity which is likely to be inefficiently ran and will not provide an objective assessment of the situation.

1.8 Methodology

The research seeks to find out how Islamic VC can be used to finance SMEs in Ghana and to do this the thesis will utilize secondary data reported in the literature and the expertise of some

Shari'ah scholars. The methodology will be explorative and will take a qualitative and quantitative approaches. This is because VC is an emerging area in Islamic finance and this study will shed light on its applicability in an Islamic frame by looking at how theoretically this can be implemented in Ghana. The study will depend largely on secondary data in Islamic finance and conventional VC. The study will thoroughly review Islamic finance literature especially the Islamic finance contracts and more specifically *Musharakah* and *Mudharabah* contracts to understand how VC operations can be contained in it. Also, the literature that will be reviewed will cover agency theory and how this is manifested in VC settings and how it can be managed.

This methodology is adopted with the guidance that an exploratory and qualitative study when purposeful sampling with semi-structured is used with in-depth analysis will help in reaching a deeper understanding and answering the research problem. Hesse-Biber and Leavy (2006) mention that qualitative research is an intellectual, creative and rigorous skill that a researcher learns and develops in a course of study. Through this type of qualitative study, large amount of data is collected which would not have been possible through limited questionnaires.

The quantitative method will help to measure the impact of GVCTF on SMEs in Ghana as well as the analysis of financial inclusion as Braham (1996) maintains that quantitative research emphasizes the measurement and analysis of casual relationship between valuables. Quantitative approach is also revered to as empirical scientific approach to data collection in analysable manner (Mugenda and Mugenda, 1999).

Edmondson and McManus (2007) refer to a number of indicators which they consider a Methodological Fit. The availability of prior literature, theoretical basis and how researchers define their research design are the indicators they talked about. Hypotheses testing and using qualitative design that allows for openness to unexpected insights from the data can be

beneficial in this approach. This study will be conscious to adopt some of these methodological prescriptions.

In developing the research design, this study is mindful of the proposal of Cavana et al (2001) which came out with six basic characteristics of research design including the purpose of the study, the types of investigation, the extent of researcher interference, the study setting, the unit of analysis and the time horizon of the study which have been developed from the problem statement. All these aspects will be addressed in designing the research methodology for this study.

1.9 Literature review

This section reviews literature relevant to achieving the research objectives and answering the research questions.

1.9.1 SMES financing in Ghana

The definition for SMEs has not reached consensus among various players and hence the definition is often driven from the perspective of the one defining it. According to UNIDO, the definition for SMEs is linked to the number of employees the business employs. A 5-19 employees is considered a small business and an example of this can be seen of typical small shops in the urban areas such as hair dressing saloons. For a medium enterprise, the number of employees is put in the range of 20 to 99 workers and often include manufacturing firm and exporting companies.

The Venture Capital Trust Fund Act 2004 Act 680 (section 28) defines SMEs as “an industry, project, undertaking or economic activity which employs not more than 100 persons and whose total asset base, excluding land and building, does not exceed the Cedi equivalent of US$ 1 million in value”. This definition will be adopted for this research.

Entrepreneurial finance or SME finance is primarily concerned with how entrepreneurial ventures are financed. The proverbial 'finance gap' for SMEs has been widely debated in the literature. The importance of the SME sector to GDP, employment and private sector growth has been established in the finance literature, prompting many studies on various aspects of SME financing and development (See Aryeetey et al., 1994; Bigsten et al., 2000; Gockel and Akoena, 2002 and Abor and Biekpe, 2007).These studies have examined the challenges associated with SME access to credit from different perspectives.

Aryeetey et al. (1994) examined the supply and demand dynamics for SME finance, highlighting the problem of the entrepreneurial financing gap. Gockel and Akoena (2002) examined access to credit by SMEs in Ghana while Bigsten et al. (2000) conducted a sectoral study on credit constraints among manufacturing enterprises in Africa. The studies undertaken so far in respect of finance and enterprise development in Ghana have highlighted the predominant role of debt finance in SME finance.

In their research on the impact of financial sector liberalization policies on the financial management of SMEs in Ghana, Tagoe et al (2005) assert that the prime financial challenge facing SMEs is access to inexpensive credit over a reasonable period which are usually inhibited by availability of collateral, borrowing by government, the general economic climate, record keeping of SMEs and SME investor relations skills deficit. These findings are similar to the consensus in the literature in previous studies that identify the disparity between the demand for hank credit by SMEs and the supply of bank funds in Ghana (see Abor and Biekpe (2007); Aryeeiey (1998); Bigsten et al. (2000) Buatsi (2002); and Sowa et al. (1992).

1.9.2 Performance of venture capital backed businesses

Some start-up firms mobilize capital from banks and others from venture capitalists and Ueda (2004) in a study to understand why the differing underpinning financing decisions, used a model which can provide the venture capitalist an accurate evaluation of the entrepreneur's project more accurately than the bank but can also threaten to steal it from the entrepreneur. Consistent with evidence regarding venture capital finance, the model suggests that the features of a firm financing through venture capitalists include high growth, relatively little collateral, high risk and high profitability. The model also shows that tighter protection of intellectual property rights provides an additional motivation for entrepreneurs to finance through venture capitalists.

Venture capital arrangements use a number of instruments to protect venture capitalists interest in order to attract them to invest in businesses. Schmidt (2003) asserts a new explanation for the predominant use of convertible securities in venture capital finance. Convertible securities can be used to endogenously allocate cash-flow rights as a function of the state of the world and the entrepreneur's effort. This right can be used to incentivise the entrepreneur and the venture capitalist to invest efficiently into the target business or project.

With regards to VC backed enterprises performance, it is reported that VC plays a positive role in promoting the performance of enterprises. VC could not only provide the necessary funds for the development of the invested companies, but also enhance the value of the enterprises by participating in decision-making, improving the governance of corporations and optimizing the allocation of resources (Zhang et al, 2015). Jain and Kini (1995) found that, although after the IPO the all companies had experienced decline in performance, but the operating performance of VC backed companies was significantly better than non-VC-backed ones. Tan

and Yang, (2011) pointed out that VC had a positive impact on the long-term performance of the independent innovative SMEs of China.

Another view is that, compared to non-VC-backed enterprises, there is no increase in the performance of VC-backed ones or the performance of these companies will be even worse. Using the data from Australian listed companies, Rosa et al (2003) reported that VC backed listed companies and non VC backed ones got the same profits within 2 years of post-IPO, the result showed that there was no obvious difference between the two types. Wang et al (2015) found that in the Singapore market, the operating performance of VC-backed firms was worse than that of non-VC-backed ones during the time of IPO and post-IPO.

1.9.3 Venture capital in Ghana

While finance literature on Ghana is replete with studies on bank financing and microfinance, the same cannot be said for PE or VC (Osei-Tutu, 2014). The issue of equity financing for SMEs, notably private equity as a financing option for SMEs in Ghana, has been less explored by researchers. Biekpe (2004) reports that in sub- Saharan Africa, most businesses collapse in their first year due to lack of support from traditional banks and government. Informal finance, made up of credit from non-institutional sources such as relatives and friends, money lenders, informal groups, suppliers, clients and other businesses relied on by many SMEs are often inadequate. Given the difficulties surrounding access to finance for firms, particularly SMEs, the development of formal private equity, considered 'patient capital', as a financing option is imperative to the growth of private enterprise in Ghana.

The most notable initiative as far as PE in Ghana is concerned is the establishment of the Venture Capital Trust Fund (VCTF) by the Government of Ghana in 2004. The VCTF, backed by the VCTF Act, 2004 (Act 680), is a VC fund that uses a fund-of-funds investment approach to support SMEs and catalyse the growth of a sustainable privately-owned VC industry. The

VCTF since its establishment has leveraged government seed funding of GH₵ 22.4 million to attract co-investments of over GH₵ 40 million from other institutional investors. All of this capital had been fully invested as at the end of 2013. Over 45 portfolio companies from a variety of industry sectors have benefited from the VCTF since its establishment.

Research conducted on PE and VC in Ghana has largely comprised of perception studies focusing on the prospects of VC and exploratory case studies on the VC fund manager investee relationship. Sefa-Boateng (1996) explored the modalities of the capital-raising process in relation to new venture creation while Anokye-Yeboah (2009) carried out perception studies on various dimensions of the challenges and prospects associated with VC financing. Owusu-Adjei (2010) made early attempts to trace the PE industry's economic contribution to private sector development in Ghana.

1.9.4 Islamic finance and Islamic venture capital

Venture capital investments are a natural fit for both equity-based investments (which are compliant with Islamic law) and the financing of start-ups. This is an important characteristic of Islamic finance as Islam advocates real economic activities and the employment of capital to create social and economic welfare (WB and IDB). Therefore, from an Islamic finance perspective, the profit and loss sharing as in *Mudharabah* and *Musharakah* models are seen as the best choices to structure venture capital and private equity deals, giving consideration of the global VC/PE practices, as well as ensuring compliance with Islamic law. The combination of economic viability and Islamic preferability therefore increases the prospects of this option for Islamic financial institutions. Admittedly, when the current practices of existing venture capital institutions are scrutinised, the revelation may be that it is not fully consistent with Islamic rules which can be modified without compromising the positive aspects of its principles (Al-Suwailem, 1998).

There are a number of issues that need to be considered in IVC as some of the instruments used in conventional VC are deemed Shari'ah non-complaint. The issues bother on many conventional practices of VC funds, along with some requirements when it comes to Shari'ah screening,3 financial leverage constraints, and the requisite purification processes for VC funds and their portfolio companies intended (Marzban 2012: 2015).

Preferred shares: Private equity and venture capital funds hugely depend on preferred shares to protect investors against expropriation and also to finance the multi-stages of financing for their portfolio companies. Convertible and participative preferred which usually provide investors with liquidation preference are used.

From a Shari'ah perspective, preferred shares are considered non-compliant as defined within the AAOIFI Standard Number 21, Article 2/6 reads that "it is not permitted to issue preference shares that have special financial features leading to the granting of priority to these shares at the time of liquidation or the distribution of profits. It is permitted to grant certain shares features related to procedural or administration matters, in addition to the rights attached to ordinary shares, like voting rights."

Similarly, the Islamic Fiqh Council of the OIC in 1992 rules that "it is not permissible to issue preference shares with financial characteristics that involve guaranteed payment of the capital or of a certain amount of profit or ensure precedence over other shares at the time of liquidation or distribution of dividends. It is however, permissible to give certain shares such characteristics as are related to the procedural or administrative matters."

Liquidation and Sale Preference: It is a normal practice for a VC investors to insist on obtaining a minimum return on their invested capital before other shareholders receive any return. This

[3] Portfolio companies to operate in and generate revenue from *Shari'ah*-compliant practices.

structure provides an opportunity for investors to recoup their investments (Rashid, 2005). When the targeted return is reached by the investor the residual is distributed amongst the shareholders. Liquidation preference is deemed as Shari'ah non-compliant concept, although equivalent provisions or standalone agreements can be structured to give effect to this principle. It is worth mentioning that these alternatives need further studies to determine their compliance with the Shari'ah principles (Elseify, 2014).

Transfer Restrictions (Lock-Up): Usually, VC investor will wish to get a guarantee that the founding shareholders and any key partners of the venture are committed to the company for a certain period to ensure an alignment of the vision of both management and the investors of the company. To achieve this, it is common to provide for a prohibition on any transfer of shares by the founders or early shareholders for an agreed period (Aggarwal, 2010). This makes common sense as it aims at ensuring that the company viability in the early stage of business is not circumvented. Conversely, in the context of Islamic finance where *Musharakah* contract is used, parties have the free will to withdraw at any time and take their capital and compensate for any damage caused to other partners. Thus, putting a condition on the contract to prevent this right and consequently lock-in of investors to a certain period of time need further studies from *Shari'ah* point of view (Elseify, 2014).

Non-Compete Restrictions: VC investors will typically want to ensure that the founders and management enter into appropriate non-compete provisions, especially so as in most VC structure the value of the company is tied with the management and the founders. A VC investor will often want to be sure that it is not expending in third party advisor fees, time and effort in for instance due diligence and other work if the company is also negotiating with other parties. In this regard, a VC investor will often seek a period of exclusivity upon signing a Term Sheet where the company is barred from looking for investment from other sources. The requirement is usually that the

company will elect to pay to the VC a break fee if it pulls out or alters the negotiations within the period of the agreement (Aggarwal, 2010).

1.9.5 The role of Islamic finance in financial inclusion

According to Beck, Demirgüc-Kunt, and Levine (2007) and Bruhn and Love (2014), financial inclusion which involves the use of formal financial services is an important economic determinant of development. When individuals are financially included they are able to invest in education, entrepreneurship and this contributes to poverty reduction and economic growth.

Demirgüc-Kunt and Klapper (2013) analyse the use of financial services in 148 countries. They looked at financial inclusion from both individual and country characteristics through 3 proxies of ownership of a bank account, savings on a bank account and use of bank credit. Their findings reveal that differences in income among countries and among individuals within countries have explanatory power in the level of financial inclusion.

Similarly, Allen et al (2012) identify the individual and country characteristics that influence the ownership of a bank account and saving on a bank account for 123 countries. They provide evidence of positive impacts of several individual characteristics; in particular individuals' income and education. Some argue that financial exclusion may arise as a result of self-exclusion which relates to cultural or religious beliefs, such as the prohibition of bank interest held by Muslims (Financial Services Authority 2000) but Allen et al. (2012) classified religious reasons of financial exclusion as voluntary.

The literature is replete with a number of studies which has documented that both poverty and inequality are inversely related with access to formal financial services. The studies show that characteristics of poverty such as education, healthcare and other social services can be tackled through financial inclusion (See for example, Jeanneney and Kpodar (2011), Beck, Demirguc-Kunt, and Levine (2007), Clarke, Xu, and Zou (2006), Burgess and Pande (2005)

CHAPTER 2

EVALUATION OF THE PERFORMANCE OF GHANA VENTURE CAPITAL TRUST FUND IN FINANCING SMES

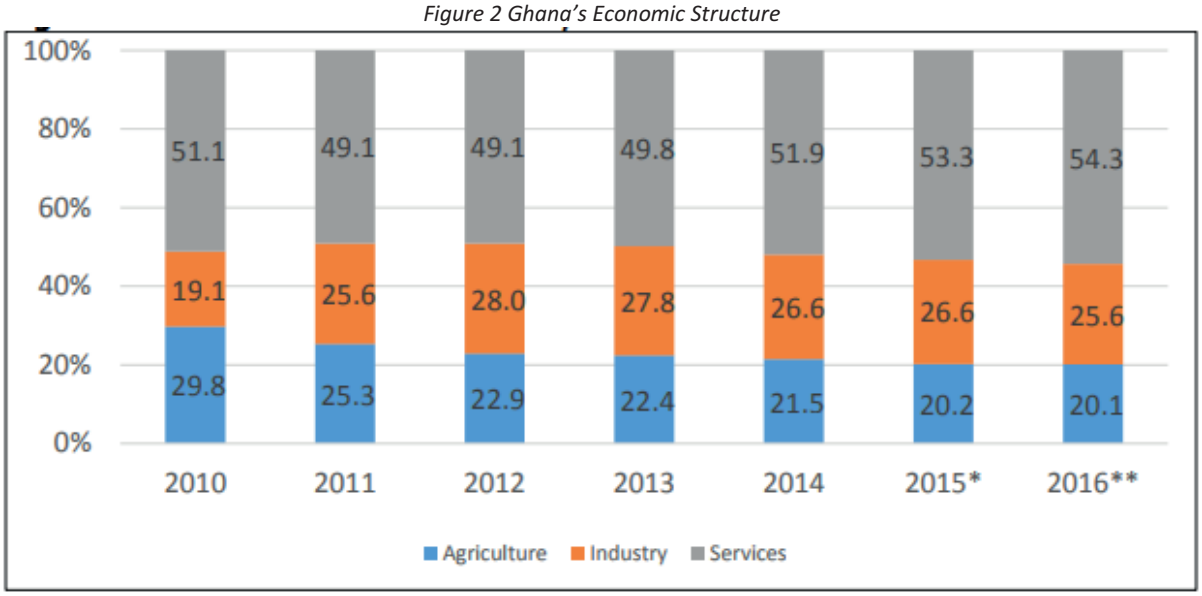
2.1 Overview of the Economy of Ghana

Ghana's GDP stands around US$ 42 billion as at the close of 2016(WB, 2016). The real GDP growth rate of Ghana reached a record high of 15% in 2011 as oil production started at commercial volumes. Ghana's economic performance has been above the average growth of West Africa and Africa generally (NSEZ, 2016). The GDP per capita has increased steadily from US$ 1,323 in 2010 to US$ 1,827 in 2013(Statistical Service, 2014). This trend however reversed, due to the major challenges of severe energy crisis, deteriorating macroeconomic condition and rising inflation and interest rates between 2014 and 2016. Ghana's economy has slowed with a less than 4% growth rate and declined GDP per capita in 2014 and further declined to a growth of only 3.5% in 2016 (NSEZ, 2016).

In the coming years, it is projected that the trend will persist and recover over the medium term, with increased private sector and public infrastructure investments, as well as an improved macroeconomic framework and political stability (WB, 2016). From figure 2, it is observed that the services sector has remained the greatest contributor to GDP over the years with around 54% in 2016. The total GDP has increased steadily and the service sector has witnessed a significant growth in income annually. The service sector is driven largely by the transport and storage, finance and insurance activities. The Agriculture sector's contribution to GDP on the other hand continues to shrink and stands at around 20% in 2015 and 19.5% in 2016. The agricultural sector remains largely driven by crop production with cocoa as the principal agricultural export. Ghana is the world's second largest producer of cocoa. Though comparatively the growth of the agricultural sector remains weak and its share of GDP has declined considerably over the years, the sector is the largest employer in Ghana, contributing to the employment of more than

half of the total labour force (53.6%) in 2013. However, much of the employment generated through the economic growth is in the informal sector. The industrial sector remains relatively flat over the years but saw a marginal decline between 2015 and 2016 to 25%. In 2016, the Industry Sector is estimated to grow by negative 1.2% in contrast with the 1% growth the Sector recorded in 2015. The decline was driven by a contraction in upstream petroleum output, which constitutes the bulk of the Mining and Quarrying Subsector. The total income from crude oil exports has been growing substantially to 28.3% of total exports in 2013, and ranking second to the income of gold, which accounted for 36% in 2013. In view of Ghana's sizeable and growing middle-class population, this represents the future increase in demand for consumption goods and services, thus serving as an enabler to the growth of various sectors.

Figure 2 Ghana's Economic Structure



Source: GSS/MOF
*Revised ** Provisional

World Bank reports that Ghana's economic performance improved in the first half of 2017, after substantial fiscal slippage in 2016. The fiscal deficit for the first half of 2017 was 2.7% of GDP which is on track to meet its target of 3.5% of GDP. Revenues underperformed and were 14.9% below their target, but the government cut both its recurrent and capital expenditure to keep its fiscal consolidation program on track. This underperformance was to

be reversed in the second half of 2017 as policies, announced in March took effect. Ghana's total debt had increased from US$29.2 billion (73.1% of GDP) at the end of 2016, to US$31.7 billion (68.1% of GDP) in 2017, reflecting a slowdown in the rate of external debt accumulation, as well as higher GDP growth.

Economic growth picked up after years of slow growth as the economy expanded for the third, successive quarter in March 2017, to 6.6% up from 4.4% the previous year. The industry sector recorded the highest growth of 11.5%, compared to 1.8% in 2016, with significant contributions of this coming from mining and petroleum. The agriculture sector grew by 7.6%, up from 5% the previous year, driven by good performances in the crops, fisheries, and cocoa sub-sectors. However, growth in the services sector slowed to 3.7% from 6.6%, due to slower growth in information, communication, and finance. Non-oil growth slowed to 3.9% from 6.3% in the same period of 2016 (WB, 2017).

The inflation rate has witnessed a declining trend since 2016 which influences the central bank to reduce its policy rate to 21%. Headline year-on-year inflation was 12.3% in August, a slight increase from 11.9% in July. The 91-day Treasury-bill rate declined from 16.81% in December 2016 to 12.10% in June 2017; and the rate on the 182-day Treasury-bill moved from 18.5% to 13.28% over the same period. Outstanding credit to the private sector grew by 16.2% in May 2017, against 10.1% for the same period in 2016 (WB, 2017).

The WB data shows that the external sector further improved as the Cedi continued to stabilize and the reserve buffer expanded. The June 2017 trade balance turned out a surplus of US$1.43 billion, equivalent to 3.1% of GDP from a deficit of 3.3% the previous year. This was attributed to export earnings, especially from gold, cocoa, and oil. After a sharp decline in the value of the Cedi in January (due to demand caused by seasonal factors), pressure has eased with improved liquidity and increased reserves. Gross International Reserves went up from US$ 4.9

billion, equivalent to 2.7 months of imports, at the end of December 2016, to US$ 5.9 billion in June 2017, equivalent to 3.4 months of imports.

Ghana has a vibrant financial service sector and is one of the fastest growing sectors in the Ghanaian economy. The financial sector includes Universal Banks, Development Banks, Investment Banks, Insurance Companies, Reinsurance Companies, Mortgage Finance Institutions, Leasing Companies, Venture Capital Companies, Hire Purchase Companies, Export Finance Companies, Mutual Funds, Investment Trusts and Savings and Loans Companies. There is still lack of capacity in financing huge transactions like the cocoa syndication loans, financing upstream exploration and development, and taking full advantage of the insurance requirements in the oil and gas and energy sectors (Osarfo-Marfo, 2017).

There are 35 commercial banks in Ghana with the sector dominated by foreign banks. As part of their reform agenda to strengthen the banking sector in Ghana, the Bank of Ghana more than trebled minimum capital requirements for lenders (Bloomberg, 2017). The new minimum capital required for banks is pegged at least 400 million Ghana Cedis (US$ 91 million) compared with 120 million Ghana Cedis previously, to meet their license obligations. Lenders will be given until December 2018 to meet the requirement.

In terms of resources, Ghana is one of the most endowed countries in Africa in terms of natural resources (such as oil, gold, bauxite, manganese, diamonds iron ore, gas, cocoa, fertile land). The untapped and proven mineral resources include about 2.8 billion metric tonnes of iron ore, 960 million metric tonnes of bauxite, 430 million metric tonnes of manganese and 430 million metric tonnes of limestone. Presently, the country produces a modest 160,000 barrels of oil and 120 million standard cubic feet of gas per day (Osarfo-Marfo, 2017).

With international trade, there has been an increase in the total trade amount in Ghana, but with declining export performance in 2016 (NSEZ, 2016). With regards to regional trade, Ghana

only has a small share of trade with ECOWAS. The country's main exports destinations include South Africa, Netherlands and France. The top three import partners are China, United States and Belgium with main imports of automobiles, refined petroleum and broken rice in 2013.

It is expected that the budget deficit to narrow to 4.9% of GDP in 2017 (compared with 3.7% of GDP under the ECF) and to reach 3.3% of GDP in 2019, given stronger economic growth, a revenue bump from the onset of new oil and gas production and further attempts to restrain spending. After a TEN-related spike in real GDP growth to 8.2% in 2017, growth will ease back to a robust, but not spectacular, 5.9% in 2020(EIU, 2017).

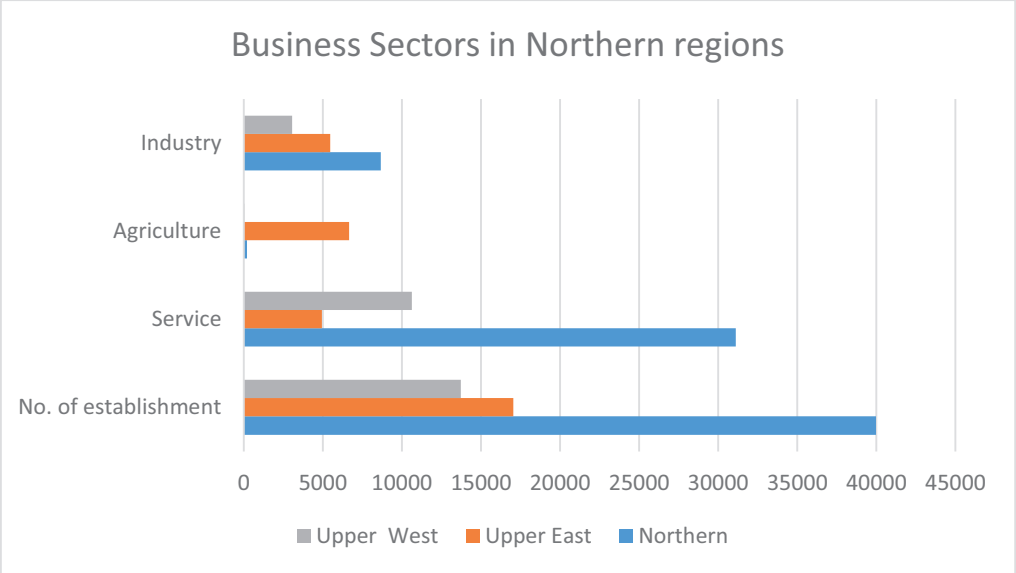
On the social front, GLSS (2015) report mapping on the incidence of poverty in Ghana shows that, there is a high concentration of poverty in Northern Ghana[4] with a regional poverty incidence of 55 which is 13 points above the average national poverty incidence of the country which stands at 42. This is an alarming figure for concerned policy makers (See regional poverty distribution in figure 1 in chapter one).

The Muslim population of Ghana is domiciled in Northern Ghana comprising of Northern, Upper East and Upper West regions[5]. The Northern Region, which occupies an area of about 70,383 square kilometres, is the largest region in Ghana in terms of land area, and has a total population of 2,728,081 people. The land is mostly low lying except in the north Eastern corner with the Gambaga escarpment and along the western corridor. The region is drained by the Black and White Volta and their tributaries, Rivers Nasia, Daka, among others (Ghana Statistical Service, 2010).The Upper East Region is located in the north-eastern corner of the country between longitude 00° and 10° West and latitudes 100° 30" N and 110° N with a total

[4] Where majority of Muslims reside. This area is likely to drive the demand for Shari'ah compliant VC.
[5] According to Ghana Statistical Service, Muslims in Ghana constitute 17% of the population of Ghana with more than 83.6% of household heads in the Northern region practicing Islam. Islam is also a major religion in Upper East (55.7%) and Upper West (48.0%).

population of 1,134,453 people. The land is relatively flat with a few hills to the east and southeast. The total land area is about 8.842 sq km, which translates into 2.7 per cent of the total land area of the country (Ghana Statistical Service, 2010).The Upper West Region which has the lowest population in Ghana of 756,303 covers a geographical area of approximately 18,478 square kilometres. The region is bordered on the North by the Republic of Burkina Faso, on the East by tipper East Region, on the South by Northern Region and on the Westby La Côte d'Ivoire. The region is located in the guinea savannah vegetation belt (Ghana Statistical Service, 2010).

Figure 3 Business Sectors in Northern Ghana

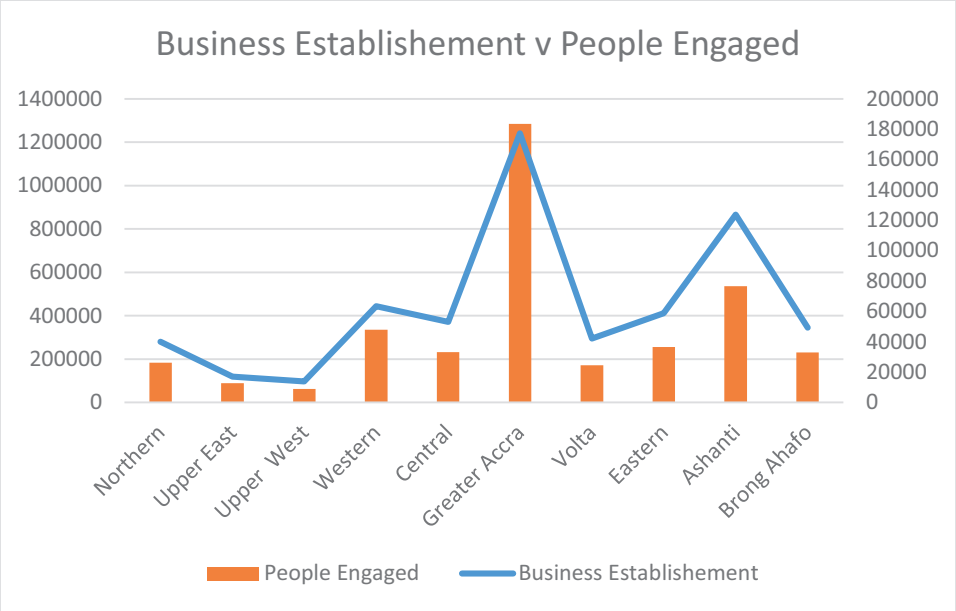


Source: IBES, 2015

The most dominant business establishments in Northern Ghana is the service sector which is in line with the dominance of the service sector at the national level despite the vast arable and fertile land for agriculture (see figure 3 above). The northern region has the highest number of business establishments even though it lack behind the national average. This is partly due to the lack of access to credit for the agriculture sector because of the perceived high risk in the sector which makes it unattractive for banks to finance. The Upper East region has predominantly agricultural related businesses as service and industrial sectors businesses are

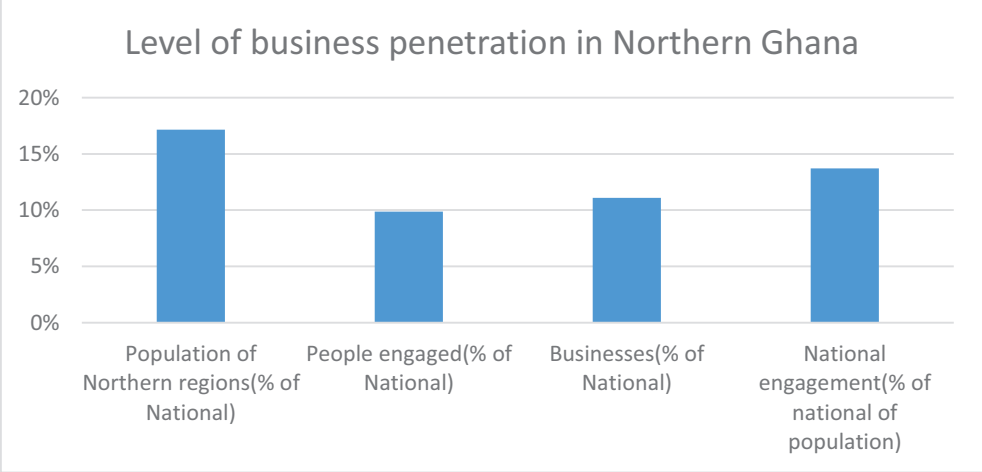
almost non-existent and this businesses are predominantly in the informal sector. This narrative makes it more important for VC to be promoted in this area.

Figure 4 Business Establishments and the number of people engaged



Source: IBES, 2015

Figure 5 Level of business penetration in Northern Ghana



Source: IBES, 2015

Figure 4 shows that Unemployment rate in northern Ghana is higher than the national average as a result of the low number of business establishment and consequently, low number of people engaged in employment. In figure 4, whereas Greater Accra has as high as 190000

establishments with over 1.2 million people engaged in work, Northern region has less than 20000 and 200000 establishments and people engaged in work respectively.

In a similar analysis, figure 4 shows that, even though, the three northern regions constitute around 16% of the national population, only 10% of the working population are engaged in work which is lower than the national average of 14%. This shows the enormity of the poverty drivers in the Northern regions and the need for a well thought intervention. Increasing the number of business establishments remains an important approach to countering this and the IVC will be helpful in creating more businesses and employment.

2.1.1 Islamic finance in Ghana

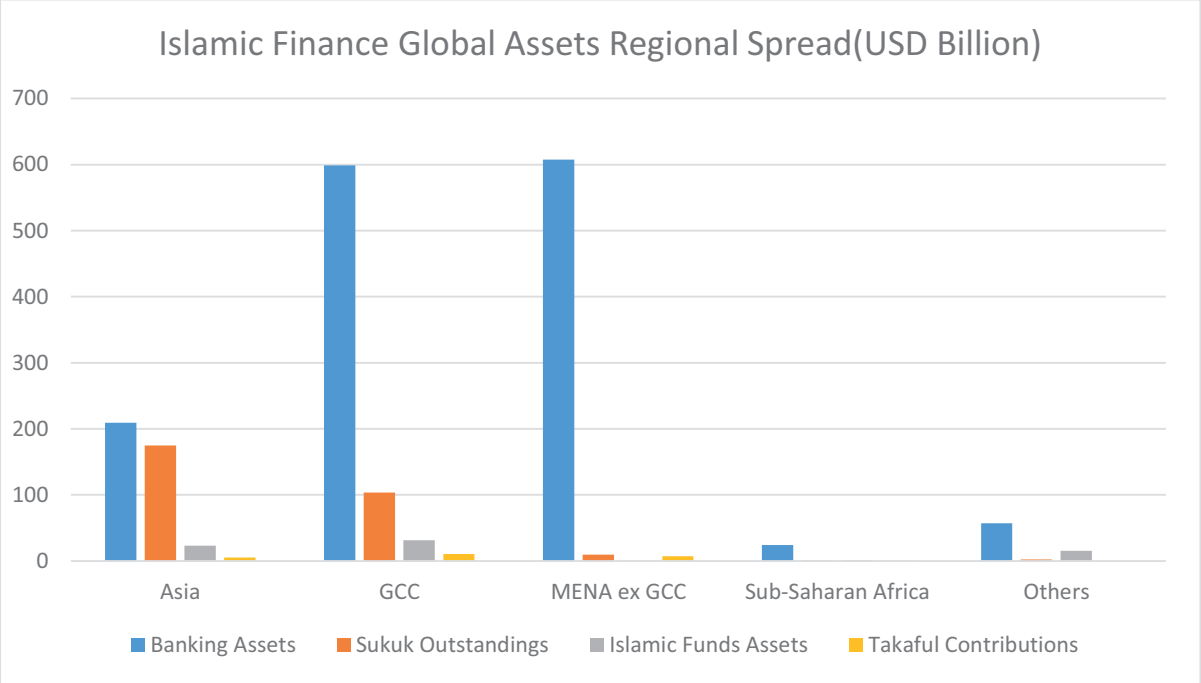
As noted in the introductory chapter, Islamic finance has grown over the years but the growth and coverage of Islamic finance has not been encompassing across the Muslim world as some significant population of Muslims are left behind, especially in Africa. Africa is a host to 27.8% (480 million) Muslims of the 1.7 billion people under the IDB 56-Member countries. The figure is even larger when Muslims in the 32 non-IDB member countries are considered. Despite representing close to 30% of global Muslims population, Africa has not witness the benefits of Islamic finance with only 1.6%, 0.24%, 1.96% and 2.16% of global Islamic banking assets, outstanding sukuk, Islamic funds and Takaful respectively (See figure 6). Thus, the continent shares only 1.4% of global Islamic finance assets of 1.9 trillion. This raises legitimate concerns of financial inclusion of the growing Islamic finance in sub-Sahara African.

According to IMF (2014), Botswana, Kenya, Gambia, Guinea, Liberia, Niger, Nigeria, South Africa, Mauritius, Senegal and Tanzania have Islamic banking activities. There is also scope for development in Zambia,[6] Uganda, Malawi, Ghana and Ethiopia, as all but Zambia have

[6] Zambia is interested in using Islamic finance instruments to fund investment in the mining sector

relatively large Muslim populations. In Uganda, financial institutions Act (2016) as amended, allows Islamic finance and 3 banks have applied to the central bank for license to operate Islamic banks.

Figure 6 Islamic Finance Global Assets Regional Spread (US$ Billion)



Source: IFSB, 2016

In Ghana there is no Islamic bank even though the central bank (BoG) allows non-interest banking. This may be attributed to an absence of Islamic finance architecture and infrastructure in Ghana. There is no comprehensive law that regulates Islamic finance in Ghana even though some few institutions are reported to be offering Islamic microfinance products in the market. For instance The Ghana Islamic Microfinance (GIMF) and Salam Capital provide these services. Islamic finance has huge prospects in Ghana looking at the number of unbanked population. It will provide an opportunity to reach out to more Ghanaians who may be financially excluded as a result of their religious persuasions. Also, Islamic finance will provide an alternative banking model in the banking space in Ghana through efficient allocation of financial resources because of the real-economy linked financing. Looking at the higher debt-

GDP ratio of Ghana, it is prudent for Government of Ghana to consider other financing alternatives in order to attract capital to finance infrastructure projects in the country. Sukuk(Islamic bonds) becomes handy as a financial instrument in this regard. Similarly, BOT projects can be structured to meet the religious demand of financiers with the capital by using Islamic finance instruments.

2.2 Overview of the VCTF

The VCTF was established by Venture Capital Trust Fund ACT No. 680, 2004 as a Government of Ghana initiative to provide finance to SMEs operations in January 2006. The Government's objective in establishing the VCTF is to promote and support the private sector as an equal partner in achieving the country's developmental goals through entrepreneurship.

In accordance with the VCTF ACT, it is to "Provide financial resources for the development and promotion of venture capital financing for SMEs in Ghana by: Providing financing to eligible Venture Capital Finance Companies (VCFCs) to support SMEs; and the provision of monies to support other activities and programs for the promotion of venture capital financing".

The mission of the VCTF is to provide low cost alternative source of funding to SMEs that will lead to efficient and profitable operations in order to create jobs and wealth. The vision is to create a vibrant and well-structured venture capital industry boasting of investments in various sectors, leading to poverty reduction through job and wealth creation with a marked growth in government revenues and ultimately economic growth.

The model adopted by VCTF in its operations is to work through VCFCs, which are managed by Fund Managers, licensed as Investment Advisors by the Securities and Exchange Commission (SEC). VCFCs are the intermediaries between SMEs requiring funds for operations and the VCTF. The maximum funding limit in an investee company is 15% of total

capitalization of a VCFC. The Trust Fund also invests in Value Chain Projects (VCP) under a Special Purpose Vehicle Structure. These investments are undertaken with the primary objective to produce critical raw materials locally, to feed Ghanaian industries.

The initial source of funds was from the national reconstruction levy where 25% of the total levy collected was allocated to the VCTF which lasted till 2006. Post 2006 the fund depended on allocations from government which was not forth coming. Although, they are allowed to raise funds from private sector, this has been very slow. On the local front VCTF continued to engage with partners and investors to tap into their resources and build a stronger and inclusive Venture Capital eco-system.

In their quest for continued development of the VC sector in Ghana, VCTF introduced the Ghana Angel Investment Network (GAIN) and have initiated the concept of Impact Investing in Ghana. These initiatives are expected to give needed push to have the expected necessary social impact.

Securities and Exchange Commission has laid a bill before Parliament seeking to regulate the VC/PE industry in Ghana. The motive behind this regulation will be to streamline the activities of the VC/PE industry in Ghana, thus making the asset class more attractive for both local and foreign investors. An interagency committee can be formed to hold broader stakeholder consultations to interrogate and come up with a proposed guideline rules to regulate the industry (VCTF Report, 2015).

2.3 Performance of VCTF

So far the VCTF has not received any distribution of profit since it started investment in 2006 as the aim of these investments is to grow the investee companies and make them profitable in the long run. The VCTF investments in various VCFCs are relatively young. The fund is now more than ten year old and distributions were expected from year five (VCTF Report, 2013).

However, the VCTF through its investments in interest bearing securities, received a total interest income of GH₵ 2,250,910 (US$ 511,570) for the year 2007 and in 2011 it increased by 28% to GH₵ 2,887,277 (US$ 626,199). In 2012 the interest income increased by 42% to GH₵ 4,123,942 (US$ 937,259). As at end of 2015, the interest income increased to close to US$ 2 million. Since, the VCTF has not been able to realise any income from the equity investments, the interest income remains the only source of revenue for the Fund.[7]

With regards to disbursement, during 2012, a total of US$ 1,257,545 was disbursed to VCFCs in response to capital calls. A total of US$300,000 was disbursed to VCFCs in 2013, which increases the total amount disbursed to date to US$10,187,054. (VCTF Report, 2013).

2.3.1 Investment in SMEs by VCTF

The model of operation of VCTF with respect to cash disbursement is through VCFC as intermediaries between it and investee companies (SMEs). The VCFC can source funds from the VCTF through debt or equity arrangements.

2.3.1.1 Debt Financing

One form of sourcing funds from the VCTF is by debt. The VCFCs may borrow from the Trust Fund to invest in SMEs. Under this option, there is a prerequisite for funding that VCFCs should have counterpart funds to which the VCTF may match at a ratio of 1:1 up to a maximum of 3:1. The downside of this form of financing structure to the VCFC is that debt capital does not promote entrepreneurship as much as equity capital which put premium on active investment by the financier. It implies that the fund does not intend to finance seed and start–up stages of businesses.

[7] This is a non-core income to the VCTF as its mandate is to realise returns from equity investments on SMEs

2.3.1.2 Equity financing

The other form of sourcing funds is through equity partnership. The VCTF and Gold Coast Securities Limited, a licensed dealing member of the Ghana Stock Exchange, pooled funds together to establish the Gold Venture Capital Company with an equity contribution of US$ 450,000 from each partner setting the total capitalization of around US$ 900,000 million in 2007 (VCTF report, 2008). With seed money of around US$ 700,000 million from the VCTF, another VC partnership was established, Fidelity Equity Fund II Limited (FEF). The Fund Manager of FEF II leveraged this sum to attract additional funding from SSNIT and several overseas investors to create a US$ 3.8 million FEF II commenced business in July 2007 and has since invested approximately US$ 930,000 million into private sector investee companies. The Trust Fund then managed to leverage the initial seed money to source US$ 11.6 million available to deploy to SMEs which results in the establishment of two additional VCFCs (Gatsi and Nsenkyire, 2010).

The operations of VCTF has been fraught with mismanagement as the Auditor-General 2015 report reveals that there was a wrongful payment of US$ 3.6 million to SIC Financial Services and two entities. One of the beneficiaries of the payment happens to be a church. The report further indicts the management of VCTF stating that 51 percent of US$ 207,000 of loans granted could not be traced as there was no adequate information on borrowers. Further revelation indicated that there were no authorised approvals of some US$ 336,336 of facilities contrary to section 15 (5 and 6) of the VCTF Act No. 680 of 2004.

Similar reports came from the Daily Guide newspaper which mentions that an alleged corruption at VCTF has caused the Bureau of National Investigation (BNI) to open investigations. According to the newspaper, the Development Assistance Fund (DAF) and the Special Purpose Vehicle (SPV) created under the VCTF to give funding access to Small and SMEs were allegedly used as an avenue to steal state funds. “Currently, only about 7% of a

whopping GH₵ 18.26 million (US$ 4.32 million invested by the government between 2010 and 2015 has been recovered and GH₵ 32 million (US$ 7.4 million) was outstanding."

Despite reported mismanagement, the new government has indicated its commitment to ensure that the VCTF functions efficiently to carry out its mandate and has tasked the new CEO to come out with a strategic plan to turn the fortunes of the funds to carry out its mandate. The fund, for the first time in four years, has been allocated GH₵ 219 million (US$ 50 million) in the 2017 budget to support SMEs and drive up economic growth via equity investments (B&FT, 2017).The allocation is expected to offer alternative and cheaper source of capital for hundreds of small businesses across the country. The last time the fund had budgetary allocation was in the 2012 budget, with an amount of GH₵ 5 million (US$ 1.16 million). This followed a 2011 allocation of GH₵10 million (US$ 2.32 million). No allocation was made in the 2013, 2014, 2015 and 2016 budgets, as a result of which managers kept calling for government support (B&FT, 2017). With a closer look at the operations of the VCTF, it is clear that the current government is committed to supporting it to drive job creation. This development is refreshing as the current government championed job creation as the main campaign promise in the 2016 election that saw the overwhelming voting of the NPP into government. It is important to mention that, the VCTF will not function properly once it's managed by government or its proxy. Generally, government hand in managing an organisation is always inefficient especially in developing countries. Hence, it will be more functional in supporting government's mandate in creating SMEs if the funds can be given to a private entity to manage. This will ensure that, resources will be allocated more efficiently and genuine start-ups and SMEs will be supported devoid of political cronyism. The current model allows the management of VCTF to be manipulated by politicians and make them unaccountable. Private management will be given performance targets and contracts renewed based on performance of the VCTF creation of SMEs or successful exits.

Also, from policy perspective, it will be better if government is able to consolidate the various interventions that are geared toward supporting start-ups and SMEs development in Ghana. There is the National Board for Small Scale Industries (NBSSI) which is as an apex governmental body for the promotion and development of the Micro and Small Enterprises (MSE) sector in Ghana (nbssi.gov.gh). It was established by an Act of the Parliament of the Third Republic of Ghana (Act 434 of 1981) and operationalized in 1985 because Government views the sector as having the potential to contribute substantially to reducing the high unemployment rate as well as the growth of the economy of Ghana. Also, in July 2017 government launched another strategic institution called the National Entrepreneurship and Innovation Plan (NEIP) as a flagship policy initiative with the primary objective of providing an integrated national support for start-ups and small businesses (Ghana.gov.gh). NEIP primarily focuses on providing business development services; start-up incubators and funding for young businesses to enable them grow and become successful. The ultimate aim of NEIP is to enable entrepreneurs, empower innovation and accelerate job creation for Ghana's teeming unemployed youth. There is huge synergy that can be drawn if NBSSI, NEIP and VCTF can work together in a genuine effort to support start-ups and create more SMEs in Ghana.

2.4 VC financing companies in Ghana

By close of 2016, six venture capital finance partnerships have been established between the VCTF and VCFCs. These companies are Bedrock Venture Capital Finance Company, Activity Venture Finance Company Limited, Fidelity Equity Fund II, Bedrock Venture Capital Finance Company, Gold Venture Capital Limited and Ebankese Venture Fund Limited.

Bedrock Venture Capital Finance Company was born out of a partnership between SIC Insurance Company Limited, National Investment Bank (NIB) and the Venture Capital Trust

Fund (VCTF) in January 2007. Its mission is to provide financial resources for the development and promotion of venture capital financing for SMEs in priority sectors of the economy like Agriculture, Information Technology, Education, Tourism and Health Care (VCTF report, 2009). Activity Venture Finance Company (AVFC) was incorporated on 2nd October 2006. AVFC is a limited liability company incorporated under the companies code of 1963 (Act 179) with the sole authorized business of assisting in the development of SMEs by making available for their use, equity and quasi-equity financing and providing them business and management expertise. It is owned by the Agricultural Development Bank (ADB), the Ghana Commercial Bank (GCB) and the Venture Capital Trust Fund and managed by Blackstar Fund Managers. Fidelity Capital Partners limited (FCPL) is a member of the Fidelity Group. The company was established in February 1997 and commenced business in November 1999 as venture/private equity funds manager and provider of corporate finance advisory services. In 2007, the Fidelity Equity Fund II (FEF II) was established with seed money of GH₵ 3.0 million from the VCTF. The Fund Manager of FEF II leveraged this sum to attract additional funding from SSNIT and several overseas investors to create a GH₵ 16.5 million FEF II. FEF II commenced business in July 2007 and has since invested approximately GH₵ 4.0 million to the private sector investee companies. In 2007, the VCTF and Gold Coast Securities Limited (GCSL) partnered to form the Gold Venture Capital Fund (Gold) in April 26. Gold is a US$ 4.0 million Fund, with Gold Coast Securities and VCTF holding 50% each in capital commitments. Though Gold was established in 2006, it remained dormant until the appointment of Boulders Advisors as Fund Manager in April 2010. The Fund has invested a total of GH₵ 1.15 million in three portfolio companies with a five year investment period ending in April 2014. Ebankese Fund Limited (EFL) is a result of a promotion between VCTF, HFC Bank and Oasis Capital. VCTF committed US$ 4.0 million with HFC investing US$ 2.0 million. Initially, EFL raised US$ 12.5 million at first closing although the target is to raise US$ 25.0 million by final closing.

Other investors include; WDB –US$ 2.0 million, Oasis Capital US$ 0.5 million, Ghana Union Assurance –US$ 2.0 million and a co-investment arrangement of up to US D2.0 million with SOVEC. EFL commenced operations in April 2010. EFL began investing in the first quarter of 2011 and has since invested $2.9 million in two portfolio companies within the educational and hospitality sectors

Table 1 VCFC stake in investee companies

VCFC	Shareholding in Investee Companies
Bedrock	49 percent
Activity	49 percent
Fidelity	38 percent
Gold	49 percent
Ebankese	49 percent

Source: Author (data sourced from interviews with Ministry of Finance)

The model of operations of VCTF as explained earlier is that they appoint VCFC as Fund Managers to deploy capital to potential SMEs that require funding. The VCFCs take equity stake in these portfolio companies on behalf of VCTFs sharing risks and return. Bedrock indicated that it has a significant minority stake of up to 49 percent of equity stake whiles Activity has shareholding of 30% to 49% in each of the portfolio firms they manage. Fidelity has 20% to 38% in each of their 12 portfolio firms under its management. Ebenkesse and Gold both hold 49% in their respective investees businesses.

In summary, an assessment of the shareholding structure of VCFCs in Ghana shows that commercial banks invest so much into the sector. The prospect of VC as entrepreneurial catalyst may be under serious challenge as all the VCFCs are partly owned by the VCTF and some selected commercial banks. Normally, for lack of historical performance record,

commercial banks do not finance SMEs at the early stages. This may imply that the VCTF together with commercial banks linked VC financing companies only focus on debt financing. As a result they provide the financing to selected older SMEs. A VC financing arrangement which does finance start-up businesses should be operating just like a bank outside the banking system (Gatsi and Nsenkyire, 2010).

2.5 Assessment of VC finance companies

Currently, in Ghana the VCFCs source funds from the VCTF, banks and SSNIT who are co-owners of these companies (Gatsi and Nsenkyire, 2010). Gatsi and Nsenkyire report that fund raising activities of these VCFCs are limited to VCTF and some few institutional investors. It is however difficult for the VCFCs to raise funds from individual investors. Unfortunately these VCFCs have not staged specific programs to attract investments from individuals to contribute to their fund raising activities (Gatsi and Nsenkyire, 2010).

2.5.1 Investments by VCFCs in Ghana

VCFCs in Ghana invest the funds committed to them by the VCTF and banks in entrepreneurial firms with projects that have the tendency for high returns (see table 2 and figure 7). There are also monitoring processes such as periodic visits to client and submission of monitoring reports by the portfolio firm to verify and ascertain progress for achieving targets and benchmarks during the investment period and these reports are sent to VCTF. The VCFCs in Ghana are general purpose funding companies and invest in all sectors of the economy except direct imports to sell. Priority sectors for funding are established periodically by the Board of Trustees of the Trust Fund in line with Government's developmental agenda for the year (See table 2 for the priority areas for VCTF in 2007).

Table 2 Priority areas of VCTF for funding

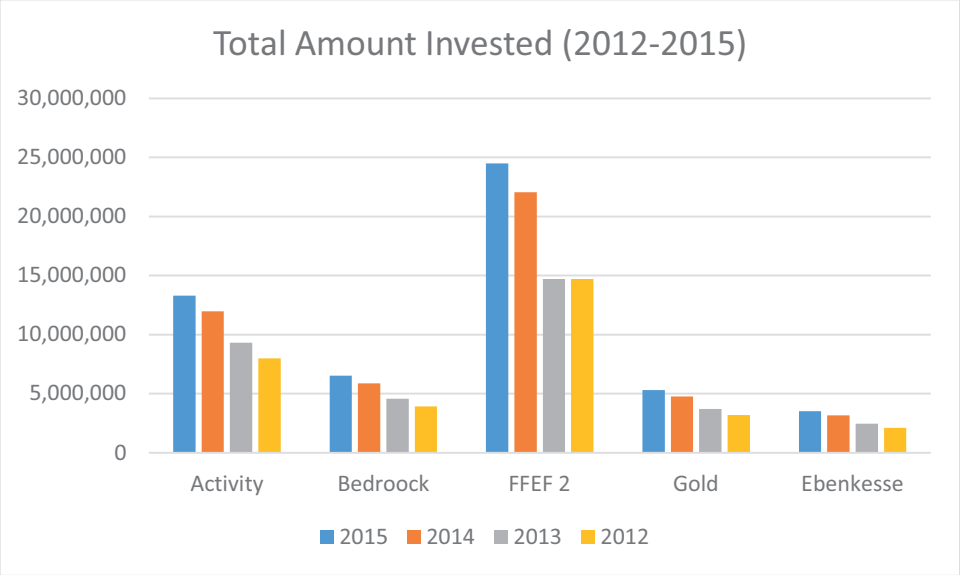
PRIORITY AREAS
Information and Communication Technology
Tourism
Agriculture
Pharmaceuticals

Source: VCTF Report, 2007

These priority sectors may benefit from about 55% of the total funds available while the remainder will be spread to cover other viable business opportunities (VCTF Report, 2007; 2010).

As at 2015 VCFCs had invested into a number of SMEs who are at various stages of growth. Figure 7 shows that First Fidelity Equity Fund invested the highest amount of over GHS 13 million in various SMEs numbering about 7, followed by Activity of over GHS 5 million in 18 SMEs. Bedrock and Gold invested near GHS 4 million and GHS 1 million in 11 and 2 SMEs respectively. And Ebenkesse was the only company that had not invested in any SME as at this year.

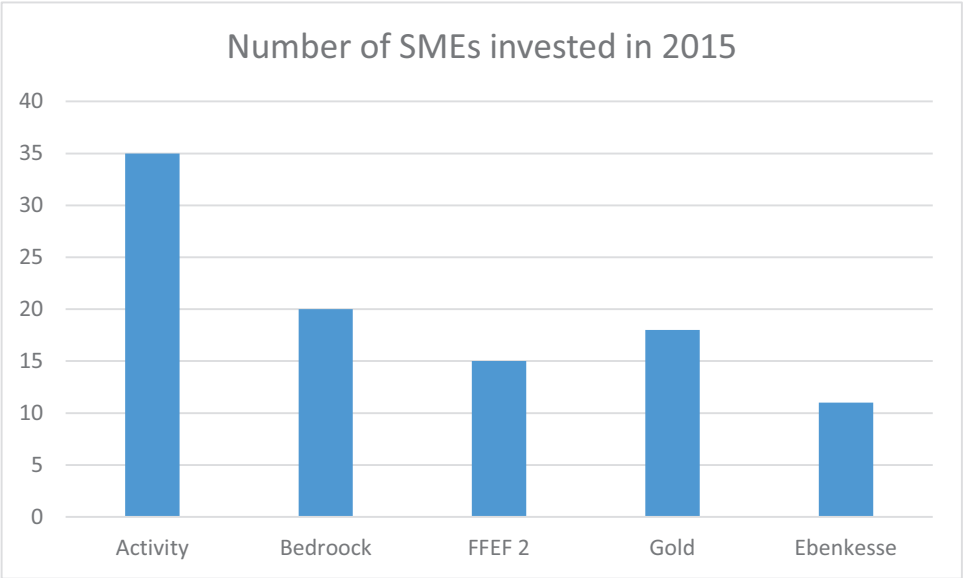
Figure 7 Investment by VCFCs for 2012-2015



Source: Data from VCTF reports, 2012-13 and interview with VCFCs

Figure 7 shows that the highest investment came from Fidelity across the years with a cumulative investment of US$ 24.5 million in 2015 representing 46 percent of total investments. The investment level in 2012 and 2013 are the same and sharply increased in 2014 and 2015. Activity was the highest investment deployment VCFC with a 25 percent of total investments in 2015 and this has seen consistent increases in portfolio size over the 2012-2015 period. The least proportionate contributor of total investments is Ebenkesse which holds only 7 percent of the total investment shares in 2015. Total investment of VCFCs amounts to US$ 53.1 million in 2015 which appears to be significantly small compared to US$ 127 billion of VC assets reported globally for only 2015 (KPMG, 2016).

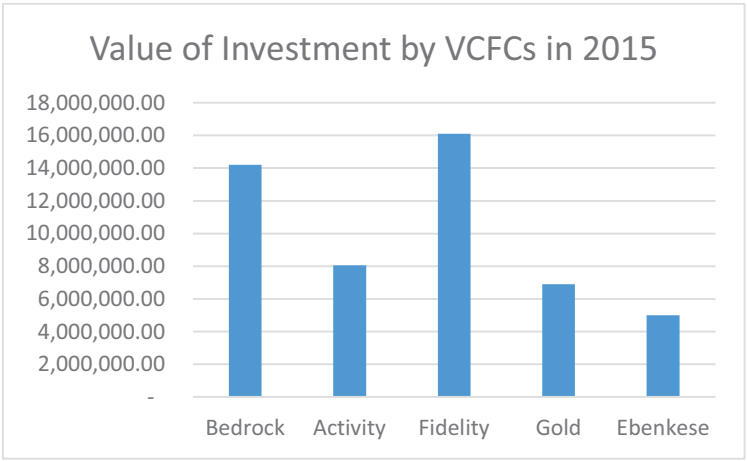
Figure 8 Number of SMEs VCFCs invest in



Source: Interview with VCFC

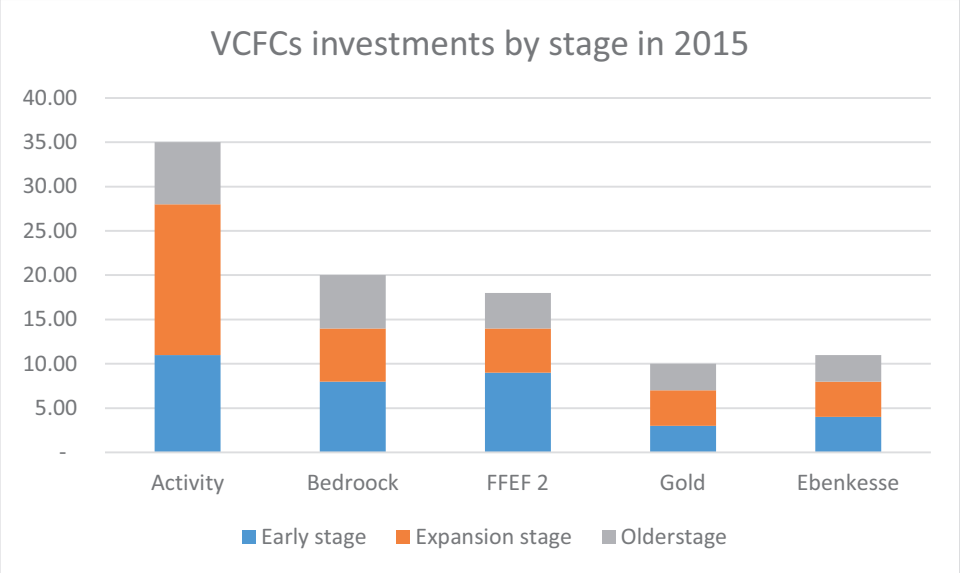
Even though Fidelity holds highest investments in SMEs in terms of value, Activity invests more with regards to the number of SMEs (See figure 8). Activity invests in 35 SMEs at various stages of growth in 2015 whilst Fidelity invests in 15 SMEs. This means that the investments of Activity in investee companies are relatively of smaller sizes compared with Fidelity. In total 94 SMEs benefit from the investments of these VCFCs.

Figure 9 Amount of VCFCs Investments in SMEs



Source: Interview with VCFCs

Figure 10 VCFCs investments in SMEs by stage

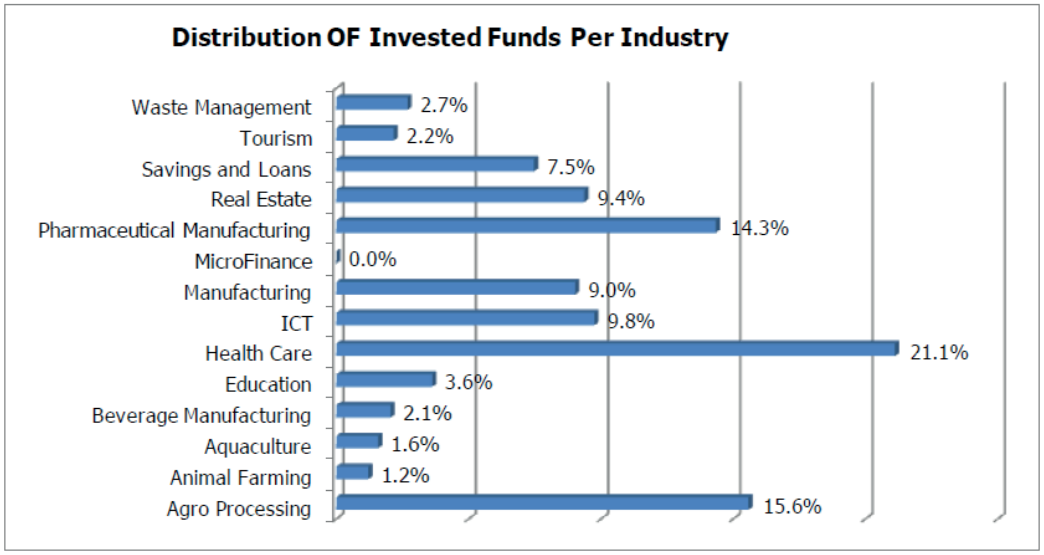


Source: Interview with VCFCs

From the perspective of stage of growth of SMEs, it is observed that Activity invests more in SMEs which are at expansion stage of growth as seen in figure 10 which shows that it invests close to half of their total investments in SMEs which are at the expansion stage. Fidelity on the other hand directs half of their investments in early stage SMEs. This explains why they deploy more investments in terms of value but with less number of SMEs as early stage businesses require more capital. Despite the fact that all the VCFCs invest across the various stages of SMEs, the concentration has been with the early and expansion stages and only Gold allocate the highest of 30 percent of their portfolio to older stage SMEs. In all, out of the total 94 SMEs invested in, 37%, 38% and 24% are invested in early stage, expansion stage and older stage respectively. This reveals that VCFC don't give enough priority to early stage SMEs and this development is worrying as their mandate is focused on building successful SMEs from scratch and turn innovative ideas into entrepreneurial ventures. Overall more investments were channelled through expansion stage SMEs than the other stages. Investment of older stage SMEs may be seen by some as deviating from the core motivation of VCTF as this goes into the realm of private equity. From risks management perspective, the investments in diverse

stages of SMEs development will be a good one as failure of one segment may not unreasonably impact on the entire portfolio. The high proportion of investments in expansion stage shows that VC firms shows signs of risks averseness towards start-ups.

Figure 11 Distribution of SMEs investments by industry



Source: VCTF report, 2010

According to figure 11 above, the sectorial analysis of VCFCs investments to SMEs shows that the, health care service sector receives the highest amount of funding from VCFCs with over 21% of funds invested in 2010. Agro-processing and pharmaceutical sectors also featured prominently in terms of funds attraction with almost 16% and 14% investments respectively. Ghana economy is driven by the service sector and it is not surprising that health care sector dominates the funding attraction. But looking at the vast natural resources, the country has comparative advantage in the Agriculture sector. This sector has the huge prospects in value addition for domestic and export market if the right support is given to SMEs. Even though the agro-processing sector's allocation is second in rank, there are still huge opportunities that can be explored in this sector. Linked to the agaric sector is animal farming and aquaculture which both have huge prospects especially for the Northern part of the country. The Pharmaceutical and manufacturing sectors should also be given priority as these sectors will help the country

reduce its imports of medicine and improve on the balance of trade. As the country face challenges with the foreign exchange pressures on the local currency, supporting SMEs to succeed in these sectors will help tone down the huge monies spent on importing these goods.

So far the Agricultural sector has had the most investment, this is encouraging because the mainstream financial institutions financing mix has a less proportion of financing to the agricultural sector as reported in the Bank of Ghana stability report in April 2017(BOG, 2017).

2.6 VCTF impact on the Ghanaian economy

The VCTF is mandated to stimulate economic growth and development by supporting SMEs to create value and jobs (Act 680, Article 2). According to World Economic Forum, in 2013, VCFCs have invested more than US$ 17 million into 48 SMEs across various sectors of the Ghanaian economy, including healthcare, education and agro-processing enterprises producing items such as inexpensive packaged foods and filtered water.[8] These SMEs provide more than 1,000 direct jobs and an estimated 3,000 indirect jobs through the expanded operations of portfolio companies (WEF, 2014). This number increased to US$ 53.1 million in 2015.

The VCTF has placed Ghana at the forefront of the African venture capital field. Due to the VCTF's awareness-building activities and groundwork, other venture capital funds have begun to emerge in Ghana. To further expanding its work, in 2012 the VCTF received a US$ 150,000 grant from the Rockefeller Foundation to develop the impact investing market in Ghana. The concept of impact investing is that investors can pursue financial returns alongside intentionally addressing social and environmental challenges (Bugg-Levine & Emerson 2011). This funding is used to perform a comprehensive landscape of the country's impact investing marketplace and to establish the Ghana Institute for Responsible Investment. The grant among other things

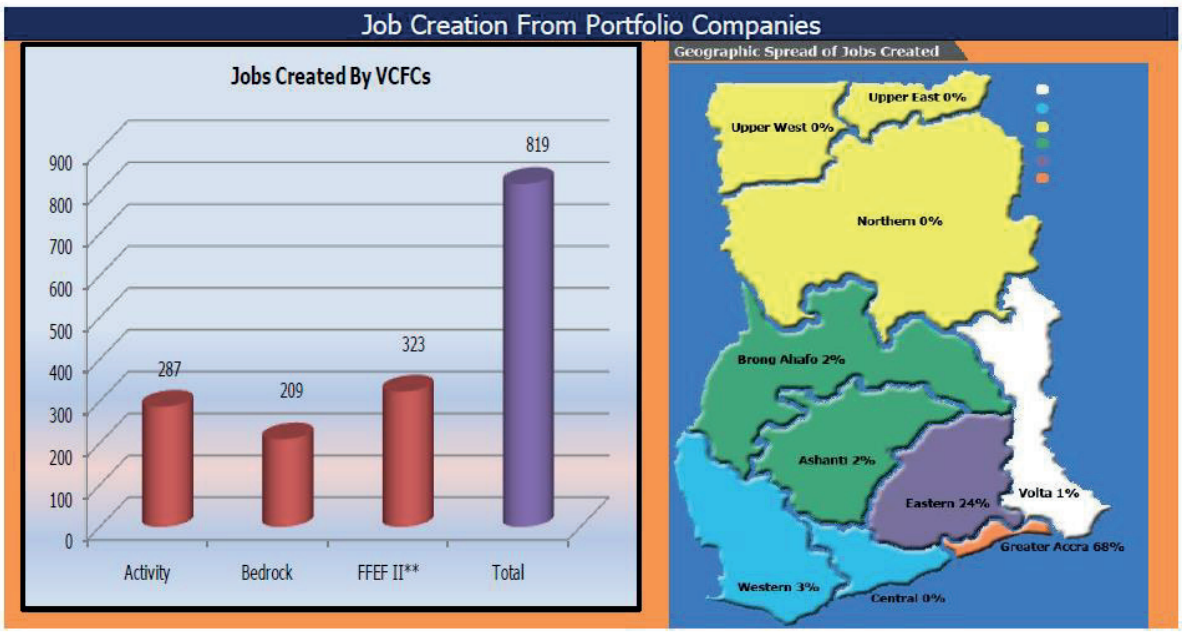
[8] Source: http://reports.weforum.org/social-innovation-2013/06-the-venture-capital-trust-fund-ghana/ (date and hour of checking it).

was to finance policy research environment, organize stakeholder consultation, and establish the Ghana Institute for Responsible Investing (GIRI) – an advocacy body to promote impact investing in Ghana.

A total of 819 direct jobs have been created by the investments in the 39 portfolio companies. Although not easily assessable, ancillary jobs resulting from the increased activity from the investee companies and employment emanating from the trickledown effect of improved demand for inputs, including raw materials and human capital, is estimated to be in excess of 1,500.

Even though VCTF has created some jobs through their investments, the job creation has not been felt by the whole country. According to figure 11, whilst 66% of the total jobs created went to Greater Accra region, no single job was created in any of the 3 Northern regions which have been identified as the poorest regions in the country. This shows the investment deficit in these areas which contributes the perpetuating of poverty in these areas.

Figure 12 Job Creation by VCTF across Ghana



Source: VCTF Report, 2010

Another way VCTF has impacted the Ghanaian economy is through social enterprise. This is a growing subset of Ghana's emerging SME market. In a developing economy such as Ghana, many SMEs supported by the VCTF provide employment for previously jobless individuals and often improve access to basic services in healthcare and education.[9]

In addition, the VCTF has advocated for industry infrastructure development, including an angel investor network, a research programme and a partnership with the Ghanaian stock exchange.

The concept of impact investing was also advocated for by the VCTF. This is designed to encourage investors to direct funds toward opportunities that deliver a double edged benefit stream of economic returns and improvement of social wellbeing. The Trust Fund as part of its strategy is to increase private sector participation in the investment, submitted a proposal to The Rockefeller Foundation (TRF) to source for counterpart funding to develop impact investing as an asset class.

In keeping with the second mandate of Act 680, the VCTF continued to build the Ghanaian venture capital market, developing a network of private stakeholders to support its fundraising and technical assistance activities. To initiate connections between the SME community and investors, the VCTF held joint investor/SME roundtables across the country. Additionally, VCTF staff realized that more than 60% of SMEs applying for capital from finance companies came from the Greater Accra Region, which represented only 12% of the country's population. In 2010 the VCTF began a countrywide "road show" to educate entrepreneurs in other regions about their services.[10]These road shows continued yearly.

[9] Source: http://reports.weforum.org/social-innovation-2013/06-the-venture-capital-trust-fund-ghana/.
[10] Source: http://reports.weforum.org/social-innovation-2013/06-the-venture-capital-trust-fund-ghana/.

The VCTF was instrumental in creating the Ghana Alternative Market (GAX), an alternate listing on Ghana's stock market specifically for SMEs in 2013. As the entry cost into the primary market exchange is too expensive for smaller businesses, the GAX will offer a more accessible option for SMEs to attract investment. The VCTF is also working with the Ghana Stock Exchange to establish a fund dedicated to helping SMEs cover the upfront cost required to list on the Exchange.

According to the World Economic Forum, another impact area of the VCTF is the Commodity Value Chain Financing. In 2012, a total amount of GH₵ 3,492,600 was disbursed to 14 Companies in soya and maize production, aggregation the assisted Companies is 1,600 acres whilst the other 8 Companies were assisted to aggregate, store and market grains (maize and soya) produced by their out-growers and other farmers in their respective catchment areas. The impact of the Commodities Value Chain Financing with regards to productivity, jobs creation, incomes creation, provision of ready market outlets to farmers and food security in the local communities and the economy as a whole is significant.

Also in 2007 SMEs in the Northern Regions were provided with about GH₵ 360,000 for the production of Sorghum for Guinness Ghana Brewery Limited in replacement of imported barley, which the company uses for its brewery processes. Due to this investment, Guinness Ghana Brewery Limited eventually eliminated the importation of barley completely. Funds invested in the Agricultural Industry particularly to farmers, by the Trust Fund's assisted in increasing production from the previous years (that is pre VCTF investment) total 100 metric tons to 903.4 metric tons in the 2006 season, creating a net income of GH₵ 102,000 to the farmers and a collateral income of approximately GH₵ 36,000 to other incidental industries (VCTF Report, 2007). Another financing agreement which extended GH₵ 800,000 to farmers under the Sorghum Value Chain Project was signed by the Trust Fund in the 2007. The Project progressed well, and met the targeted supply of 2,000 metric tons of yield to Guinness Ghana

Brewery, despite the excessive flooding in the three Northern regions where most of the farms were located during the 2007 farming season. As VCTF financial report (2007 to 2013) indicated that a total of 3500 farmers had benefited directly from the Trust Fund's facility with an additional 53,698 people affected indirectly. Direct net income to the farmers grew from GH₵ 102,000 in the previous year to GH₵ 371,250 for the 2007 farming season, representing a 264% increase. Income to support services sectors also grew from GH₵ 36,000 to GH₵ 52,000, a 44% increase, all within the Sorghum production regions of the Upper East, Upper West, Northern and the Northern Brong Ahafo Regions. As at December 2007, the VCTF financial report indicated that a total of 3500 farmers had benefited directly from the Trust Fund's facility with an additional 53,698 people affected indirectly. Direct net income to the farmers grew from GH₵ 102,000 in the previous year to GH₵ 371,250 for the 2007 farming season, representing a 264% increase. Income to support services sectors also grew from GH₵ 36,000 to GH₵ 52,000, a 44% increase, all within the Sorghum production regions of the Upper East, Upper West, Northern and the Northern Brong Ahafo Regions.

Despite, the emerging opportunities in the Agricultural Sector, VCTF operations in the period reviewed revealed that there is the need to facilitate effective warehousing and marketing arrangements with bulk buyers including processors (especially VCTF Investee Companies) in the various commodities to ensure timely bulk sales and payments for produce of nucleus farmers and retailers. This will address delays in payments by bulk buyers to VCTF clients and improve on timely repayment of loan facilities by the beneficiaries (VCTF report, 2013).

CHAPTER 3
ISLAMIC VC AND THE ISSUE OF INVESTOR PROTECTION

According to IMF, *Shari'ah* principles, on which Islamic finance is founded, have inherent features that potentially promote the protection of consumers and investors. In particular, Islam prohibits transactions based on *Gharar* (uncertainty in transactions), *Maysir* (gambling or the acquisition of wealth by chance instead of effort) and *Riba*. These principles are beneficial for financial stability and consumer protection.[11] The IMF report further observes that features alone cannot ensure consumer protection. Islamic financial products are provided within the same moral, regulatory, and economic paradigm as conventional products, and not all providers of Islamic financial products are motivated by religious or ethical precepts. Empirical evidence abounds of disparities between the principles and the practice.

Traditional VC uses a variety of financial instruments to structure a transaction in order to incentivise and protect capital. These instruments are motivated by the need to limit the risks that an entrepreneur actions may expose the investment into as well as some tax benefits that may be available in the country. These include, but are not limited to, different classes of preferred stock, debt, warrants, blend of common stock in conjunction with other instruments (Al-Rifai and Khan 2000). These instruments allow the investor to allocate risk, establish ownership rights, control management, and provide them with incentives. Some of the structures used in venture capital were originally developed for tax efficiencies (Gompers, 1998).

AAOIFI standards for modern corporations allow for the mixing of conventional and Islamic investors in VC, but prohibit commonly used preferred share structures. AAOIFI's *Shari'ah* Standard No. 12 covers modern corporations, including the types of *Musharakah* arrangements that Islamic venture capital would use in a traditional limited partnership, provided that the

[11] See report at https://www.imf.org/external/pubs/ft/wp/2015/wp15107.pdf

articles of association allow for a mechanism of *Shari'ah* oversight. Protecting investors and incentivising entrepreneurs to perform remain a challenge for IVC and this will likely lead to attraction of conventional VC over IVC.

All financial contracting confronts three fundamental problems: uncertainty, information asymmetries, and agency costs (Gilson and Schizer, 2003). These problems are manifested highly in high-tech start-ups. Because these ventures are in an early stage and the relevant technologies may well be un-tested, most of the important decisions bearing on the company's success have not yet been made. This reality exacerbates not only uncertainty, but also information asymmetries between investors and entrepreneurs, as "intentions and abilities are far less observable than actions already taken" (Gompers, 1998). Entrepreneurs may exploit their informational advantage for their private benefit. The following sections will discuss *Shari'ah* permissible instruments that can be used to protect investors and incentivise them to invest in IVC. According to Esam Ishaq "The main issues relate to guaranteeing capital or returns, and preference for certain parties in case of a loss. As long as these issues are not being circumvented, most other venture capital norms can be adopted in a *Shari'ah* compliant manner".[12]

The guiding principle in structuring IVC is *Shari'ah* permissibility such that any instrument or structure used should not directly or indirectly lead to guaranteeing capital or returns, preference for certain parties in case of a loss and interest payment. Insofar as these issues are not being circumvented, most of the venture capital norms can be adopted in a *Shari'ah* compliant manner.

3.1 Liquidation preference

[12] Interview by Thompson Reuters accessible at http://www.salaamgateway.com/en/finance/story_/interview *Shari'ah*related_issues_in_venture_capital_activities_sheikh_esam_ishaq-SALAAM08122016051859.

VC investors usually require preferential treatment by demanding their return first before other parties who have equity stake in the business. The venture capitalist may recoup his/her investment when the business matures and this normally occurs at exits or on liquidation and it is normally structured such that VC is incentivised with liquidation preference. According to *Shari'ah*, venture capitalist is not allowed to stipulate that if a firm is liquidated, some shareholders have first access or recourse to certain assets especially tangible assets such as motor vehicles and the like. Partners must share equally in all assets of the venture. It is instructive to note that when *Murabahah* or *Istisna'* are used as part of the transaction where the VC is a party under any of these contracts, then its permissible to be given preference at liquidation. For instance, if the VC finances the purchase of equipment through *Murabahah* and there happens to be a liquidation, the *Murabahah* debt has to be settled first before other tangible assets are distributed to capital contributors.

Investors can always ask for some sort of security against negligence or breach of the terms of the contract, but this can only be against agreed principles of business practices (Lawal, 2016). This cannot be based on target rate of return or profitability of the venture.

3.2 Preference shares

Preferred stock is the heartbeat of conventional VC structuring as it is used to signal investors. Gilson and Schizer (2003) reports that about 94% of companies studied in US used preferred stock. Preferred stock has preference over common stock in the event of liquidation of the company. Preferred stock has a face value that is paid out before looking at common stocks. Typically, the face value of preferred stock in a private equity transaction is the cost basis the venture capitalist pays for the stock. Any amount above the preferred redemption would be paid out to common stockholder and divided according to the type of preferred stock used. Redeemable, convertible, and participating convertible preferred stock are the various forms of preferred stocks.

3.2.1 Redeemable preferred stock

Redeemable preferred stock is stock that has no convertibility into equity. Its value is its face value plus any dividend rights (Josh, 1999).Redeemable preferred stocks then acts more like subordinated debt than equity. The stock carries a negotiated term specifying when the investor, most likely the sooner of a sale or public offering, or up to eight years, must redeem it. It is used in private equity transactions in conjunction with common stock or warrants.

3.2.2 Convertible preferred stock

According to Khan and Al-Rifai (2011), convertible preferred stock is a stock that can be converted at the shareholder's option into common stock. In this situation, the shareholder must choose between redemption of his/her preferred shares at face value or convert them into common stock. Obviously if the value of the stake is worth more than the face value of the preferred shares, the shareholder will convert to common stock and realize a gain in value.

3.2.3 Participating convertible preferred stock

Participating convertible preferred stock is the same as convertible preferred stock with the additional feature that in the event of a sale or liquidation of the company, the shareholder has the right to receive the face value and the equity participation as if the stock were already converted (Khan and Al-Rifai, 2011). Thus, the shareholder does not have to decide between redeeming or converting since any increase in value over the face amount would be given to the investor in the form of common stock or cash equivalent. This means that the stocks are owned by the stockholders from day one and hence are *Shari'ah* compliant.

It is argued that even though the use of preferred stock is popularly reasoned on its role in superior cash flow rights and liquidation preference, tax planning motivations also have explanatory power in this regard (Gilson and Schizer, 2003). Sequel to this, from a tax planning perspective, much depends on the valuation of the portfolio company's common stock at the

time the manager receives equity compensation. The problem is that this award typically coincides with a venture capital financing round. Although the manager wants a low valuation for her own stock for tax purposes, she still wants venture capitalists to pay a high price for their investment.

In the US context, the tax treatment of managers' incentive compensation turns on the valuation of common stock on the grant date. When the manager and venture capitalist receive identical stock at approximately the same time, and the venture capitalist pays more, the tax law takes a common sense result: the price the venture capitalist pays for the common stock sets its fair market value, and the discount offered to the employee generally is taxed as ordinary income (Gilson and Schizer, 2003). To avoid this result, the tax planning goal is to drive a wedge between the tax valuation of the manager's equity compensation, on one hand, and the price the venture capitalist pays for its investment, on the other. This is the tax reason for giving venture capitalists convertible preferred stock instead of common stock (Sahlman, 1990).

3.3 Finding alternative ways to get the benefits of venture capital structures

Some of the potential *Shari'ah* compliant solutions that can be considered include implementing supermajority clauses, share lock ups or warrants, combining *Musharakah* with *Qard or with Murabahah* and diminishing *Musharakah*.

3.3.1 Supermajority clauses

Supermajority clauses with larger voting majorities than the simple majority for certain business decisions could be used to protect investors where the entrepreneur does not command a supermajority of the voting rights (Thomson Reuters, 2016). This means that even if the venture capitalist has minority shareholding, it can still influence certain key business decisions within the premise of protecting its investment.

Management could also be considered so that the entrepreneur cannot immediately try to give out the company to another investor and benefit disproportionately on their capital contributions. However, Elseify (2014) notes that in a *Musharakah* investment, "parties are allowed to withdraw at any time at fair market evaluation at time of withdrawal provided they compensate for any damage caused to other partners". The loss here should be limited to actual cost, not potential loss, to the business caused by the exit of the partner. Partners are also enjoined to give due notice to other partners. In a case of withdrawal by any partner, the obligations and actions that preceded the termination of the *Sharikah* are binding on all the partners (AAOFI, 2010, standard number 12, page 209).

3.3.2 Warrants

In conventional finance, warrant typically is an option that allows the bondholder to purchase the firm's common stock from the firm at a specified price for a given time period. The specified purchase price for the stock set in the warrant and is typically above the price of the stock at the time the firm issues the warrant but below the expected future stock price (Reilly and Brown, 2012). In VC structuring, warrants are used as mechanism for entrepreneurs to grant the venture capital investor the option but not obligating the investor, under limited situations, to exercise the warrants when desirable. The conditions under which the warrants would be exercisable would have to be sufficiently narrow to avoid the venture capital investor being able to use the warrants to capture more of the gain from the company's success than he/she were entitled to under the original agreement (Thompson Reuters, 2016). Also warrant cannot be traded according to Shari'ah as it represents a promise to buy more stocks at an exercisable price.

3.3.3 Diminishing *Musharakah*

A diminishing *Musharakah* makes provision in the agreement for the VC capitalist to offload its stake overtime to the entrepreneur based on actual valuations. This can especially be used to finance family businesses where entrepreneurs usually do not want to lose control or dilute ownership.

3.3.4 Liquidation preference

A *Mudharabah* contract solves the issue of liquidation preference by ensuring that the principal is repaid first before any profits are distributed, as is common practice within the VC industry and is captured in AAOIFI Standard No. 13, Article 8/7. That Standard states that "No profit can be recognized or claimed unless the capital of the *Mudharabah* is maintained intact. Whenever a *Mudharabah* operation incurs losses, such losses stand to be compensated by the profits of future operations of the *Mudharabah*. All in all of this arrangement is that the distribution of profit depends on the final result of the operations at the time of liquidation of the *Mudharabah* contract. Further, *Mudharabah* can be structured with periodical presumed liquidation, e.g., every year or for the whole period. In the latter case any periodical distribution is considered provisional, subject to adjustment at end of *Mudharabah* period. And then in such a case liquidation at capital face value can be done by recalling any provisionally distributed profit. Further this applies not only to *Mudharabah* but also to *Musharakah* although it is more visible in *Mudharabah*. If losses are greater than profits at the time of liquidation, the balance (net loss) must be deducted from the capital….If the total *Mudharabah* expenses are equal to the total *Mudharabah* revenues, the capital provider will receive his capital back without either profit or loss, and there will be no profit in which the *Mudharib* is entitled to share. If profit is realised, it must be distributed between the parties as per the agreement.

According to WB and IDB (2015), in an environment where Islamic law is alien, it may not be feasible to structure the offerings of conventional finance products to fully satisfy Islamic law requirements, especially if the majority of their limited partners are conventional investors that do not want to be bound by the limitations of Islamic law on potential investment opportunities and instruments. A solution to overcome existing structures and still attract Islamic capital is through the structuring of parallel VC investment vehicles. The three parties (general partner, conventional fund, and Islamic fund) can enter into a co-investment agreement, with an opt-out option for the Islamic limited partner from specific deals that they consider not to adhere to *Shari'ah* compliant.

3.3.5 Negligence clauses

The venture capitalist and the entrepreneur can agree to spell out potential sources of negligence that will guide the operations of the entrepreneur. AAOIFI Shari'ah standard 12 provides that all partners are supposed to hold the assets of the company in trust unless they act negligently, misconduct or breach the contract. In the event of negligence and dispute, independent experts must be involved to decide whether this is considered a normal situation or a result of negligence. In this case arbitration can be provided for in the agreement and will be triggered in a situation of dispute.

Kahf and Ibrahim (2017) assert that failure to perform its duties by an entrepreneur towards the business is often caused by negligence, misconduct, violation and abuse of contract on the part of entrepreneur. In its attempt to cut edges, the entrepreneur may compromise the success of the project on the ground that it can always compromise with the project's monitoring authority. It is contended that an IB can address this by making the client to assume liability of non-performance unless it can proof beyond doubt that this was caused by external factors to which the client has no relation whatsoever (Hassan, 2013). With this condition, the Islamic Bank will shift the burden of proof of non-negligence and non-transgression of contract to the

client. This is permissible in the Maliki School. Imam Malik differentiates between common worker (*Ajeer Aam*) and private worker (*Ajeer Khas*) and opined that within the remit of non-performance, the potentiality of negligence is high for a common worker and therefore should be held responsible for negligence unless he/she proves otherwise (Hassan, 2013).

3.3.6 *Musharakah* with *Qard*

When IVC deploys funds to SMEs through *Musharakah* combined with *Qard*, there is an opportunity to secure the *Qard* funds as the principal is guaranteed in the case of liquidation. The IVC will not be able to earn profit on the *Qard* funds in this situation and profit-motivated investors may be sceptical to deploy their capital through this. To water down the demotivating tendency, the IVC and entrepreneur can make the *Qard* short term with conditions of renewal set against performance of the entrepreneur. There can also be a financing arrangement that allows the *Qard* to be converted to equity. The VC can set some performance targets for the SME that will serve as an incentive to have access to additional capital. It is important to note that, in converting *Qard* to equity, care must be taken not to attract *Riba* in the conversion. Thus, the outstanding debt should be valued at face value and commensurate stake in the SME taken with arm's length valuation of the business.

3.3.7 *Musharakah* with *Murabahah*

Musharakah can also be combined with *Murabahah* to finance SMEs. With this structure, the VC will hold equity stake in the investee company with all the benefits that *Sharikah* comes with in terms of management and control. Aside this, the VC will also enter into a Murabahah transaction with the investee company. This allows the VC to finance essential working capital of the business. For instance, if it is a factory, the VC can finance the raw materials, purchase machines and even vehicles all under *Murabahah*. Upon entering into a deferred sale agreement with the portfolio company based on a promise to purchase for instance raw material, the VC will enter into a sale agreement with a supplier of the raw material and the

portfolio company will be given a delegated authority under a *Wakalah* agreement to take delivery of the raw material and the amount paid on instalment or one-off. This arrangement allows the VC to secure its investments as in a situation of distress, the *Murabahah* liability of the investees company will rank higher in terms of settlement than capital share. This allows a balance of equity and debt in an a *Sharia'ah*-compliant manner

3.3.8 Perpetual *Mudharabah*

To avoid a situation where an entrepreneur can arbitrary decide to pull out or sell its stake in a venture, perpetual *Mudharabah*[13] can be used to structure the IVC arrangement as some scholars allow this. The parties can agree to stipulate that the entrepreneur cannot exit until agreed return is realised (Ishaq, 2016). However, this does not become binding in case of force majeure. In addition, this cannot be a perpetual condition, but valid for a certain time frame or with other considerations. The purpose of this is to prevent negligence and can be used as extra security for the investors (Ishaq, 2016). The perpetual *Mudharabah* provides an opportunity to mitigate the risk of entrepreneur's acting whimsically and causing financial loss to the IVC. This financial loss must be real and not opportunity cost as Kahf (2015) contends that opportunity cost may be positive or negative and it will be unrealistic to assume that any opportunity use is positive. The idea is to ensure that venture capitalist is not systematically treated unfairly in the execution of the IVC.

[13] Globally bond is a debt instrument carrying certain declared percentage of interest. Considering advantage of Bond being an instrument offering stable income source for the bond holders, many countries like India, Malaysia, Pakistan, Sudan, Iran have restructured bonds to bring under the Islamic principle of *Shari'ah*, wherein the bonds will not offer fixed rate of interest rather making the return as a part of profit distribution to the bond holders, a partner to share profit or loss on the basis of *Shari'ah*, however, keeping the features of the bond as stable source of income. Considering the above, Islamic Bank Bangladesh Limited (IBBL) decided to go for *Mudharabah* Perpetual Bond to meet the capital adequacy need of the bank. At the first instance, the management of IBBL received the consent of the *Shari'ah* Council of the Bank for issuing MPB explaining the features of MPB and its modus operandi of determining profitability. The Shari'ah council approved the above MPB subject to the condition that the bondholders should be informed about the profit distribution with weightage before issuing MPB. IBBL invested the fund received through MPB as general investment of the Bank and it treated as a component of total *Mudharabah* Fund. MPB holders share the income derived from total investment activities. The MPB holders get minimum 65% of the Investment Income generated from deployment of total *Mudharabah* Fund with 1.25 weightage. The gross income generated from the investment is distributed to the bondholders(Islam et al, nd)

In the case of *Musharakah* arrangement, the nature of the maturity of *Sharikah* contract has implications on the risk of financing. *Shariakh* allows any partner to withdraw at any time and this can pose sustainability problem to the business.

In modern practice, a shareholder of a limited company is unable to withdraw his capital contribution but can sell his stake to another person who may wish to acquire the shares. This is because the business is seen as a separate entity from the owners and is expected to operate into the foreseeable future. In businesses that require long gestation periods and huge capital outlay, termination of the project in between is considered out of question. It's also allowed for partners to enter into a binding promise for continuity of the partnership for a specified period of time (Kahf and Ibrahim, 2017).

3.3.9 Preference shares

According to Zarqa and Suhaybani (2012) preference stocks are prohibited because they are misleading (as preference in profit may result in the interruption of profit sharing) and they contain *Riba* (because preference at liquidation diverts preferred shareholders from partners to lenders). In order to meet the permissibility of *Shari'ah* they propose a way of re-structuring preference shares. In their paper, they suggested *Shari'ah*-compliant preferred formula that has the ability to split profit flows in two streams: one less risky than the other, thus enabling companies to attract new investors with different risk preferences or expectations. According to this study, the profit sharing can be differentiated between common stockholders and preference shareholders. They argued that insofar as the profit share of the preference shareholders (say 5%) does not exceed the maximum profit share of the preference shares (The preference share's profit cannot be more than the total profit declared) then it is allowed. Usually, preference shares issued contain the equity's dividend rate and par value in the preferred stock. To get the dividend payment for a particular period, the dividend rate is multiplied by the par value of the share. With respect to the proposal by Zarqa and Suhaybani

(2012), let's assume that the preference shares are 500 (5%) and common stock is 1000 and profit for the period is 40. Under normal conventional arrangement, the preference shareholders will be entitled to 25 (.05 of 500) irrespective of the profit level of the business. But under new proposals, the dividends is tied to the profit declared. For instance, with US$ 40 profit the preference shareholder will receive US$ 25. In a situation where the profit declared is US$ 20, the preference shareholder cannot receive US$ 25 as dividends. There can be a condition that provides for the maximum profit share that can go to the preference shareholder (for example, it can be capped at 65% of the declared profit).

Preference shares, depending on how they are used, can be helpful to structure IVC's investment in investees companies. Redeemable preferred share as explained earlier sets the period when the stockholder can redeem it. This class of preference shares is permissible provided the dividend distribution follows best accounting practices, i.e., not set at a given value. This is because if profit/loss are rightly distributed every year, the amount of principal remains the same, and of course loss means either to be charged to previously retained profit or paid up by fresh fund from investors. The preference stock then amounts to temporary stock based on temporary *Mudharabah/Musharakah).* Similarly, *Convertible* Preferred Stock provides opportunity to be converted to a common stock. Certainly, if the stock is converted to common stock, there is no problem of *Shari'ah* impermissibility as far as it is agreed upon between partners. With Participating convertible preferred stock the shareholder does not have to decide between redeeming or converting the stock since any increase in value over the face amount would be given to the investor in the form of a price increase of Common stock or cash equivalent. This means that the stocks are owned by the stockholders from day one and hence they are *Shari'ah*-compliant.

3.4 Applying Islamic VC in financing SMEs in Ghana

Venture capital in Islamic finance is not much common even though the core principles of equity investment resembles much of those underlying *Mudharabah* and *Musharakah* based financing. From an Islamic point of view, VC as based on equity financing (*sharikat inan*), and thus falls within the framework of Islamic finance once the underlying investment is deemed permissible by *Shari'ah* Contractual arrangement.

A venture capital can be established as a company under *Musharakah* or *Mudharabah* and then operates by attracting funds from potential investors into an IVC fund and then invest these funds into viable businesses. In IVC, there has to always be an exit motive by the VC and this is well accommodated in the profit and loss sharing contracts used in Islamic finance. For instance, in *Musharakah*, any partner can pull out at any time by notifying the other partners within the framework of the agreed terms.

The VC can use various contracts in its dealing with their investments in other businesses. For instance, they can use *Mudharabah, Musharakah, Murabahah, Istisna' or Wakalah* contracts in defining the contractual relation between them and their portfolio companies.

By its nature, the most appropriate contract that an Islamic VC can use will be *Musharakah* because the VCs always take part in the management of any venture they invest in. In a specialised situation where the VC is confident of the credential of a partner, it can appoint a *Mudharib* to manage the business on its behalf. In that case they will not be part of management but allows the managing partner to drive the value creation/addition of the business. This may be rare especially in developing countries because of lack of expertise and hence the VC will be comfortable to be involved in the management and assert its control on the direction of the business.

Also in a situation where the VC invests in a venture through *Musharakah*, the VC can also engage an expert to represent its interest in the venture through *Wakalah*. This means that the VC will exercise its strategic decisions through the agent. The agent may either share in the profit or be paid an agency fee for its services to the VC.

In Islamic finance, VC can be applied to any business endeavour once it is *Shari'ah* permissible. Most the financial instruments in Islamic finance can be applied to support the operations of a VC. There are important issues that take centre stage of VC structuring among which are valuation of Portfolio Company, structuring through contact combinations, investment protection, incentivising entrepreneurs and VC exits.

3.4.1 Valuation of portfolio companies in IVC

According to finance theory, firms drive their value from the discounted value of its expected future cash flow. The value of a firm should increase if investors learn that its future probability will be higher (Gompers and Lerner, 2000). Similarly, if they learn that the firm will be less risky than originally foreseen, i.e., its cost of capital declines, the valuation should rise (Gompers and Lerner 2000). A number of factors affect the cash flow. Gompers and Lerner (2000) showed that VC valuation is highly impacted by market conditions. Hsu (2007) argued that several characteristics of founders are important determinants of VC valuation. Not only venture quality and market conditions, but also many factors associated with VCs, such as their reputation, size, and services available, are expected to change the relative bargaining power of VCs and entrepreneurs in the negotiation (Cumming and Dai, 2011).[14]

Messica (2008) contends that discounted cash flow (DCF) is fundamentally based on cash flow projections but projections for high-risk, high-technology ventures, for example, which are

[14] Sharma 2015 reports that in VC valuation, the *worthworm* method uses a blend of questions (value drivers) whereas the *berkus* method uses qualitative and quantitative variables in determining the value of the venture.

very often private and non-tradable, might be considered highly speculative, especially for ventures with a long time to maturity. On the other hand, Sharma (2015) asserts that the value of venture in a start-up is governed by the amount of financing required and not by the traditional discounted cash flow. He further argues that in discount cash flow-based valuation, the terminal value of cash flows when added to cash flows in a high growth period increases the value of the business, which can eventually lead a venture capitalist to invest more capital than required in the start-up.

The valuation process consists of three sequential steps. First, information is gathered on the venture, its management team, and its future prospects. Second, this information is used to appraise the risk of the venture and hence the required return on the investment, and to estimate the (future) cash flow and profit potential. Finally, one or more valuation method is used, which combines the elements of risk, return, and profits or cash flows in order to compute the value of the company (Manigart et al, 1997).

As discussed above, the DCF is extensively used in venture valuations but this is seen as *Shari'ah* non-compliant because of the use of interest rate (Durrani and Boocock, 2006). The DCF approach uses interest rate in discounting, to arrive at a fair valuation or entry price of a project; the notion is that the interest rate reflects the degree of risk inherent in the underlining business and the general economic environment.

The principle of discounting per se is not a prohibited practice.[15] Kahf (1994) in responding to Khan (1991) assertion on "Time Value of Money and Discounting in Islamic Perspective" fully

[15] The time value is well recognized in Islamic jurisprudence, provided that it relates to goods/assets rather than debts (lending and borrowing) of money (Khan, 1995). Zarqa (1983) distinguishes clearly between using interest rates as a means of financing and using them to compare the viability of rival projects. For the latter purpose, any sensible discount rate can be adopted. In essence, the use of interest in financial transactions is prohibited, whereas it may be acceptable to use interest rates as a benchmark to gauge a project's relative value.

agreed with him that there is recognition of the presence of time value of money. The time value of money can be driven in an underlining asset. This is because money in itself has no intrinsic utility but only has a derived utility when used as a medium of exchange. He emphasized that "as the time value of money is an investment phenomenon, its valuation can only be realistic if it takes place at the end of investment when its outcome becomes known. Any evaluation before that point is only illusionary". However, the paper argues that the illusion can be used for mental operation but must not be exchanged for actual goods and services. The effect of time value of money in mental operation of comparing values of different times is not a *Riba* practice and when it comes to inter-personal transaction the realized actual value, ex-post is only recognized, hence using a discounting tool for comparing values of projects is not a *Riba* practice

The approach to the valuation should naturally take into consideration the growth level of the investee company. For pure start-ups where the entrepreneur doesn't have any physical contribution that will serve as counterpart equity financing to the venture capitalist, it will be difficult to allocate shares to the entrepreneur in this scenario. This is because, it will be extremely subjective to value the entrepreneur's expertise, experience and reputation and monetise that into equity. This will also introduce ambiguity which can lead to *Gharar* and may lose realism and lead to possible injustice when there is misjudgement. From this premise, the venture will be realistically valued based on the venture capitalist cash calls and the entrepreneur will be engaged as a *Mudharib.*

When the business is not completely new or the entrepreneur is prepared to also make cash call into the investment of the venture, the valuation of the business will consider the cash flows and physical asset valuation of the venture contributed by all parties. In this scenario, the venture capitalist and entrepreneur can enter into a *Musharakah* in respect of the operations of the project or business.

To determine how much capital is required for a venture, the current study reviewed the method presented by Sharma (2015) and found it useful. This is because this method contends that, the present value of cash flows to equity holders in a high-growth period fetches the present value of the venture's equity even before the capital is invested. In the real world, venture capitalists invest capital as well as time (i.e., the investment holding period) while working on making a venture successful. For this reason, for venture capital investments, the focus should be on valuing ventures/businesses in terms of the appropriate capital required over the life of an investment holding period. Sharma (2015) stresses the importance of identifying the appropriate amount a venture capitalist should be asked to invest over the investment holding period; this investment amount, rather than a discount cash flow-based equity valuation, determines the value of the venture over the life of an investment holding period.[16] This is expressed in the form of Equation:

Value of seed venture/Business over investment holding period $I_0 = CR_t X\ PR_t - CC_t\ X\ PC_t$

Where CR_t is the cumulative revenues realized by the venture over the life of an investment holding period; PR_t the probability that CRt will be realized over the life of an investment holding period; CC_t is the cumulative operating costs realized by the venture over the life of an investment holding period; and $PC_t$is the probability that CCt will be realized over the life of an investment holding period. Analysis of this method is that, there is still a high dose of speculation of revenues and cost in the future. But using the analogy of Kahf (1994) assertion that time value of money can be used in ex ante for purposes of planning and mental calculation but not for earning return, it is not out of place to use this for purposes of calculating the

[16] For more information on this method, please visit http://www.iijournals.com/doi/abs /10.3905/jpe.2015.19.1.073?journalCode=jpe.

projected revenue and cost of the business. More also, the criteria for ascertaining the variables is linked with historical data on peer companies in the industry and the market proxies.

Another issue will be with the calculation of probability of the occurrence of the revenue and the cost. However, if there are tools which are developed to estimate the probability based on the actual data gathered from the market, there may not be an issue in so far as it is actual data and also to only provide space for planning towards the future but not as a determinant for actual earning. This method will therefore provide a useful tool for the valuation of the venture capital in an Islamic frame.

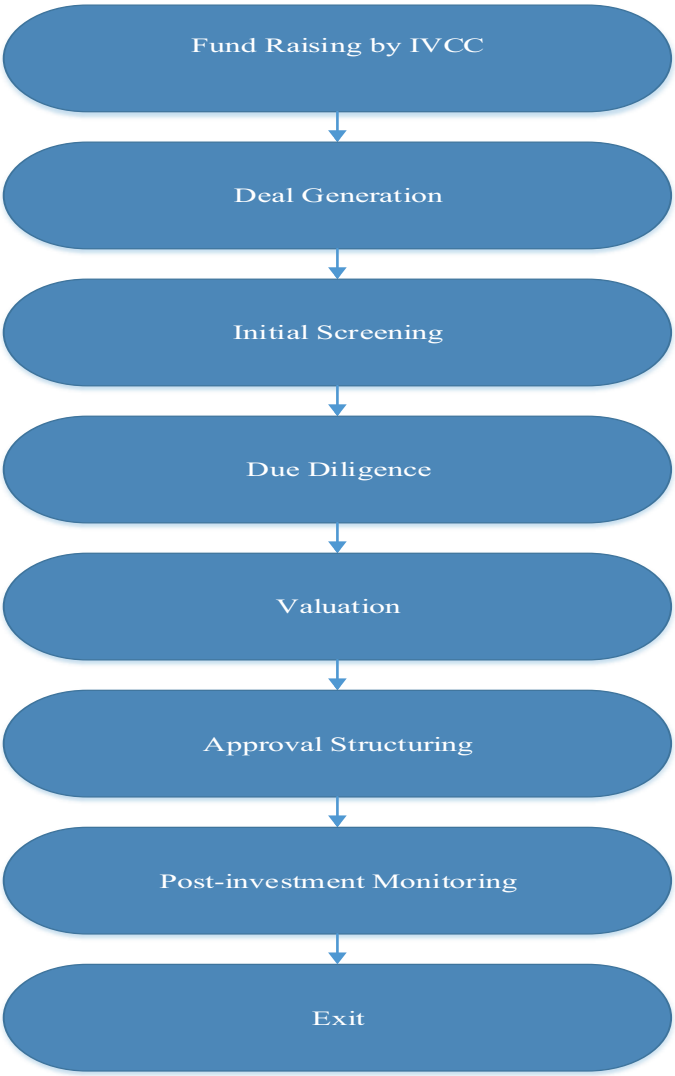
3.4.2 Structuring of IVC

Whichever fund structure that is adopted, in IVC a contractual relationship is formed between the fund managers as *Mudharib* or agent and capital contributors as *Rabb* al-mal. VC contributors (typically high net worth individuals and some high risks taking institutional investors seek long-term investments hence they target capital gains to match their future liabilities. The fund management team has to protect the investors' funds yet invest in projects with the capacity to generate the targeted rates of return. Ahmed (2004) contends that Islam allows the fund managers to have fixed fees and variable elements (tied to profits) within an overall compensation package. The well-established limited partnership form of legal structure could thus offer real benefits for the development of IVC. OIC *Fiqh* Academy resolution has it that *Mudharib* can earn a fixed profit but profit based on percent of capital but should avoid any clause of guaranteeing the returns, If such clause is implied explicitly or implicitly, the guarantee condition is voided, and the *Mudharib* is entitled to a profit equal to that of a similar *Mudharabah* (OIC FA resolution number 30).

The fund managers will generate, screen and evaluate potential deals. Having decided to invest, cash is injected through equity-based instruments. The venture fund's status changes from an

agent of the investors to a principal in relation to the entrepreneur. Depending on whether the VC fund provides all the required finance or whether the entrepreneur contributes, the fund managers will sign a *Mudharabah* or *Musharakah* contract with the entrepreneurs. The VC can also enter into a Murabahah line of credit with the investee company such that essential assets can be acquired with line of credit as well as financing working capital that is channelled through the purchase of say raw materials or other tangible assets for the operations of the business. The investee company will have the benefit of management support from the VC directly or through its representative in order to drive value creation and superior performance. The fund managers' involvement in the routine operational management of the business through supervision and monitoring roles will reduce the risks of information asymmetry and thus generate the desired rate of return.

Figure 13 IVCC investment process



Source: Adopted from (Wright and Robbie, 1998) and amended

Figure 13 illustrates the typical VC process from funds raising stage to exit by Wright and Robbie (1998). After sourcing for funds for funding venture capital from high net worth individuals, institutional investors and development organisations, IVCC is set to move to the next level of deal generation. The proposals received at the deal generation stage must have the promise of generating the target rates of return. Each venture fund develops its own distinct strategy for sourcing potential deals; the long-term investment goals might lead a fund to stipulate the sector, size of target projects, location, and stage of investment and so on.

Following this stage, IVCC then carries out an initial screening of the proposals received in order to identify the bankable ones that meet their investment criteria. The business plan is interrogated to gauge its quality with regards to the business it's seeking to do.

Next, due diligence is carried out with the aim to minimize investment risk by conducting a thorough investigation of the information presented in the business plan by the entrepreneur, with special attention usually paid to the qualities of the entrepreneur or management team, the product and market potential, and the scalability of the business model.

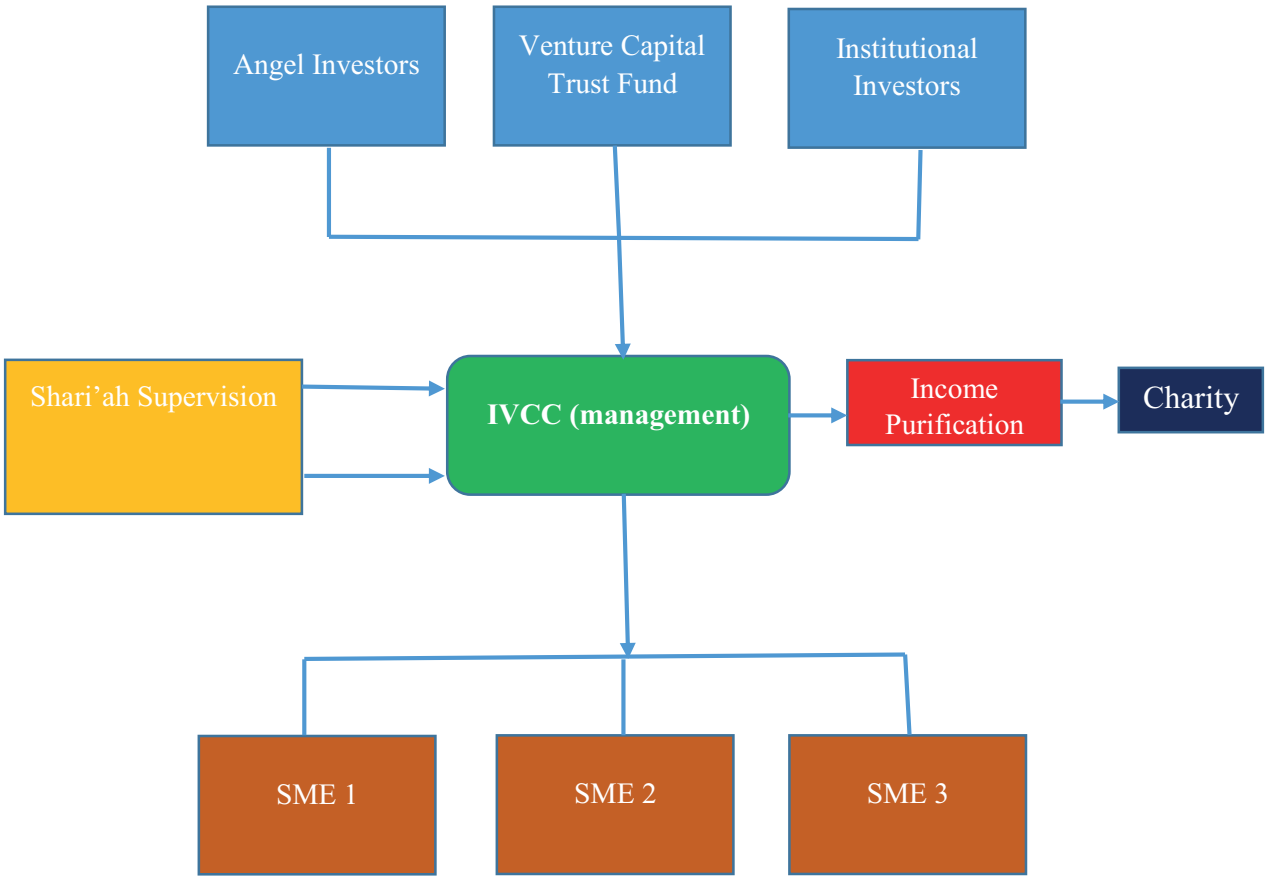
After this stage, the venture is valued as discussed in previous sections and then moved to the structuring stage. The structuring stage is one of the important stages in the venture capital financing. The venture capitalist at this stage is in a position to approve the proposal, however, the fund manager and potential investee company still have to negotiate the deal. The venture capitalist preoccupation is to achieve required rate of return taking into consideration the high risk of the investment, while the entrepreneur does not want to give up too much ownership or be subject to excessive constraint in running the firm. The fundamental objective is to ensure that all parties are: '… comfortable with their positions' (Gibson and Blake, 1992).

This stage of the investment cycle involves consideration of three broad areas: the types of financial instruments used (equity, preferred stock or debt); the specific covenants included in the subscription agreement; and, the release of funds in stages to limit the downside risk of an investment.

The critical question is whether Islamic profit-sharing contracts (*Musharakah* or *Mudharabah*) can provide the required flexibility for efficient risk management. According to Durrani and Boocock (2006) this question can be explored in relation to two fundamental dimensions of the structuring process: contractual structuring (the covenants included in shareholders' agreements and any staging agreements); and, the selection of financial products, namely the

choice between equity, debt or hybrids. In Islamic jurisprudence, parties are free to structure a contract to achieve their mutual economic interests provided the arrangement does not breach the provisions of *Shari'ah.*

Figure 14 Potential IVCC Structure in Ghana



Source: Constructed by author

Figure 14 presents a structure that an IVCC can take in the Ghanaian context. The VC industry's ecosystem in Ghana is enabled by the VCTF as it invests in SMEs through potential VCFC. Coming from this background, an IVCC will have VCTF, angel investors and institutional investors as the main target venture capital investors. Angel investors could be high net worth individuals with passion to contribute entrepreneurship in Ghana through an impact investment orientation whereas, an IVCC can leverage on the VCTF to attract institutional investors such as pension funds, *Takaful (Islamic Insurance)* or even national and

multilateral development institutions that share the investment criteria of the funds (this can be social responsible investors, ethical investors or *Shari'ah* compliant investors).

The contractual arrangement between the IVCC and the investors will depend on whether the IVCC will also contribute capital into the fund. If the IVCC is contributing into the fund, then the contractual arrangement will take the form of a *Musharakah* between the fund manager and the investors in the IVCC structure. Because the IVCC has the expertise in managing the funds, the investors may also enter into a separate *Wakalah* agreement (there is always an underlining *Wakalah* agreement in *Musharakah*) with the IVCC in respect of the management. In this case the IVCC, acting like a *Wakil*, will be paid its agency fees which may be tied to the profit realised from the investment management. The IVCC will also receive profit proportionate to its capital contribution to the fund as a partner in the case of *Musharakah* participation. When the IVCC is not contributing to the capital, then a *Mudharabah* contract will be used and in this case, only agency fees will be paid as remuneration for the management of the fund.

With regards to the portfolio investment of the IVCC, it will invest in SMEs of both start-ups and growth-seeking SMEs. This is an important stage where the SMEs and the IVCC will have to agree on the modalities of their ensuing relationship with the entrepreneur. Here, the major contracts that come handy are *Musharakah* and *Mudharabah*. Depending on the whether the entrepreneur has capital contribution into the business the underlining contract can be either of them. When the entrepreneur doesn't have any tangible assets as a contribution into the business, it will better opt for *Mudharabah* where his superior skills can be recognised as a *Mudharib* with the IVCC providing the needed cash calls. This arrangement will help in avoiding ambiguity *(Gharar)* in terms of trying to value the entrepreneur's expertise into capital contribution.

To incentivise or assure the IVCC with regards to investment protection, the *Mudharabah* contract will ensure that the capital of the venture is given priority when it comes to liquidation. As discussed previously, it is permissible for the investee company to carry forward losses. This means that when an investee company makes losses in a particular year, it can deduct the losses from subsequent year profits. The use of *Murabahah* for the financing of machines and equipment is another window for protecting the IVVC as those liabilities need to be settled first in the event of liquidation.

The Islamic venture capitalist can also be given supermajority rights when it comes to certain decisions of the business especially with regard to cash flows rights. In a case of a *Mudharabah*, the contract structure doesn't allow the IVCC to have management control, but the IVCC may provide useful experience in terms of management, strategy and financial advice to help create value in the venture. The benefit of this experience is extremely valuable in venture capital's value addition agenda in investee companies. The *Mudharabah* structure will not make it possible for IVC to offer the experiences and expertise at its disposal for the benefit of the investee company as it is not allowed for the capital provider to interfere in the management of the venture. In a situation where the entrepreneur also invests in tangible capital in the target investee company, then a simple *Musharakah* company is used where both the Islamic venture capitalist and the entrepreneur of the business all take part in the management of the business. To provide the flexibility for the Islamic venture capitalist to support in driving the value addition of the business, the provision for the supermajority clause in *Musharakah* arrangement is important. Since typical venture capital investment is aimed at long term returns, there has to be a framework that will lock-in the entrepreneur in the investment. In Ghana for instance, the VCTF investments expect returns in the 5th-7th years of investment. This means that, naturally it will not be fair for an entrepreneur to abruptly decide to exit the business. The Islamic venture capitalist and the entrepreneur should agree that either party should not exit the

business along the way unless proven that the said exit will not injure the business continuity or be costly to the business.

In all this structure, the *Shari'ah* supervision is provided by a *Shari'ah* committee. With reference to figure 13, it is seen that the *Shari'ah* committee works with the fund manager by providing expert advice on all the structure of the Islamic venture capital arrangement. This is especially manifested in the investment in the various SMEs by the fund as the Shari'ah committee will have to screen all the potential SMEs to ensure their business operations are halal. The *Shari'ah* committee reviews the operations of the prospective SMEs that the Islamic venture capitalist is considering to ensure that the appropriate contracts are used and all the necessary documentations are put in place. The *Shari'ah* committee is to also ensure that post investment, the SMEs operations are compliant with *Shari'ah* in terms of the incomes it generates from its operations. In a situation where the *Shari'ah* committee identifies an impure income, it is supposed to direct the Islamic venture capitalist through the fund manager as to how to purify the income. This purification will done by calculating the impure income by the *Shari'ah* committee and then donate the impure portion of the income to charity. This process flow is captured in the structure above in figure 13.

3.5 VC investments and the Ghana tax regime

Gilson and Schizer (2003) concludes that Managers report a lower tax valuation for their common stock, transforming current ordinary income into deferred capital gain. Ironically, even though the venture capitalist's preference is in some ways more formal than substantive, taxpayers use this form to claim a real substantive benefit: favourable tax treatment for the highly intense management incentives that are central to venture capital contracting. Meaning that, depending on the tax provisions in the country the use of preferred shares may seem advantageous to conventional VC when compared with IVC where preference shares is not allowed.

The tax regime of Ghana has a number of incentives to attract VC investments and this is presented in table 3.

Table 3 Tax incentives for VC in Ghana

No.	Item	Incentive	Internal Revenue (Amendment) (No.2) Act, 2006 (ACT 710)6).
1.	Loss carry forward	A loss incurred by a venture capital financing company from the disposal of share [sic] invested in a venture capital subsidiary company under the Venture Capital Trust Fund Act, 2004 (Act 684) during the period of tax exemption granted under section 11 (5) shall be carried forward for a period of 5 years of assessment following the end of the exemption period.	Section 22
2.	Dividends	The dividend of a venture capital financing company that satisfies the eligibility requirements for funding under the Venture Capital Trust Fund Act, 2004 (Act 680) for a period of five years of assessment commencing from and including the year in which the basis period of the company ends, being the period in which operations commenced	Section 10
3.	Capital Gains	Capital gains accruing to or derived by a venture capital financing company that satisfies the eligibility requirements of the Venture Capital Trust Fund Act 2004 (Act 684) for a period of five years of assessment commencing from and including the year in which the basis period of the company ends, being the period in which operations of the subsidiary company commenced	Section 101
4.	Income Tax	The[sic] income of a venture capital financing company that satisfies the eligibility requirements for funding under the Venture Capital Trust Fund Act, 2004 (Act 680) is exempt from tax for the period of five years of assessment commencing from and including the year in which the basis period of the company ends, being the period in which operations commenced	Section 11
5.	Investment tax deductible	For the purposes of ascertaining the income of a financial institution which invests in a venture capital financing company there shall be deducted an amount equal to the full amount of the investment in a year of assessment	Section 19A

The tax code in Ghana further provides an exemption for dividends received by a resident company that owns 25% or more of the voting rights in the paying company but this exemption excludes redeemable shares ownership. This means that the tax incentive that may be inherent in preference shares is remote in the case of Ghana and thus putting conventional and Islamic venture capitalist in the same footing. Also, the analysis of the tax code shows that loss carry forward, tax on dividends, tax on capital gain, income tax exemption and other tax incentives

presented are opened to both Islamic and conventional VCs and it appears not to present any *Shari'ah* issues as they are straight forward in terms of applications.

3.6 VC exit in Ghana

Exits represent the point at which exposure to an investee company is partially or fully reduced, giving way to the realisation of value created in the investee company by the fund manager and investors (Povaly, 2006). Typically, VC fund have an investment holding period of 7 to 10 years (Xu, 2004). One can infer that the existence of an exit route for the VC is considered to be an important factor in deciding whether to invest in a firm. Successful exits are critical to insuring attractive returns for investors and, in turn, to raising additional capital. Black and Gilson (1998) reports five principal venture capital exit vehicles.[17] In Ghana, the VC industry supply side has seen the role of government as a key stakeholder in supporting the needed stimuli to unleash its potential. Since its inception the VCTF has accomplished the most important element of the virtuous cycle of venture capital which is fundraising. However venture capital financing companies are now in the investment or disbursement stage and there has not been many exits as the industry is very young and two exits were carried out by Fidelity Equity Fund II. The exit mechanisms used by these VCFCs include: Majority Shareholder Buy Back; Third Party Private Placement; and IPO on the Ghana Stock Exchange.

In order for the venture capital financing firms to experience the mutual benefit within the venture capital industry, the VCTF in Ghana has established a Technical Assistance (TA) program to provide heavily subsidized or free business support to various SMEs who have been approved for funding by the venture finance companies. This is to provide a win-win cycle for

[17] 1) Initial public offerings (IPOs) – the entrepreneurial firm is listed on a stock exchange for the first time.
2) Acquisitions (or trade sales) – the company is purchased by a larger firm, typically a strategic acquirer, and both the venture capitalist and entrepreneurs sell their interest in the company.
3) Secondary sales – the venture capital fund sells its interest, but the entrepreneurs do not sell their interest, to another firm or venture capital fund.
4) Buybacks – the entrepreneurs repurchase their interest from the venture capital fund and.
5) Write-offs (or liquidation) – the investors walk away from the investment with little or no return.

the SME and the VCFCs as well as the investors in the industry. The SEC and VCTF have also championed the establishment of the alternative listing platform for SMEs which are not that big and may not be able to meet the listing cost by assisting them in their listing process.

3.7 Risk management in applying Islamic VC financing of SMEs in Ghana

Venture capital investment is one of the highest risk exposure investments because investment decision is based on potential. This is even critical in Islamic VC where most of the instruments used to protect the investor and lower the risk of capital loss on conventional VC are deemed *Shari'ah* impermissible. Venture capital by its nature is a risky business as there is high chance of capital lost. In conventional CV, various instruments and arrangements are used by investors to protect the interest of investors and reduce the risk of capital loss. Warrants, convertible debts, preferred shares, non-compete clause, liquidation and sale preference are some of the tools adopted in order to protect a VC investor's capital and interest in conventional VC as discussed earlier. All these tools with the exception of warrants are deemed impermissible (Elseify, 2014).

3.7.1 Risk identification

Islamic finance modes of financing is exposed to additional risks as a result of *Shari'ah* compliance. Within this context, risks identification and management become even more important (Kahf, 2006). The risks can be looked at from both the supply and demand side.

For the supply side, VC funds are sourced from investors who are looking for yields in high potential businesses with possible scalability. The risks from the supply side can be observed from the fact that the *Wakalah* or *Mudharabah* contract between the investors and the fund managers come with their own risks. Under both *Wakalah* and *Mudharabah*, the *Wakil* or *Mudharib* respectively holds a position of trust and is expected to act in the best interest of the investors. There is a possibility of an abuse of this trust and the *Mudharib* or *Wakil* may act negligently that may lead to poor performance of the investment in venture capital businesses.

This is expressly captured in moral hazard where fund managers may hide vital information from investors in the assessment of the competence and suitability of the fund manager. This poses great risks to the investors and can lead to capital loss. Between the VC and investees, moral hazard once again poses significant risks to the IVC as the problem of moral hazard comes as a result of a non-interest of the *Mudharib*(due to low motivation) to fulfil the interests of the project other than for his benefit. It is also linked to the risk that the entrepreneur would hide vital information concerning his competencies, abilities and background before the contract and that he would perform independently after the contract is executed (Ismail and Tohirin, 2008). Dar and Presley (2000) accordingly concluded that such problems can also exist when the entrepreneur fails to honestly reports profits.

From the demand side, the various Islamic finance contracts which are used in the dealings between the VC and the investees come with various risks which need to be identified and managed. Since VC is predominantly equity based investments, the risks associated with the *Musharakah* and *Mudharabah* contracts need to be considered.

Hence, *Musharakah* and *Mudharabah* will be the typical contracts that will be used to govern the dealings of the IVC and the investees. The risks that is posed by the other partners with respect to honest representation of the business interest in important. This representation is usually prone to abuse as a result of information asymmetry. This arises because, in selecting of a potential investee, the entrepreneur usually has more information about the proposed project and its profitability which the investor may not usually have access to. Consequently, it leads to imperfect information between the investor and the entrepreneur (Siddiqui, 2008). Additionally, Ismail and Tohirin (2008) and Khalil, Rickwood and Murinde (2002) asserts that Profit and Loss Sharing(PLS) business can become unproductive when there is a failure to embark effective screening process of choosing a suitable entrepreneur to manage a business

or project before contracting and similarly failure to monitor the entrepreneur's action post the contract is implementation.

At the macro level, like all real investments in developing countries, *Musharakah* financing is generally risky given the many adverse effects of changes in the macroeconomic environment and policies, and other factors influencing conditions in the market for the underlining investment. Musharakah is the highest perceived risk-bearing investment among the various Islamic financing modes (Khan and Ahmed, 2001).

Numerous writers have expressed concerns about adverse selection in the VC market[18]. The reason cited for these concerns hinges on high costs of obtaining venture capital arguing that for the VC market to operate with efficiency, benefits must outweigh its cost(Sahlman, 1990) and Petersen, 1992).

Aside the risks emanating from the modes of financing, there is also unique risks that is associated with the potential sectors that IVC may deal with. As an agriculture-dominant economy, it is important to look closely at this sector as there is a huge investment deficit.[19] The major risk in applying VC to finance in agriculture will be directly related with the contracts used. And once again the moral hazard issue of the farmers or businesses in the VC arrangement is worthy of note.

There is also risk associated with a situation where there is lack of transparency in markets within which the VC is operating. This can also occur as a result of information asymmetry between the VC and the other partners.

[18] Adverse selection is the true risk posed to the VC before the investment is executed.

[19] According to Osarfo-Marfo(2017), agriculture is the main driving force behind Ghana's economy, accounting for approximately 42% of the country's GDP and employing 54% of its work force. Out of a total land size of 238,535 square kilometers, 60% of the land is arable but only 10% of the land is currently being utilized.
The Northern parts of the country have the largest area for both food and cash crops but has only one farming season. Unfortunately, there has not been success in irrigation facilities to take advantage of an all year round farming.

Another important risk that naturally manifest in agricultural activities is the possibility of low yield as a result of bad weather and other uncontrollable events. This is manifested strongly in Salam as the ability to deliver the commodity is directly and indirectly related to the occurrence at production. When a VC investment depends on raw materials from farm gates and there is low yield, this will affect production and ultimately adverse business outcomes.

There is also market risk with regards to post-harvest selling of the commodities. As mentioned earlier, there is usually high supply of commodities during the bumper season thereby driving down the prices down and sometimes selling immediately around this time can lead to a loss or lower profit. There has to be a way to minimise the exposure to low prices in bumper seasons by the VC.

3.7.2 Risk control and mitigation

In using IVC financing in Ghana, diversifying the portfolio is the first important defence against risks of general non-performance. In order to minimise risk, the investment in investee company need to be diversified from different perspectives such as sectors, stage of Investee Company and diversifying the technology sector investments. When the portfolio is balanced across various sectors, non-performance of one sector may not affect the dearly of the entire portfolio. Also, when there is a balance in the investments into early stage companies and pure start-ups, the risk of loss as a result of business failure may be mitigated. Also, investment in technology businesses comes with a very high risks because of the fast changing nature of technology and the fact that technology conception may not attain the fullest reach in terms of performance in the future.

When it comes to Agriculture investments, the VC may have to segment the farmers by applying different conditions to diversify the risks. This can be done by identifying the various scenarios, in the context of risk assessment and risks events identification with the view to

properly and appropriately responding to them. The reality is that the VC may have to bear most of the cost associated with the farm inputs in a situation where the investee company is sourcing raw materials from the farmers in order to produce. This can still be contained by segregating the farmers according to income level and appropriately applying a blend of strategies to mitigate the risk. Additionally, to mitigate the risk of non-performance and adverse selection of investees, the VC can also rely on the guarantees and sureties given by the group members. This approach will work where the VC for instance encourages the farmers to form groups. These groups are formed such that they share certain characteristics (age, community ties, family, ethnic or clan). Because these group member know each other they can vouch for the credibility of one another as well as serve as a subtle guarantee for the VC to deal with the group members and by far the individual members. This will reduce the risk of adverse selection and also avoidable negative risk evolution of investees and thus will help reduce the moral hazard risk. This approach can be applied to other sectors especially where the appropriate segregation criteria is identified.

Also third party guarantees can be used as an appropriate tool to mitigate the risks of VC investors. The government within the objective of job creation and spurring of entrepreneurship should have an interest in supporting VC to taking risks of areas of strategic importance to the country. With this, the Ghana Eximbank can come out with a scheme that will provide a performance guarantee facilities to VC in order to share some of the risks of failure with them. The guarantee will not be 100 percent coverage but should be able to cover part of the investment by VC that will provide the comfort to venture into areas which are considered strategic important to the state.

In partnership, there is an element of *Wakalah* and partners are supposed to act in the best interest of the partnership. The possibility of the entrepreneur acting against the interest of the VC is not remote. The VC in a bid to minimise this risk can put some conditions regarding

misconduct by the other partners. Partners are supposed to bear the losses that occur in the course of normal businesses. This loss bearing has a potential of exposing the VC investment to losses where investee may act imprudently or negligently. A situation of loss occurrence should be properly spelt out with instances of violation of contract and negligence clearly articulated.

When it comes to minimising the risks of adverse selection and moral hazard, one important recommendation by Abalkhail and Presley (2002) is on the use of screening process to overcome the problem of incomplete contract that create an adverse selection and moral hazard problems. Also, Sarker (2000) and Ismail and Ahmad (2006) asserted the usage of screening as well as monitoring process to supervise the actions of the entrepreneur in the financing and investment activities. In resolving asymmetric information, Ahmed (2002) stated that the *rabbul maal* can gather more information on the operations of the firm especially through the monitoring process. With this the *Rabbul maal* should evaluate and monitor the "*Mudharib's* visions, objectives, market strategy, financial strategy and production process when the contract being executed".

Another risks mitigant that can be used is good corporate governance practices. Corporate governance fundamentally is relates to the internal integrity of a corporation that promotes a corporate fairness, transparency and accountability in the management (Sapuan, N. M. (2016). Some Islamic scholars try to emphasize on the role of Islamic corporate governance to mitigate agency problems in Islamic financing instruments especially in profit sharing contract (Sapuan, N. M. (2016). The corporate governance system will ensure that there is accountability, fairness and transparency in the governance of investee company's operations (Iqbal and Mirakhor, 2004 and Hasan, 2009). With good corporate governance, the risks of negligence and imprudence behaviour by the management of the investee company is minimised.

3.8 Potential impact on future of IVC in Ghana

3.8.1 Solving unemployment problem

According to World Bank report, close to 50% of Ghanaian youth are unemployed (WB, 2016). Unemployment is seen by some experts as a national security issue in Ghana and was a campaign issue in the 2016 general elections. With a well-functioning VC system, the expectation is that, more jobs will be created in various sectors of the economy. Unemployment is lowered by the activities of VC both in the short and long-term and this has been confirmed by Feldmann (2010) who used survey-based data from 20 industrial countries over the period 1982-2003. Similarly, Belke et al (2003) opines that venture capital plays a crucial role in bringing about employment growth as it provides a source of financing for new firms, innovations and structural change.

3.8.2 Technological innovation

Even though there are huge prospects for technological innovations in solving economic and social problems in Ghana, much has not been achieved in this respect. The prime important reason why venture capital is regarded as capital is that it creates the opportunity for technological innovation, which requires a lot of upfront capital investment before the emergence of new technology (Zhang et al, 2013). When VC is promoted in Ghana there will be increased human capital value creation and unleashing innovative thinking capacities of the youth. This is confirmed by Wang and Shu (2008) who analysed the amount of patent applications as a proxy of technological innovation and conducted empirical analysis of the impact of venture capitalist on patent applications and came out with the finding that that venture capital was tied between human capital and funding and it had a strong spill over effect, which stimulated the operation of social capital, and promoted efficient allocation of resources.

3.8.3 Financial inclusion

Financial inclusion is one of the indicators of financial deepening and is seen as one of the contributors of financial and economic development. Demirguc-Kunt., Klapper and Randall (2014) find that Muslims are more likely than non-Muslims to report religion as a barrier to account ownership, especially respondents in Sub-Saharan Africa. This shows the importance of recognising people's religious persuasions in financial access. With VC within Islamic frame been made available, Muslims in Ghana who are excluded from the current financial system with respect to the conventional VC because of the perceived impermissibility of some of the instruments used in structuring it will have an alternative. They will be able to receive investments through the IVC and thus helps drive productivity and create employment opportunities. At the supply side, IVC fund managers will be able to attract investors and institutional funds who are looking for opportunities to deploy their funds in Shari'ah compliant investments.

3.8.4 Economic growth

At the core of VC activities is the creation of economic growth. When jobs are created, people work and this improves total production and the economy expands. Similarly, when entrepreneurs come get the opportunity to fund their innovations, then new business emerge and growth of the economy takes place. Likewise, when religious barriers to the access of finance is removed, more capital can be deployed and this will lead to general economic output. The impact of VC in economic growth is confirmed by Romina and van Pottelsberghe (2004) who carried out a test to ascertain the VC contribution to economic growth through innovation and development of absorptive capacity in 16 major OECD countries over the period 1990-2001. The study findings show significant and direct effect of VC on economic growth. They also argue that VC has indirect impact on the growth of the aggregate economic performance through improving the economic effect of private and public R&D spending and the absorptive

capacity of the stock of knowledge generated by universities and firm. Mayer (2010) conducted an analysis of the causality relation between VC investment and Real GDP growth for 14 European countries plus the US within the period of 1989 to 2009. The findings show that an increase in VC investments of 0.1% of GDP is statistically associated with an increase in real GDP growth of 0.30 percentage point. This means that when more funds are channelled through VC investments, the economy of the country will respond by expanding as a result of the VC activities.

CHAPTER 4

CONCLUSIONS AND RECOMMENDATIONS

4.1 Conclusions

The benefit of IVC on economic growth is undoubtedly enormous and will particularly be an avenue for equity financing in Islamic finance. This will provide the vehicle for a shift away from debt financing that is currently the trend in Islamic finance. This study explores how VC in an Islamic frame can be used to finance SMEs and start-ups in Ghana with focus on investment protection. Traditional venture capital instruments as used are deemed Shari'ah impermissible by some Shari'ah and Islamic finance experts. The study thus, is aimed at looking at how IVC can be structured and how *Shari'ah*-compliant instruments can be used to protect investments which have been lacking. The study also seeks to provide useful insight and ways into how it can be made attractive by addressing how funds providers can protect their investments through *Shari'ah*-compliant investment protection mechanisms. Investors who are interested in IVC usually shy away because of the seeming unavailability of financial instruments that will protect their investments when deployed.

The paper found that IVC is not present in Ghana as general Islamic finance is not known in the country despite a large potential demand. These findings reveal that some Ghanaians are financially excluded as they do not patronise in conventional VC because of the impermissibility of some of the instruments used in structuring it.

The study reveals that VCTF has not performed satisfactorily over the years. This is explained by the fact that there has not been any successful exit from any of the portfolios invested. Mismanagement of the operations of the VCTF is also reported from the research as some funds advanced to some SMEs were not properly captured in files. The VCTF investments through the VCFCs have not been spread across the country as most of the investments are concentrated in the Southern part of the country to the neglect of the Northern part where

poverty is endemic. The study further reveals that VCFCs investments cut across the various stages of SMEs growth including early start-ups, expansion stage and older stage. The expansion stage SMEs receive investments of more than 38% of total portfolio which is closely followed by the early stage SMEs with 37% while 24% is the share of the older stage SMEs. This shows that even though VCTF mandate is to stimulate the creation of new businesses, the portfolio allocations of VCFCs shows otherwise as they channel more investments to expansion stage SMEs. The findings also reports that despite the vast agriculture opportunities in the country, less investments went to the agriculture sector.

The study shows that IVCC can invest in SMEs and start-ups using a blend of *Musharakah*, *Mudharabah*, *Murabahah*, *Istisna* and *Wakalah*.

The findings of the research demonstrate that another set of Shari'ah compliant instruments, which is rarely tabbed by Islamic banks, is available for IVCC that can be used to protect investments and incentivise potential investors into IVCC. Preference Shares, Perpetual *Mudharabah*, *Musharakah* with *Murabahah*, *Musharakah* with *Qard*, Negligence Clauses, Liquidation preference, Diminishing *Musharakah*, Warrants, and Supermajority Clauses can all be used with appropriate conditions to protect investors and offer incentives for them to invest in IVCC. The trump card in the use of these instruments is that their application should not lead to Riba or guarantee of returns in respective contracts.

IVC is exposed to a number of risks which need to be minimised and contained. Risks of adverse selection can be minimised through due diligence on respective investee SMEs. Moral hazard risk can be mitigated by monitoring and controlling mechanisms that need to be put in place by the IVCC post the investment period. Also, group guarantees as well as third party guarantees can help minimise the risks of moral hazard. Also, risks of negligence, misconduct and breach of contract can be mitigated by clearly stating conditions of occurrence and the shifting of the burden of proof of non-negligence on the investee company. Portfolio

diversification can also be used to minimise the risk of default. Corporate governance is another mechanism that can be used to minimise risks in IVC investments as it seeks to check the behaviour of management of investee SMEs to ensure it's in the best interest of investors.

The research concludes that IVC operations in Ghana will have an impact on stimulating job creation, driving technological innovation, improving financial inclusion and more broadly, it leads to economic growth. Venture capital's investment in SMEs can facilitate wealth creation in ways that will bring improvements in the lives of people. Literature has it that the economic impact of venture capital has been realized by SMEs in sales growth, profit, and improvement in management of finance and other resources. Apart from the employment that will be created social impact from venture capital respective VC provides opportunities for poverty alleviation of employees. Also, the improvement of profit means that SMEs will pay more taxes to the government will lead to more revenue to support government's expenditure. Venture capital involvement has demonstrated that the partnership implicit in equity capital is as important as the finance and that these two aspects of the relationship are mutually reinforcing

4.2 Recommendations

In order for IVC to be functional and play its role in growing SMEs in Ghana there need to be certain actions taken by relevant stakeholders.

1. There is a need to provide the necessary regulatory framework for Venture Capital sector by the Security and Exchange Commission. The amendment of the current legal regime, the Securities Industries Law, 1993 (PNDCL 333) that is currently under consideration should be more expansive to create a conducive regulatory environment for IVC. The absence of an appropriate regulatory framework for IVC stifles the the growth of the industry. In coming out with this framework, the authorities should consider the religious preferences of Ghanaians to enhance financial inclusion. This

will provide the needed financial infrastructure and architecture for sustainable functioning of the sector. This will also attract Shari'ah compliant funds from both local and overseas investors.

2. The BoG should consider Islamic finance as an avenue for enhancing financial inclusion in some sections of the Ghanaian society. This will provide the needed motivation to come out with policy intervention that will see the operations of Islamic finance in Ghana including IVC.

3. The VCTF needs to be given to a private firm to manage to serve start-ups and SMEs better. The private management will ensure efficiency and superior performance of the Trust Funds devoid of corrupt practices. Also, the private management will be performance driven and will be tasked to produce successful exits of SMEs.

4. The government has to come out with generous tax incentives for VC investors in order to incentivise private sector investors such as high net worth individuals, large corporate investors, local and international financial institutions and possible offshore venture capital funds. Similarly, government policy can be directed at strategic sectors of the economy, such as targeting a particular technology. In this regard, investors may be allowed to write off losses coming from those investments in order to encourage investors to take high risk investments in high-technology businesses.

5. Government of Ghana through the Ministries of Finance and Business Development should consider integrating NBSSI, NEIP and VCTF. This will provide synergistically support for SMEs and likely to achieve more results than the current arrangement where they all work independently but towards the same goal. This can be done by forming a steering committee that will have all these state agencies represented with the goal of

coming out with an action plan that will see them all use their resources towards supporting SMEs' development.

6. Appropriate stakeholders should consider localisation of indigenous technology and leveraging of local natural resources to drive VC development in Ghana. The government's 'one district one factory' project can be used as a vehicle for unleashing the potentials of SMEs.[20] The importance of fuelling indigenous technology is emphasised by Ray (1993) who suggests: 'the venture capital sector can only succeed as a catalyst for the growth of high tech firms if it forms an integral component of an indigenous technological infrastructure that includes, inter alia: concentrations of skilled labour; substantial public R&D expenditure; and access to big domestic or international markets'.

7. In order to attract more institutional investors to VC the government should consider amending the current pension funds management law , the Pensions Act, 2008 (Act 766), to clearly classify VC and private equity as an asset class. This will enable pension funds' assets to be allocated to this sector. In other jurisdictions, Pension funds constitute one of the major sources of long-term capital available to SMEs and high growth businesses.[21]

8. There is a need to use public policy interventions like the Commercialization programs such as the Small Business Administration's Small Business Innovation Research (SBIR) and Small Business Technology Transfer (STTR) programs, as well as the National Science Foundation's Innovation Corps (I-Corps) in the USA, These help to

[20] The one district one factory policy is to ensure that Ghana's ongoing industrialization effort is decentralised to every part of the country, as opposed to the hitherto situation where the vast majority of manufacturing facilities are located in the five largest urban areas, namely Accra, Tema, Kumasi, Takoradi and Tamale.
[21] Pension funds constitute over 50% of the funds allocated to VC sector in the US in 2001(National Venture Capital Association,2002).

bridge the commercialization divide for small businesses with the potential for commercialization. With this, researchers in Ghana will be able to find the eco system to commercialise their ideas into successful businesses through the support of VC.

9. Government can also consider using its sovereign status to leverage more investors especially, the institutional ones, to deploy more capital to the VC sector.

10. In order to invest in high potential growth projects but with huge cash calls, VC fund managers may consider forming syndications in order to pool resources together. This will also help in diversifying the risk of investment.

11. Also, there is a need to consider developing more exit opportunities for VC investors. This can be done by strengthening the existing Ghana Stock Exchange and also Ghana Alternative Exchange (GAX) and the VCTF partnership should be deepened. Similarly the planned integration of West African stock markets should be fast-tracked as this further widens opportunities for investors to exit both nationally and regionally.

12. Once IVC is equity financing, it may not need special regulations outside the VC eco system but it is important to have a robust and transparent legal environment that will uphold the sanctity of contracts. There need to be an appropriate financial architecture such as a clear, proficient and comprehensive system that will respect the Islamic finance contracts entered by parties. Apart from the court system, there can be a guideline on dispute resolution and because of the lack of *Shari'ah* experts in Ghana the arbitration approach should be encouraged as a dispute resolution mechanism within the operations of IVC.

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