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# The Viability of Profit-Loss Sharing Models to Finance Small and Medium Enterprises: The Case of Saudi Arabia

## Abstract

This study aims to explore the role of profit-loss sharing (PLS) models to alleviate access to finance for small and medium enterprises in Saudi Arabia, in the light of the stringent requirements of traditional financial institutions, to ensure the growth and development of the SME sector. A central question of this study is the extent to which Islamic banks can adopt profit-loss sharing modes to finance SMEs. The main results present the barriers preventing Islamic banks from the application of profit-loss sharing that increase incidence of agency problems for such institutions. High asymmetry of information and the nature of Islamic banks as depository institutions place more constraints on extending finance on the basis of profit-loss sharing. Profit-loss sharing dominates the literature of Islamic finance, however, there is a lack of rigorous empirical evaluations of the potential benefits of profit-loss sharing to finance SMEs. There is a need for public intervention to stimulate the role of non-banking institutions that are considered more suitable for long-term, riskier investments to offer alternative finance for SMEs on the basis of profit-loss sharing.

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*The Case of Saudi Arabia*

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by

Alhanoof Alghamdi

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Title: The Viability of Profit-Loss Sharing Models to Finance Small and Medium Enterprises: *The Case of Saudi Arabia*  
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### **Abstract**

This study aims to explore the role of profit-loss sharing (PLS) models to alleviate access to finance for small and medium enterprises in Saudi Arabia, in the light of the stringent requirements of traditional financial institutions, to ensure the growth and development of the SME sector. A central question of this study is the extent to which Islamic banks can adopt profit-loss sharing modes to finance SME. The main results present the barriers preventing Islamic banks from the application of profit-loss sharing that increase incidence of agency problems for such institutions. High asymmetry of information and the nature of Islamic banks as depository institutions place more constraints on extending finance on the basis of profit-loss sharing. Profit-loss sharing dominates the literature of Islamic finance, however, there is a lack of rigorous empirical evaluations of the potential benefits of profit-loss sharing to finance SMEs. There is a need for public intervention to stimulate the role of non-banking institutions that are considered more suitable for long-term, riskier investments to offer alternative finance for SMEs on the basis of profit-loss sharing.

## Table of Contents

<b>ABSTRACT</b>	<b>II</b>
<b>LIST OF FIGURES</b>	<b>V</b>
<b>LIST OF ABBREVIATIONS</b>	<b>VI</b>
<b>CHAPTER 1: INTRODUCTION</b>	<b>1</b>
<b>I. RESEARCH OBJECTIVES</b>	<b>1</b>
<b>II. RESEARCH METHODOLOGY</b>	<b>1</b>
<b>III. LIMITATION OF THE STUDY</b>	<b>2</b>
<b>CHAPTER 2: THE ROLE OF PROFIT-LOSS SHARING FOR SMALL AND MEDIUM EMPRISES</b>	<b>3</b>
<b>2.1 INTRODUCTION</b>	<b>3</b>
<b>2.2 DEFINITIONAL ASPECT OF SMES</b>	<b>5</b>
<b>2.3 SMES AND CONTRIBUTION TO NATIONAL ECONOMY</b>	<b>6</b>
<b>2.4 FINANCING SMALL AND MEDIUM ENTERPRISES: THE FINANCE GAP</b>	<b>9</b>
2.4.1 INTERNAL FINANCE	10
2.4.2 EXTERNAL FINANCE	11
<b>2.5 SMES FINANCE GAP IN SAUDI ARABIA</b>	<b>14</b>
<b>2.6 ISLAMIC FINANCE INTRODUCTION</b>	<b>16</b>
2.6.1 OVERVIEW OF ISLAMIC BANKING	16
2.6.2 THE NATURE OF FINANCING	17
<b>2.7 PROFIT-LOSS SHARING TO FINANCE SMALL AND MEDIUM ENTERPRISES</b>	<b>19</b>
2.7.1 MUDARABA (SILENT PARTNERSHIP)	20
2.7.2 MUSHARAKA (PARTNERSHIP)	21
2.7.3 MUSHARAKA MUTANAQISAH (DECREASING PARTNERSHIP)	22
<b>2.8 PROFIT-LOSS SHARING INSTRUMENTS: IDEAL VS. REALITY</b>	<b>25</b>
<b>2.9 IMPLICATION OF AGENCY PROBLEM IN ISLAMIC CONTRACTS</b>	<b>27</b>
2.9.1 ADVERSE SELECTION & MORAL HAZARD IN PROFIT-LOSS SHARING	29
<b>2.10 WELFARE IMPLICATION AND EFFICIENCY</b>	<b>31</b>
<b>CHAPTER 3: AGENCY THEORY AND PROFIT-LOSS SHARING MODEL</b>	<b>33</b>
<b>3.1 INTRODUCTION</b>	<b>33</b>
<b>3.2 AGENCY THEORY</b>	<b>34</b>
3.2.1 AGENCY THEORY: ISLAMIC PERSPECTIVE	35
3.2.2 AGENCY PROBLEMS IN PLS CONTRACTS: EVIDENCE FROM EMPIRICAL ANALYSES	38
<b>3.3 INFORMATION SHARING AND CREDIT REPORTING IN SAUDI ARABIA</b>	<b>42</b>
<b>3.4 RISKS MANAGEMENT IN PROFIT-LOSS SHARING CONTRACTS</b>	<b>45</b>
3.4.1 FIDUCIARY RISK	46
3.4.2 LIQUIDITY RISK	46
3.4.3 OPERATIONAL RISK	47
3.4.4 CREDIT RISK	47

<b>CHAPTER 4: VENTURE CAPITAL AS A MODEL FOR PROFIT-LOSS SHARING</b>	<b>49</b>
<b>4.1 INTRODUCTION</b>	<b>49</b>
<b>4.2 VENTURE CAPITAL</b>	<b>50</b>
4.2.1 THE INVESTMENT PROCESS OF VENTURE CAPITAL	51
<b>4.3 VENTURE CAPITAL AS A MODEL FOR PROFIT-LOSS SHARING FINANCE</b>	<b>54</b>
4.3.1 STRUCTURE ISSUES	58
<b>4.4 VENTURE CAPITAL IN SAUDI ARABIA</b>	<b>60</b>
<b>4.5 CONCLUSION</b>	<b>63</b>
<b>BIBLIOGRAPHY</b>	<b>65</b>
<b>APPENDIX</b>	<b>72</b>
<b>GLOSSARY</b>	<b>72</b>

## **List of Figures**

FIGURE 1: SMES' CONTRIBUTION TO NATIONAL ECONOMIES (2011) .	7
FIGURE 2: SMES LOANS/TOTAL LOANS IN MENA REGION	15
FIGURE 3: ISLAMIC FINANCIAL INSTRUMENTS	19
FIGURE 4: THE STRUCTURE OF FINANCING MODES IN ISLAMIC BANKS 2012	26
FIGURE 5: KEY VARIABLES PREVENTING ISLAMIC BANKS FROM MUDARABA CONTRACTS.	39
FIGURE 6: USE OF STAGED FINANCING AND CO-INVESTMENT BY SAUDI INFORMAL INVESTORS.	42
FIGURE 7: CREDIT INFORMATION AND LEGAL RIGHTS	45
FIGURE 8: SMES PREFERENCE OF SHARIA-COMPLIANT FINANCE IN MENA REGION	56

## **List of Abbreviations**

**SMEs:** Small and Medium Enterprises.

**PLS:** Profit-Loss Sharing

**IFIs:** Islamic financial institutions

**VC:** Venture Capital

**GCC:** Gulf Cooperation Countries. (Saudi Arabia, Qatar, Oman, Kuwait, UAE, Bahrain).

**MENA:** Middle East and North Africa

**AAOIFI:** Accounting and Auditing Organization for Islamic Financial Institutions.



## **Chapter 1: Introduction**

### **i. Research Objectives**

This research examines the financing constraints facing small and medium enterprises (SMEs) in Saudi Arabia. Profit-loss sharing (PLS) finance models are presented as an Islamic alternative that meet the demands of entrepreneurs in Muslim countries, and Saudi Arabia in particular, for Sharia-compliant SMEs finance. This research examines the limitations of of PLS-based finance through Islamic banks which are explained by the agency theory. It also explores the potential role of non-banking institutions (venture capital) to adopt PLS instruments to finance innovation and entrepreneurial activities, along with the current limitations to the development of Islamic venture capital industry in Saudi Arabia.

### **ii. Research Methodology**

In this study, extensive literature review has been done on Islamic finance and small and medium enterprises using books, peer-reviewed journal articles, official reports and secondary data. The study uses a qualitative approach and present a discussion on the efficacy and feasibility of Islamic equity finance and profit-loss sharing contracts to increase the financial inclusion for small and medium enterprises.

### **iii. Limitation of the Study**

Profit-loss sharing modes are practiced on a very limited scale which make an empirical analysis not possible due to the limitation of data. Profit-loss sharing modes are theoretically presented as the 'ideal' modes of finance and can play a vital role in enhancing entrepreneurial spirit in Muslim countries. However, studies on modern practical application of PLS are yet to be done.

## **Chapter 2: The Role of Profit-Loss Sharing for Small and Medium Enterprises.**

### **2.1 Introduction**

Small and medium enterprises are considered the engine of economic growth in both developed and developing countries. A vibrant SMEs sector plays a major role towards the generation of employment, fostering innovation and technology, diversification of economic base, generation of exports revenues and creating industrial linkages between large industries and SMEs for less dependence on imports (Durrani 2006). The growing interest in SMEs sector around the world is partially attributed to its ability to absorb and quickly respond to market changes more effectively due to SMEs' flexible production structures. Moreover, there is a wide agreement on the direct link between job creation and poverty reduction as the lack of paid employment is a central problem to poverty. The SME sector accounts for larger shares of employment in the private sector, creates most of the new jobs and has the highest employment growth rate. However, these inferences are widely based on observations of industrialized economies. In developing countries, most of the SME are borne out of necessity, usually operate in crowded markets and characterized with low productivity. Therefore, governments' public policy addressing poverty in developing countries should provide the required regulatory and legal environment for the expansion of SMEs, low cost finance, business development services, and market access. All of these factors could increase the productivity of the SME sector and the quality of the jobs created (e.g. sufficient earnings, job security) in order to

capture the full potentials of SMEs in poverty alleviation (Vandenberg 2006; Deijl et al. 2013). A vibrant SMEs sector has also been used as an economic tool to production-base diversification, particularly for oil-economies where the bulk of their national income comes from the production and export of crude oil and oil- related products. In Saudi Arabia, one of the main goals to diversify the economic base away from oil and maintain less volatile national income is to increase the productivity of the private sector and its contribution to GDP. Therefore, the status of small and medium enterprises should be reconsidered. SMEs represent 99 percent of all enterprises and contribute with approximately 22 percent to GDP which is considered a small contribution considering the total number of SMEs and the country's diversification policies. Moreover, SMEs could be an important source of jobs and self-employment where the current structure of both private and public sector is unable to absorb the increasing number of job seekers. However, SMEs sector in Saudi Arabia faces many constraints that limit their growth and development; such as the lack of unified procedures for smaller businesses, weak linkages between SMEs and large enterprises, and the lack of infrastructure needed for market access, particularly marketing and exports. The most important obstacle facing Saudi SMEs is access to finance. SMEs are still viewed as high-risk to commercial banks and more prone to failure, and with higher asymmetry of information, the lack of collateral increases the difficulty of obtaining funds through banks. Lack of nonbanking financial institutions added more constraints on SMEs' access to finance. This paper focus will on SMEs access to finance and possibility of developing Islamic financial instruments (profit-loss sharing) to broaden funding opportunities for SMEs and the extent of government intervention to provide subsidized finance to support economic reform plans.

## 2.2 Definitional Aspect of SMEs

The definition of SMEs includes a wide range of definitions that vary from country to another depending on factors like the country's level of development, business culture and enterprises characteristics within that particular country. In some cases, a definition of SMEs does not exist. Adoption of single definition could be difficult and a challenging task. Definitions of SMEs are usually designed to meet the needs for SMEs development within the country (e.g. delivering greater access to finance), and subsequently design the appropriate SMEs support programs to meet these needs. Using measures of size (i.e. profits, turnovers) in different sectors would give a different result which might affect the design of the appropriate regulatory framework, therefore, some countries adopt different definitions for SMEs according to the type of activity. Multiple quantitative measures and financial indicators are used such as the number of employees, assets size, sales, and profitability, etc. According to (Abdelhamid *et al* 2003; Elasrag 2010), there are three main quantitative measures that are commonly used to define SMEs. The number of employees within the enterprise is usually the most common measure to define SMEs, however, it varies from country to another depending on the degree of development of the country in question. Another measure is the value of assets but it is not as common as the number of employees because SMEs might face a difficulty in determining the precise value of their assets or hesitance of SMEs' owner to reveal such information. Turnover per enterprise which is also referred to as the value of sales or gross receipt and this measure is correlated with other quantitative measures to define SMEs (Elasrag, 2016). In Saudi Arabia, a definition did not exist nor a special government agency for SMEs until 2016, which greatly restricted the ability to understand the SME sector and the issues that hindered its

development which in turn restricted SMEs access to finance and other forms of assistance to stimulate the SME sector.

	Employee's No.	Revenues (Million SAR)
Micro	1 - 5	0 - 3
Small	6 - 49	3 - 40
Medium	50 - 249	40 - 200

Table 1: SMEs definition in Saudi Arabia (SMEA)

### **2.3 SMEs and Contribution to National Economy**

SMEs can have crucial contributions towards economic growth and sustainability by having a more diverse and balanced production base, fostering innovation and technologies and other high-value-added activities that create linkages between large industries and SMEs. In Saudi Arabia, SMEs represent 99 of all enterprises and contribute with 29% of total revenues and nearly 22 percent of total GDP. This is in contrast with most of the developed and developing economies where SMEs represent a large share of total enterprises. The diversification of the economic base includes the diversification of exports composition as well, however, SMEs only contribute with one percent of total export of the country (SMEA). It is quite important to diversify the government revenues to stabilize the economy in case of severe downturns in the oil market since oil revenues are the main source of finance for economic and social development in the country.

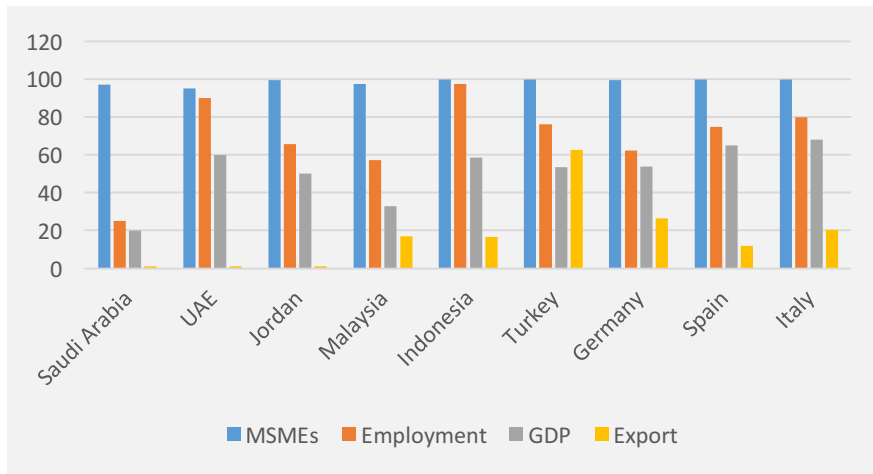


Figure 1: SMEs' Contribution to National Economies (2011) .<sup>1</sup>  
 Source: country-specific official data.

The recent drop in oil prices had a negative impact on the Saudi economy which pushed the country to accelerate the pace of diversification process and address the issues facing the development of the private sector and SMEs (Al Baker 2015). In addition to SMEs considerable contribution to GDP and provision of more affordable goods and services domestically, SMEs dominate the business profiles in national economies and play a vital role in the generation of income and jobs opportunities. However, due to differences in SMEs' definitions and their characteristics across the world, in addition to the inaccessibility to data on informal SMEs in developing countries, it is difficult to make general conclusions about the effect of SMEs on growth and job creation. Developing countries usually have a larger informal sector, and most of SMEs are out of necessity with lower productivity and compete in crowded markets (Deijl et al. 2013). A study conducted by World Bank in 2010 covering 132 countries has found that SMEs in high-income countries employ a higher percentage of the workforce. In half of high-income economies

<sup>1</sup> Exports data not included for UAE and Jordan.

surveyed, formal SMEs employ at least 45% of the workforce compared to 27% only in low-income economies. The low ratios of SMEs' employment to total employment in low-income economies can be explained by the larger size of the informal sector (Kushnir *et al.* 2010). This highlights the importance of SMEs in economic development and provision of jobs. As for Saudi Arabia, the SME sector is still inefficient in terms of creating jobs for citizens in the private sector. Saudi workers did not exceed 18 percent of total employment for the last decade and the rest of jobs in the sector are occupied by expatriates. Therefore, it can be concluded that current status of SMEs sector is inefficient in terms of generating employment and this is due to many reasons that are directly related to the history of the country, investment culture, educational outcomes, and government policies. Most Saudi SMEs are centered in low-value-added activities like trade and construction with low qualifications needed for the related jobs which resulted in the high recruitment of foreign labor for lower wages. Moreover, the educational outcomes are unbalanced with the country's intention to move towards more industrialized and productive economy and less reliance on natural resources like oil and minerals. Saudi Arabia suffers from a shortage of Saudi skilled labor and one reason is attributable to the inefficient outcomes of the educational system are not satisfactory in terms of responding to the scientific and technological demand of the labor market. Moreover, reforms should focus more on vocational and training education rather than university level education to create more jobs in the SME sector and reduce reliance on unskilled foreign labor (Achoui 2009). Government interventions and policies like Saudization to generate more jobs in SMEs sector for citizens was a marginal success. In most cases, Saudization policy had an adverse effect on SMEs overall productivity where most SMEs would hire Saudis just to avoid



sanctions and some SMEs informally paid random citizens in exchange of registering their name as employees to meet the legal requirement of Saudization. Although government intervention might encourage companies to hire more citizens, but it is not creating incentives for SMEs to invest high value-added activities that could create permanent employment opportunities. (Al Baker 2015).

## **2.4 Financing Small and Medium Enterprises: The Finance Gap**

The SME sector and its important role in the economic growth and development process continue to be the forefront of policy debates and has attracted the interest from academics and policy-makers across the globe. In general, the crucial importance of SMEs sector is stemming from its claimed role in facilitating the economic growth and development process. Advocates argue that SMEs encourage entrepreneurship and enhance competition, therefore, have benefits on economy-wide efficiency, innovation, and aggregate productivity growth. It is frequently being claimed that SMEs, in general, are more flexible in responding to market changes and more productive than large firms. Also, SMEs expansion can have an immediate impact on employment generation because they are more labor-intensive (Ganbold 2008). However, the SME ability to grow and expand depends highly on their potential investment in restructuring, technology, and human capital. In spite of the consensus on SMEs importance, they are significantly more financially constrained especially in developing countries. It is assumed that SMEs face a higher cost of external credits where financial institutions (e.g. banks) are less willing to lend to SMEs due to the higher credit risk, information asymmetry and lack of trading history (Abdulsaleh *et al.* 2013). Other SMEs are involuntarily excluded from access to

finance in cases where enterprises are not making enough returns or are unable to provide the guarantees required by capital suppliers which increase their credit risk (Angela, 2011).

### **2.4.1 Internal Finance**

It is claimed that SMEs in their early phases rely heavily on internal sources such as retained profits, personal savings, family and friends. SMEs start to gradually adjust their capital structure as they advance through their business lifecycle. During subsequent growth stages, SMEs start to establish track record which improves their creditworthiness and information transparency and therefore higher chances to access external finance like banks loans (Berger *et al*, 1998). According to the growth lifecycle model, researchers<sup>2</sup> have found empirical evidence that SMEs financial behavior is, to a large extent, attributed to the life-cycle pattern which was consistent over time and similar across different industries. However, others have critiqued the growth life-cycle model that it does not offer a clear picture of SMEs financial behavior. Moreover, the lifecycle paradigm is not applicable to all SMEs operating in different industries where firm size, age and information availability, which are intended to constitute the backbone of this paradigm, are not perfectly correlated. Gregory *et al*. (2005) partially agreed with growth life cycle model stating that SMEs financing cannot be standardized. Also, their results showed that only firm's size was a significant predictor of the capital structure decision in SMEs. The Peaking Order theory developed by Myers (1984) suggest that the capital structure decision is a function of the firms' age. In this theory, internal sources of funds are prioritized and the use of external sources is delayed until internal ones are exhausted. Helwege and Liang

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<sup>2</sup> Kimhi (1997), Barton and Gordon (1987), La Rocca et al. (2011) and Wu et al. (2008)

(1996) have tested the theory by observing the financial decisions of a sample of SMEs over eight years and did not observe any significant relationship between resorting to external sources of finance and a deficit in internal sources (Abdulsaleh *et al* 2013).

## **2.4.2 External Finance**

A massive amount of literature on enterprise finance, and to a large extent, agree that SMEs in both developing and developed world are more restricted in access to external sources of funds. External sources in the form of debt financing including but not limited to bank loans, equity finance, government funding and venture capital. However, SMEs face more barriers in access to such resources because SMEs are perceived as high risk for lenders. Agency problems, lack of trade history, lack of risk management skills and know-how, and lack of collateral are reasons behind the reluctance of lending institutions to lend to SMEs, especially micro and small enterprises.

### **2.4.2.1 Equity Financing**

As agency problems and information asymmetry are considered to be more severe in the early stages of SMEs, internal equity financing is a critical source of finance. As SMEs at early stages suffer from cash shortage and lack of collateral, unlike debt, equity offers long-term finance with minimum cash outflow in the form of interest. Also, equity capital can enhance small firms credibility by indicating that the firm has the approval of sophisticated financial professionals (Ou & Haynes, 2006). A contrary argument is that SMEs at funding stage may not choose to use equity to avoid dilution s of ownership of their firms (Reid, 1996; Berger *et al.* 1998)

### 2.4.2.2 Venture Capital

Venture capitalists are financial intermediaries. Venture capital is a form of finance in which funds are raised from investors and redistributed by investing in high-risk firms that are mostly small or start-up enterprises<sup>3</sup>. Venture capital market includes a variety of organizations, including public corporations, small business investment corporations and private limited partnerships. However, using venture capital as a source of funds for SMEs, venture capitalists face significant adverse selection and moral hazard problems (Smolarski & Kut, 2011). This result from the relationship between the venture capitalists and entrepreneur where the latter lack information or skills to use the funds optimally. To reduce such uncertainty, Gompers (1995) emphasized on three control mechanisms. *the use of convertible securities* which, unlike debt or equity, could mitigate agency problems through an incentive-compatible contract that allows the owner some control during the investment period (Bascha & Walz 2001). *The syndication of investment* is another common control strategy in venture capital to reduce adverse selection problem through the participation of co-investor sharing the investment risk. *The staging of capital infusion* is a main characteristic of venture capital. Venture capitalists invest in stages to maintain control over financed projects and reduce problems that can occur as a result of information asymmetry. Gompers (1995) provided evidence that staged financing allows venture capitalists to gather information before making a decision on reinvestment and an exit mechanism if any undesirable information regarding the investment emerges (Abdulsaleh et al. 2013).

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<sup>3</sup> Potter & Porto (2007); Daskalakis et al. (2013)

### 2.4.2.3 Bank Financing

A large body of the literature demonstrated that bank loans are the main external source of funds of SMEs in both developed and developing countries. From banks' perspective, SMEs segment has great potentials of profitability and frequently viewed as unsaturated sector with good prospects which explain their engagement in financing SMEs. Banks do not only offer necessary capital for entrepreneurs to start a new business or expand current ones, but they also offer a wide range of financial services and products. Banks involvement with funding SMEs is also driven by the intense competition in other sectors such as the large business and retail customers (Beck, *et al.* 2008). However, in order to reduce the risks that are usually associated with lending to SMEs, banks adopt some mechanisms such as *relationship lending*, *scoring*, and other techniques. Under relationship lending, 'soft' information is collected by banks through contact with SMEs to evaluate the creditworthiness of the entrepreneur and to ensure that the potential loan will be repaid. Relationship lending has been found to have a positive effect on the availability of funds for SMEs (e.g., Petersen & Rajan, 1994). Evidence from the literature also shows that a trust-based relationship lending includes other benefits like a lower cost of credit and protection against credit crunches (Berger *et al.*, 1998).

Scoring is another lending technique based on 'hard' quantitative information used by banks to evaluate loans applications that lack information on the creditworthiness of the applicants, i.e. entrepreneurs. Unlike in relationship lending, information required for credit scoring are readily available, usually from consumer and commercial credits bureaus. Evidence from the literature showed that credit scoring increases the availability

of funds for SMEs. Other evidence showed that the portfolio share of SMEs has increased in banks who adopted credit scoring technique (e.g. Frame et al. 2001).

## **2.5 SMEs Finance Gap in Saudi Arabia**

The results of a research conducted by Beck *et al.* (2008) that included a survey covering 45 countries<sup>4</sup> to investigate and provide measures of the extent of banks lending to SMEs show that most banks are showing an increasing interest in SMEs and viewed SMEs as attractive and profitable businesses. However, the research also show that SMEs are still significantly financially constrained and the SME market is still far from saturated. In an enterprise-level survey jointly conducted by World Bank to investigate the status of banking lending to SMEs around the world, the results suggest that lending practices to SMEs are particularly relevant in MENA<sup>5</sup> region. SMEs in the MENA region are more financially constrained where only 20 percent of SMEs have loans or line of credit and only 10 percent of their investment expenditure is financed by bank loans. A further investigation<sup>6</sup> of SMEs bank lending in MENA region showed that oil economies (i.e. GCC) recorded the lowest share of SMEs lending with 2 percent comparing to 13 percent for non-GCC. Low share of SMEs lending in GCC is explained by the domination of large enterprises with small non-oil sector. Moreover, GCC has smaller population and nationals who tend to prefer job security in the public sector rather than taking risks in SMEs sector. However, the large difference between actual SMEs lending and the long-term target of

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<sup>4</sup> The sample included 38 developing countries and 7 developed countries.

<sup>5</sup> MENA: Middle East and North Africa.

<sup>6</sup> A survey jointly conducted by World Bank and (UAB) *Union of Arab Banks* which has 330 bank members.

the respondents suggests a substantial room for more SMEs lending. SMEs lending targets were significantly lower in GCC which implies that there are ‘natural’ limits to SMEs profitability in oil-economies (Rocha *et al.* 2011).

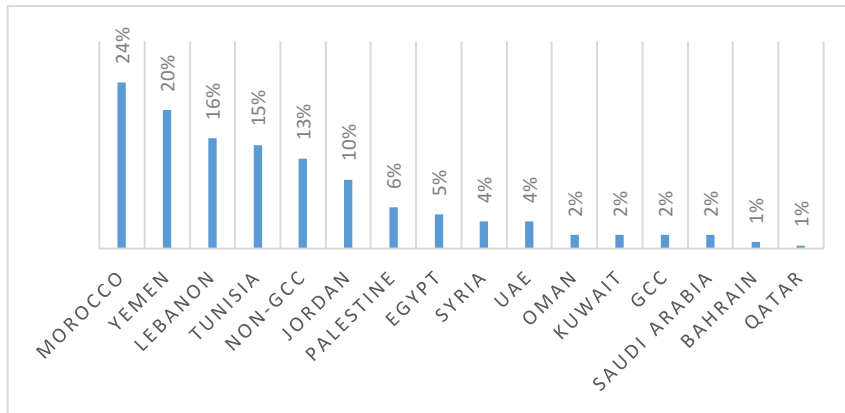


Figure 2: SMEs Loans/Total Loans in MENA Region  
Source: World Bank & Arab Union Banks

Therefore, to overcome the obstacles of access to finance facing SMEs, strengthening credit information and creditors rights should be a priority item in governments’ regulatory agenda (Rocha *et al.*, 2011). A credit guarantee scheme program (Kafalah) was established to overcome the issue of bank lending to SMEs in Saudi Arabia. The program aims to promote financing to SMEs; under this program banks offer finance to SMEs up to SAR 2 million and the Kafalah program issues a guarantee to the bank covering up to 80 percent of the financing amount. However, Saudi Arabia is still one of the few countries in the MENA region that their credit guarantee programs do not offer assistance to participating enterprises. Despite the objectives of the program are explicitly stated to improve SMEs’ lending know-how, capacity building is not offered. Capacity building is argued to have a positive externality on guarantee schemes through the provision of assistance to SMEs in areas such as risk management, accounting, and

marketing. In Saudi Arabia, SMEs bank lending represents only 5 percent of total finance and the credit scheme program *Kafalah* is still inefficient due to issues related to the regulatory framework of the program (SMEA).

## **2.6 Islamic Finance Introduction**

### **2.6.1 Overview of Islamic Banking**

Islamic finance was used predominantly in the Muslim world and its practice dates back to a classical period. However, the term 'Islamic financial system' is relatively new appearing in the late 1970s and it is defined as a banking system whose principle underlying its operations and activities are founded on *Sharia* (Islamic laws). The Islamic financial system is not limited to banking but extends to capital markets, capital formation and all types of financial intermediation. The Islamic financial system is expected to go beyond the narrow concept of being 'interest-free' system and actively participate in achieving the goals and objective of Islamic economy. Although Islamic finance is founded on the absolute prohibition of *Riba* (usury), it is supported by other principles of Islamic doctrine advocating risk-sharing and entrepreneurship and absolute prohibition of *Gharar* (preventable uncertainty and ambiguity) *Maysir* (gambling and other speculative behavior). Earning a passive return on capital is prohibited because of the Islamic perception of hoarding capital as it prevents money from realizing its intended objectives and negates its function as a viable tool for development (Kayed 2012). Rather, Islamic finance suggests profit-loss sharing (PLS) models that promote active involvement of IFIs in economic activities and limit the conventional practice of transferring risk to the borrowers. The rationale behind 'no profit-sharing without risk-sharing' is that earning



profits is legitimized by engaging in a real economic activity. The risk-sharing nature of Islamic financial intermediation and, indeed, the asset-backed nature helps greatly to promote entrepreneurship, contribute to the real sector, and minimize the speculative transactions and excessive risk-taking behaviors by economic agents. The conventional system focuses mainly on the economic and financial aspect of transactions and mostly driven by profit-maximization, and intermediation services are provided on the basis of interests rates on both assets and liabilities sides. Islamic financial intermediaries, however, had to develop other modes through which savings are mobilized and passed on to borrowers without payment or receipt of interest.

### **2.6.2 The Nature of Financing**

With the absence of interest, other financial instruments that conform with Islamic laws were developed to serve different economic purposes. Various Islamic financial instruments are broadly classified as 'markup-based' or 'equity-based' and each of which includes a variety of contracts. Markup-based can be regarded as debt-creating modes as it provides finance in the form of debt (Alomar & Abdel-Haq 1996). Markup-based modes include *Murabaha* (cost-plus sale), *Ijara* (leasing) or *Salam* (advanced payments for goods).<sup>7</sup> The finance-user in these modes owes back a predetermined payment to the financier, and hence it becomes in the form of debt. On the other hand, with equity-based finance, the finance-user pays back the financier according to the profit and loss that he makes out of the use of the finance. Two prominent equity-based instruments are *Musharaka* (partnership) and *Mudaraba* (silent partnership) with defined profit-loss

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<sup>7</sup> Glossary.

sharing (PLS) rules and values. The rationale of the profit-loss sharing is that return on capital will depend on productivity, and the allocation of funds will be primarily based on the soundness of the project (Kabir et al. 2012). Also, PLS could reduce the unjust distribution of wealth. In PLS, the supply of money is not allowed to overstep the supply of goods and would thus curb inflationary pressure in the economy (Zaher & Hassan 2001). Profit-loss sharing is considered to better adjust to shocks and disruptions of payments mechanism. In a system where predetermined interest rate is prohibited and the nominal value of deposits (i.e. investment accounts) is not guaranteed, shocks are absorbed by changes in the nominal value of the deposits. In PLS-based finance, investment depends on the additional production that is reflected in the expected profitability of the project. If the business fails to make profits, then the Islamic bank would receive much less returns; therefore, the bank debit the amount on the investment account which means a reduction in the value of these accounts and consequently a reduction in M3. In case the business is successful and make profits, part of these profits are credited to the investment accounts, consequently an increase in M3. It is important to note that there is an additional production of real wealth. Therefore, monetary expansion through PLS is not inflationary. The same argument cannot be made in Murabaha (cost-plus sale) were the creditworthiness of the borrower takes priority to a project's expected profitability in taking an investment decision. Although Murabaha finance is linked to real asset or economic activity, but contrary to PLS, it creates a debt the borrower has to pay back regardless of the success of the business. Therefore, no cancellation of monetary asset takes place due to failure in creating additional value. Moreover, it is argued that the competence and expertise of banks in effecting PLS instruments would encourage more entrepreneurs to engage in more

innovative businesses to take advantage of the available funds. As PLS instruments allow banks to contribute to management and supervision of the business, banks have the opportunity to evaluate business proposals, thus enter into partnership contracts where prospects seem promising.

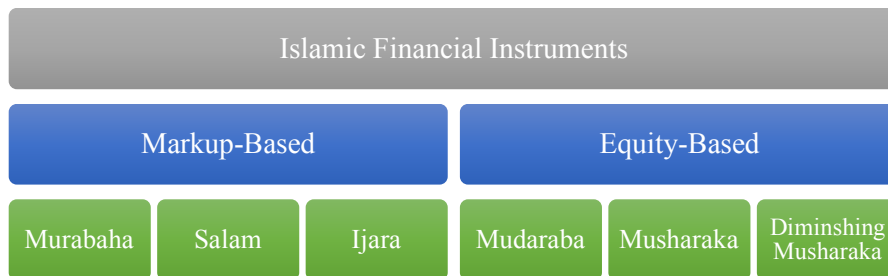


Figure 3: Islamic Financial Instruments

## 2.7 Profit-Loss Sharing to Finance Small and Medium Enterprises

There is a substantial evidence in the literature that small and medium enterprises are more financially-constrained than larger enterprises. Financial intermediaries (i.e. banks) are expected to be one of the main providers of funds to SMEs in a similar way they provide funds to other customer categories (Shaban *et al.* 2016). However, SMEs owners usually face a higher cost in access to external funds in the form of interests and collateral requirement. They usually fail to meet the stringent credits requirements of conventional banks. A number of factors including information asymmetry, lack of trade history and lack of collateral increase the risk of lending to SMEs, hindering banks' willingness to lend to SMEs. To alleviate the finance issue facing SMEs, diverse and innovative sources of finance can be examined; one possibility is to identify potentials and limitations of participatory models of Islamic finance. Profit-loss sharing (PLS) contracts, is a possible solution to finance SMEs by allowing the entrepreneurs to share, rather than to bear, the

risk of starting a new business or expanding existing ones (Kayed 2012). It is argued that Islamic participatory approaches could have huge economic potentials for SMEs if genuinely undertaken. In partnership contracts, the Islamic financial intermediary (IFI) and the entrepreneur contribute capital into the business; thus, both parties share the risk and the rewards associated with entrepreneurial activity. Moreover, considering the objectives of Islamic finance, IFIs are under religious and moral obligation to actively participate towards the nations' welfare and prosperity through the promotion of entrepreneurship and funding the creation of new enterprises. According to Kayed (2012):

A vast majority of Islamic finance scholars view IFIs as uniquely positioned to deliver significant contribution towards the establishment of an indigenous economic structure capable of expanding the productive base of the economies of various Islamic countries through the creation of a dynamic entrepreneurship sector. An honest application of PLS contracts can facilitate the development of entrepreneurship; thus, boost the growth birth rate of new SMEs.

### **2.7.1 Mudaraba (Silent Partnership)**

Mudaraba is a form of partnership where one party provide the funds, and the other provides the expertise and management (Alomar & Abdel-Haq 1997). It is a model similar to conventional asset management where asset managers invest on behalf of capital providers and receive a percentage of the realized profits for their services. However, in the case of Mudaraba, the manager is not compensated through management fee and his only return would be generated in the case profitability is achieved. Mudaraba can be *restricted* where the capital provider can define clear guidelines for the use of capital and risk exposure or it can be *unrestricted* where the capital provider allows the *Mudarib* (the manager) to manage the capital with no restrictions. In Mudaraba contract, the profits are

distributed according to predetermined ratios and the losses, if any, are borne entirely by the capital provider. However, if the loss is due to the negligence of the entrepreneur, he may be held responsible for the financial loss incurred (Zaher & Hassan 2001). Invested capital in both contracts, Mudaraba and Musharaka, will be transformed to debt in case of proven negligence of the managing partner, i.e. entrepreneur. (Febianto *et al.* 2007). Mudaraba could be a favorable option for SMEs where the entrepreneur has complete ownership and management rights over the business, and the risk is transferred to the capital provider. Unlike venture funds, the investor has no management rights and is not allowed to intervene in the affairs of the business. However, Islamic banks reluctance to offer Mudaraba to finance SMEs is understandable where this contract is too risky for the bank. Islamic banks while having no management rights over the business, it stands to lose its entire capital contribution, therefore, they cannot afford to be “sleeping partner”.

### **2.7.2 Musharaka (Partnership)**

Musharaka is a financing technique adopted by IFIs. It is an agreement under which the IFI provides funds that are pooled with funds contributed by entrepreneur and others. In Musharaka contract, both partners are entitled to participate in the management of the enterprise but not necessarily required to do so. Profits are shared according to pre-negotiated ratios and loss is distributed in proportion to each partner share of capital (Iqbal & Llewellyn 2002). Musharaka contract is more preferred to IFIs than Mudaraba because it exposes the entrepreneur to capital risk; hence, the entrepreneur has a stronger motive to be cautious with managing the business venture and therefore put forth more efforts to ensure its success. Musharaka contract allows IFIs to effectively participate in management

and supervision over funded business ventures. Musharaka is considered to be the most authentic PLS instrument and less risky than Mudaraba. It is more suitable for the entrepreneur who prefers to share the risks that are generally associated with start-ups. Moreover, it contributes to the creation and the expansion of productive businesses; thus, it entails real economic activity and goes beyond sharia-compliance to contribute to socio-economic wellbeing (Kayed 2012). Unlike conventional interest-based finance, Musharaka is fair for both the financier (IFI) and to the entrepreneur; if the business venture rate of returns turns to be higher than the ongoing interest rate, then fixed arrangement would not be fair to the financier. If the business venture fails, the entrepreneur bears the loss alone, and the financier unfairly recover which is deemed unjust; therefore, explicitly prohibited in Islam.

### **2.7.3 Musharaka Mutanaqisah (Decreasing Partnership)**

Decreasing partnership (also called *Diminishing Musharaka*) is an innovative Islamic financial instrument, arguably is capable of overcoming the shortcomings of Musharaka which are mainly the high equity risk, and whether it is practical for IFIs to remain an active partner in a numerous number of assorted businesses without making far-reaching compromises (Kayed 2012). The main advantage for IFIs is claimed to be that decreasing partnership provide them with a clear exit and liquidation mechanism. Decreasing partnership could be beneficial to SMEs owners who are underserved by financial institutions but unwilling to give up ownership of their businesses. A number of researchers have presented decreasing partnership as the most suitable modern financing

technique and could be a viable tool in facilitating SMEs access to finance and acquirement of necessary assets (Ahmed 2002; Sadique 2008).

### **2.7.3.1 Decreasing Partnership for Asset Purchase**

IFIs could contribute significantly to reducing the finance gap facing SMEs through the application of decreasing partnership to facilitate the acquirement of assets. Decreasing partnership offers a higher degree of comfort and flexibility for both the IFI and the client that would not be possible using fixed price mechanisms such *Murabaha* (cost-plus sale). The degree of flexibility is attributed to the incorporation of the *Ijara* (leasing) contract that could allow delays in meeting periodical payments without loss of revenues for the IFI, and a greater level of ease to the SME owner as he is granted freedom to manage liquidity (Obaidullah *et al.* 2008).

#### **Mechanism**

For SMEs owners who seek funds through Islamic banks to acquire or develop assets, decreasing partnership can be applied in which a joint purchase of an asset by Islamic bank and the client takes place. In decreasing partnership, each partner share is his contribution to the capital. Therefore, the down payment is the client share, and the financing amount is the banks share. After the initial purchase, the bank share will be divided into equal units, and the client is required to purchase the shares of the bank at equal intervals, thus reducing the banks share and increasing the client share until the whole asset is owned by the client. The price of each unit is usually fixed beforehand. If the asset purchased is for utility buildings and machinery, then the bank share would be leased to the client under a separate *Ijara* (lease) agreement after which the client would be allowed

to use the asset in question. The client will gradually own a larger share of the asset while the bank share decreases due to periodic purchases by the client; as a result, adjustments to the leasing rentals becomes necessary to reflect the reduced ownership of the bank. In assets acquirement, the legal title is usually transferred from the original owner to the client directly. In assets acquirement, ownership (i.e. legal title) is usually transferred from the original owner to the client directly while the bank's involvement is limited to its financial interest. Under decreasing partnership both the bank and the client are co-owners of the assets, therefore, the client is appointed as the bank's agent to make the purchase of the asset and hold its legal title. Although ownership of the asset rests solely with the client, he is only considered the owner of part of the asset; that is to the extent of his initial participation in the cost of the purchase. In order to protect the bank's interest under decreasing partnership, a legal mortgage is drawn over the asset in favor of the bank. This document reflects the bank position as mortgagee who is entitled to monetary dues from the mortgagor and its applicability would be limited to the share owned by the client, that is mortgaged to the bank for securing the *Ijara* rentals and actual losses due to possible non-adherence to the promise of purchase (Obaidullah *et al.* 2008). In the case of default, the bank would have reasonable grounds to liquidate the mortgage. However, if the mortgage is liquidated, the bank is only entitled to recover actual loss suffered due to client's default along with *Ijara* rentals for the remaining share of the bank. Any balance remaining of the sale price of the client share should be given to him.



### **2.7.3.2 Decreasing Partnership for Venture Capital**

Arguably, decreasing partnership is also applicable to finance ventures and could be a useful tool to finance SMEs with distinct advantages for both the financier and the entrepreneur. In addition to sharing unlimited profits due to profit-loss sharing scheme, if the venture becomes successful the bank could expect to make considerable revenues by selling their share to the client where the price would be based on market value. As the bank is considered co-owner under decreasing partnership, a major advantage for the bank lies in the possibility of effectively contributing to the management of SMEs and monitoring their progress. The joint equity participation could be beneficial for both the bank and the entrepreneur. It enables banks to make smooth withdrawals while making gain through the sale of its share to the client and dividends. SME could benefit from joint-equity as well where it would facilitate enhancing capital base and cash position without placing an unnecessary burden on SMEs in the form interest payments. SMEs could benefit from expertise extended by the bank as well as the ability to gradually gain complete ownership by buying the bank share through SMEs' revenues (Obaidullah *et al.* 2008).

## **2.8 Profit-Loss Sharing Instruments: Ideal vs. Reality**

Profit-Loss sharing (PLS) dominates the theoretical literature of Islamic finance and this emphasis on the principle of PLS stems from the Islamic ban on interest. However, IFIs today are seen to diverge in important ways from intellectual doctrines underpinning their role in the economy (Abozaid & Dusuki 2007). In theory, many Islamic economists<sup>8</sup>

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<sup>8</sup> Siddiqi (1983, 1985, 2001); Chapra (2000) Ahmad (1984;2000) and others.

favor PLS instruments with respect to financial intermediation and placed a greater emphasis on the social and religious responsibility of IFIs towards promoting economic development and securing more equitable distribution of income. Further, many of these economists have argued that PLS-based finance inevitably promotes small and medium enterprises with the elimination of interests and collateral requirement. However, the actual practice of IFIs is so far away from the principles of PLS. Almost all IFIs worldwide resort to fixed rate of returns techniques or debt-like instruments. Although Islamic economists do not fully negate the use of permissible debt-like instruments, many have observed that the use of PLS-based instrument has declined to almost negligible proportions (Iqbal & Molyneux 2005; Yousef 2004).

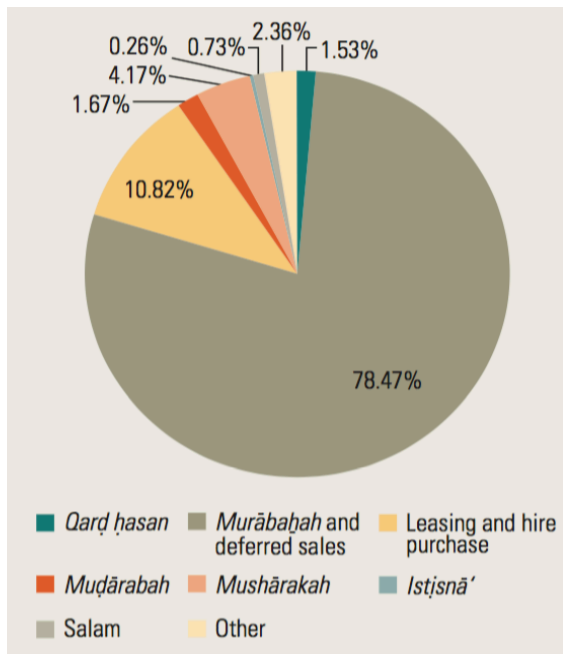


Figure 4: The Structure of Financing Modes in Islamic Banks 2012  
Source: Islamic Development Bank

In many Islamic banks' asset portfolios, *Murabaha* (cost-plus sale) account for the great bulk of their investments (Abozaid & Dusuki 2007). Islamic financial institutions tend utilize risk-free instruments in the provision of external finance such as *Murabaha* where the latter represent 70 to 90 percent of total funding activities in IFIs (Muhammad 2010; Khalaf 2011<sup>9</sup>; Ali 2014). In some countries, PLS-based finance is not offered. Islamic banks, regardless of their degree of success, have failed to adopt PLS-based finance in their business. Islamic Development Bank (IDB) has not used PLS-based finance so far except for few projects which account for only one percent of total funded projects. Thus, negating the developmental role that IFIs aims to render Muslim communities at large.

## **2.9 Implication of Agency Problem in Islamic contracts**

A thorough examination of the current practices of Islamic banks will prove it is not so 'Islamic' after all, particularly their heavy reliance on debt-like instruments which still constitute the overwhelming majority of their operations, and their financial products are considered as 'concealed' versions of conventional ones. The only difference is found in the technicalities and legal forms, but the substance is the same. There is a lot of controversy over the current practice of Islamic banks, perhaps one of the plausible reasons why the ideal "Islamic banking" has not been materialized is due to the absence of political will in the Muslim world to establish real Islamic economics (Abozaid & Dusuki 2007). On the other hand, the proponents of the current practice of Islamic banks argue that the reason behind allowing banks to practice what is considered to be "controversial" contracts is necessary to facilitate their development and to ensure their stability under the high

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<sup>9</sup> largely based on limited secondary data

competition with conventional banks and the interest-based economic system. However, other Islamic economists argued that studies related to SMEs and the role of Islamic finance and challenges associated with it were not given much attention. Despite evidence in the literature that Islamic banks showed more resilience in the last financial crisis which negatively affected conventional sources of funds available for SMEs, the proposed alternative of Islamic finance was never given enough investigation to determine its capability and readability to replace conventional financing for SMEs (Ali, 2014). Therefore, understanding the reasons behind the lack of PLS-based finance and the disproportionate reliance on debt-like finance is useful. This heavy reliance on debt-like instruments primarily *Murabaha* led several economists to refer to it as “the Murabaha Syndrome”, and subsequent studies have explained the causes behind this phenomenon. However, the most predominant among these explanations are agency problems resulting from asymmetry of information which made the application of PLS financing less efficient in practice (Khan, 1995). Moral hazard and adverse selection are argued to worsen in developing countries due to added problems (Lynn, 1998). One problem facing Islamic banks is that PLS contracts require well-defined property rights to function properly, however, in most Muslim countries property rights are not properly protected (Presley *et al.* 2000). Moreover, the structure of Islamic banks itself hinders the application of PLS modes of finance. Islamic banks investment accounts are based on PLS, which means no fixed return is guaranteed on these accounts. Depositors are generally risk-averse, therefore, Islamic banks become risk-averse as well. Thus, even with good investments opportunities, depositors might not be willing to take the risk. Also, there are few credible institutional infrastructures to conduct common monitoring and to share information of

credit rating on borrowers. This informational asymmetry made Islamic banks more reluctant to utilize PLS instruments (Febianto *et al.* 2007).

### **2.9.1 Adverse Selection & Moral Hazard in Profit-Loss Sharing**

Several studies exploring the application of profit-loss sharing finance have identified the moral hazard and adverse selection as the main reasons behind its unpopularity. Proponents of Islamic banking aspire to have a balanced mix between markup and PLS modes of finance (Ahmed, 2002). In regards to financing small and medium enterprises, it is argued that there is a dichotomy of preferences of enterprises and IFIs. Medium and large enterprises have more solid asset base and more experience in risk management and would prefer markup-based modes of finance, whereas smaller enterprises with fewer assets and being riskier would prefer to spread the risk through PLS modes of finance. Islamic banks, on the other hand, prefer to fund smaller and riskier enterprises through fixed markup-modes and would be more comfortable funding medium and large enterprises through PLS-modes.

Islamic banks are more vulnerable to agency problems in profit-loss sharing contracts. They face difficulties resulting from limited *ex-ante* information on projects' quality and profitability. Entrepreneurs who expect their business to provide high non-monetary benefits but low realized profits would seek PLS to enjoy high total return at an artificially low cost of capital (Pryor, 1985). Likewise, Islamic banks under PLS would attract entrepreneurs with riskier businesses, and borrowers who inflate their expected profits in the hope of being quoted lower profit-sharing ratio by the bank (Nienhaus, 1983). Other difficulties arise from *ex-post* information where entrepreneurs might have the

incentive to underreport profits or artificially reduce profits either by blatant fraud or legally through increasing the non-pecuniary rewards (e.g. extra leisure). Hence, the Islamic bank will have to engage in a costly monitoring process. According to Iqbal and Molyneux (2005), the problem of moral hazard in the context of applying PLS modes is overstated. They agree that agency problems make PLS modes less attractive, but they do not believe such problems are unique to PLS modes and are similar to those arising in any equity contract in the conventional system.

There are practical reasons for Islamic banks and entrepreneurs not to prefer PLS contracts as well. Under Mudaraba, it is difficult for the entrepreneur to expand the business due to the limited opportunities to re-invest retained earnings, and under Musharaka he cannot be the sole owner of his business except through decreasing partnership which may take a long time (Farooq, 2007). The structure of deposits in Islamic banks is not sufficiently long term, therefore, they do not want to get involved in long-term projects. Moreover, PLS modes require a lot of information about the entrepreneurial abilities of the borrower which are not easily available. Also, Islamic banks have to closely monitor the businesses under PLS contracts which increase the cost of such contracts. Islamic banks in PLS contracts will engage in additional dead-weight cost in terms of gathering information, monitoring cost and reduced work incentives for entrepreneurs which would make Islamic banks uncompetitive with conventional banks rivals (Sarker, 1999).

## 2.10 Welfare Implication and Efficiency

Profit-loss sharing dominates the literature as the only model that reflects the true spirit of Islamic finance. Many proponents of Islamic finance argued for Islamic finance, (e.g. Chapra 1985) as a more just financial system which places an emphasis on social welfare and distribution of wealth. Therefore, profit-loss sharing should be available and finely interwoven within the financial system to increase access to finance to capture some of the potential benefits of SMEs such as providing more self-employment, adequate production and distribution of goods and service that meet local needs or exports. Others have provided a critique of the conventional system from an Islamic perspective, (e.g. Algaoud & Lewis, 2007). However, these claims are not accompanied by rigorous theoretical modeling. An exception is (Haque & Mirakhor, 1986) who formulated investment behavior in profit-loss sharing system and investigated related problems (i.e. agency problems). Their paper shows that PLS contracts can be designed to take into account the moral hazard problem that arises from asymmetric information on profits. Their analysis also shows that there is no strong theoretical reason to support the priori assertion that if profit-loss sharing system is adopted investment would decline, but they demonstrate the importance of legal and institutional framework that facilitates contracting to avoid adverse effect on investment. Another exception is (Hasan 1985) who analytically showed that PLS financing is more profitable to financiers in the long-run than interest rate financing. However, a legal and institutional framework for PLS models to work efficiently is not fully adopted in countries where Islamic banks operate (Sugema *et al.* 2010). In the absence of such framework, monitoring cost could prohibit an honest application of the profit-sharing system. The next chapter provides a detailed explanation for why Islamic

banks tend to avoid profit-loss sharing arrangements. The agency theory provides insights into the agency-contractual problems arising from profit-loss sharing contracts, and how other factors add more constraints on Islamic banks in adopting such arrangement.



## **Chapter 3: Agency Theory and Profit-Loss Sharing Model**

### **3.1 Introduction**

Profit-loss sharing (PLS) model dominates the theoretical literature of Islamic finance with a great emphasis on its distinct features of rewards-risk sharing, finance being linked to actual economic activities, and other features that make PLS modes of finance more advantageous in comparison with debt-based ones. In the literature, PLS are the only modes that are claimed to reflect the true spirit of Islamic finance which focuses more on the social responsibility of financial intermediaries towards the promotion of entrepreneurship and the financial inclusion of the poor and unbanked segment of the society. However, the current practice of IFIs has failed to integrate PLS modes and it is mostly based on debt-like finance which led to major criticisms for the overuse of what are thought to be controversial contracts such as Murabaha (cost plus sale) and the absence of risk-sharing component. Many economists have examined the current practice of IFIs, reasons behind the unpopularity of PLS instruments, and how their application remain challenging at a practical level. As discussed in the literature review section, the lack of PLS within IFIs has been mainly attributed, among other reasons, to agency problems that are prevalent in PLS contracts as a result of asymmetry of information.

### 3.2 Agency Theory

The agency theory extends on the risk-sharing literature to include so-called “agency” problems that arise in the principal-agent relationship as a result of a divergence of goals, interests, and division of labor. Agency theory is mostly directed at relationships in which one party act on behalf of another, that is when one party, *the principal*, delegate work or management rights to another party, *the agent* (e.g., profit-loss sharing contracts). When both, principal and agent, are assumed to be utility maximizers, then the agent has an incentive not to act in the principal’s best interest. Agency problems arise as a result of a conflict of interests or when the principal is prohibited by resources to verify if the agent is acting in the principal’s best interest. The principal could limit conflict of interest by creating appropriate incentives to induce the agents to act in a way that maximizes the principal’s utility or by incurring monitoring cost to limit agent’s aberrant behavior (Jensen and Meckling 1976). Another problem is when the principal and agent have different levels of risk-aversion; thus, each might prefer to act differently in dealing with risks.

The main focus of agency theory is to develop the most efficient contract to govern the principal-agent relationship given assumptions about people (e.g., risk-aversion, self-interest), organizations (conflict of goals) and information (Eisenhardt, 1989). However, contracts cannot be written at no cost and monitoring of *ex post* behavior can be costly. Therefore, the structure of the contract is crucial to combat adverse selection and moral hazards that are mainly a result of asymmetry of information. In the context of the contract theory, there are two primary approaches to establish the optimal contract; complete and incomplete contracts. The complete contract is more concerned with choosing the optimal contract, “behavior-based” vs. “outcome-based”, and places more emphasis on **ex ante**

stage. The behavior-based contract aims to limit divergence of interests by controlling the agent behavior in accordance to pre-agreed terms and restrictions stipulated in the contract. This contract is feasible if the principal is able to monitor and verify the agent behavior, surely at a cost. However, if the principal cannot observe the agent behavior or it costly to do so, he will try to influence the agent behavior through creating contractual incentives. The outcome-based contract aims to indirectly influence the behavior of the agent by creating incentives if certain milestones are achieved in an attempt to align interests and reduce moral hazard. On the other hand, Incomplete contracts places more emphasis on **ex post** control. Hart and Holmstrom (1986) argued that ex post allocation of control is what matters to control agency problems because contracts are incomplete due to the higher transaction cost. The contract cannot stipulate each partner's obligation in every contingency, and in some instances they leave out contingencies that they simply do not anticipate. Furthermore, in the case of small businesses or startups with mostly intangible assets, the best way to gain ex post control is through active involvement in the business (Van Osnabrugge, 2000).

### **3.2.1 Agency Theory: Islamic perspective**

Agency problems are considered the major obstacles facing IFIs to engage in profit-loss sharing arrangements especially for startups and smaller enterprises. In several works on agency-theoretical framework, any contractual relationship that relates two or more parties where the agent (entrepreneur) is assigned to act on behalf and in the interest of other principals (bank, shareholders) could contain critical agency problems. The agent is identified as an “insider” who has more knowledge and more information about risky and

profitable investment opportunities but lacks funds. The financiers who are identified as “outsiders” provide funds needed to undertake such investments. However, outsiders have less information or it is highly costly for them to observe the enterprise’s cash flow and its investments decisions. The nature of PLS contracts are said to have inherent agency-contractual problems which explains why PLS contracts represent almost negligible proportions of Islamic banks’ portfolios. First, it is important to note that depositors’ preference for Islamic banks (e.g. investment account holders) is attributable to religious reasons but entrepreneurs do not necessarily have the same motive and this could result in serious moral hazard problems in PLS financial arrangements. An incentive problem could arise in PLS contracts in which Islamic banks depend on reported cash flow where the state-contingent final outcome is completely dependent on the skills, knowledge and the efforts exerted by the entrepreneur. Therefore, the entrepreneur has an incentive to under-report profits or increase costs that occur as benefits or increase in utility (e.g. fringe benefits). In this case, it is in the entrepreneur interest to increase his benefits until his marginal utility of increased benefits equals marginal cost (Bacha, 1997). Moreover, Islamic rules place restrictions on collateral requirements that increase the incidence of agency problems in PLS contracts. An enterprise seeking PLS finance through an Islamic bank for one of its projects or subsidiaries has every incentive to allocate overheads and other costs to that particular project/subsidiary. This is because Islamic banks have claims only on profits generated from the financed project/subsidiary, not over all the enterprise’s assets. Also, the enterprise could resort to different accounting methods (e.g. full-costing, transfer price) to reduce the bank’s share in profits where the profits are transferred to other units of the enterprise. Agency problems are more severe in Mudaraba (silent partnership)

contract and it seem to remain as Islamic banks have no legal or management rights over the enterprise and efforts of the entrepreneur is unobservable, therefore, cannot be contracted. Moreover, losses in Mudaraba are exclusively borne by the Islamic bank where agent's liability is limited to his effort, and utility gain from shirking or other non-wage compensations only enjoyed by the agent (i.e. the entrepreneur). Another risk that restricted the use of PLS contracts is the discretionary power of the entrepreneur in such contracts which allows him discretion over the assets, investment decision, and control over the distribution of cash flows. Discretionary power could lead to the entrepreneur acting in self-interest as the bank may not be able to consistently monitor the business' activities and performance, and in case of Mudaraba the bank has no automatic rights to make managerial appointments to get an insight over the business' operations.

According to Grossman and Hart (1988), many agency problems could result from the separation of control to management because it could result in a conflict of interests between those who make the decisions and those who bear the losses. Moreover, It has been argued<sup>10</sup> that agency problems are more likely to occur, particularly overinvestment and more consumption of perquisites when the capital is externally financed with considerable discretion assigned to the agent (i.e. entrepreneur). In PLS contract, the agent either has zero liability (Mudaraba) or small liability (Musharaka) with most of the finance being provided by an outside party which create an incentive for the agent to invest in projects with low or negative net present value and to consume more perquisites (Khalil *et*

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<sup>10</sup> Jensen (1986), Jensen and Mackling (1976).

*al.* 2002). Managers value investments because their perquisites increase with investments even with negative net present value (Stulz, 1990).

### **3.2.2 Agency Problems in PLS Contracts: Evidence from Empirical Analyses**

In one of the few empirical studies<sup>11</sup> on the lack of profit-loss sharing contracts in Islamic banks has tested, among other aspects of Mudaraba contracts, the incidence of agency problems and issues related to monitoring and control over the businesses' activities. The main results of the analyses showed that underreporting of profits, variability and uncertainty of returns, banks bearing the loss and the high cost of monitoring were the most important reasons behind Islamic banks reluctance to use PLS contracts. However, the lack of control and the risk of low profits showed less importance. The analyses also showed that incidence of agency problems such as overinvestment and overconsumption of personal benefits is higher in PLS than other contracts. The risk of unobservable effort of the agent is shown to be relatively less important for Islamic banks. As the literature on the management and control rights in PLS contracts is a little out of date, a complex governance structure is required for PLS contracts to work effectively and to overcome existing agency problems. The surveyed Islamic banks considered periodic management reports and extending help and advice on projects management to businesses are very important to control potential agency problems, where representation in management and direct involvement in decision-making showed relatively less importance. All respondents asserted that the aim of applying a monitoring system in PLS contracts is to ensure efficient allocation of resources to their most profitable use,

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<sup>11</sup> Primary data on a global sample of 52 Islamic banks.

compliance with the terms of contracts, and validity of reported information. All findings of the analyses are consistent with the theoretical expectations and have policy implications for managers of Islamic banks, agents and central banks in dealing with PLS contracts (Khalil *et al.* 2002).

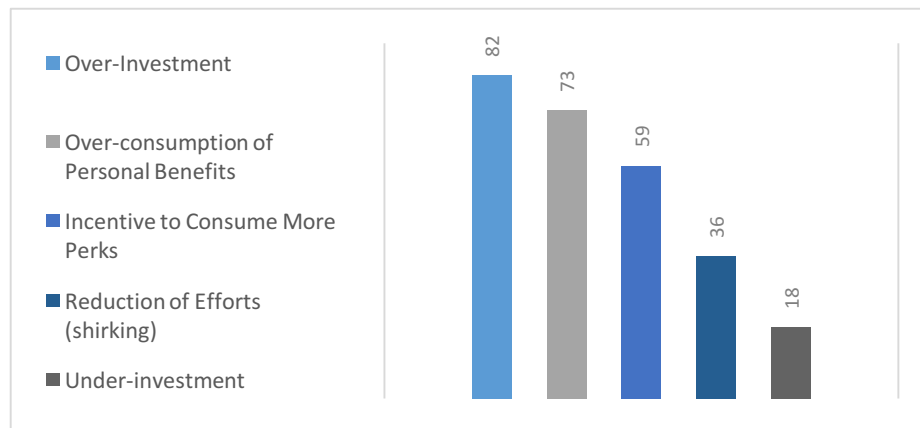


Figure 5: Key variables preventing Islamic banks from Mudaraba contracts.  
Source: Khalil et al (2002)

Another empirical study<sup>12</sup> is on how informal investors in Saudi Arabia manage risks and minimize agency problems resulting from asymmetry of information in financing SMEs. The study intended to examine the decision-making behavior of 156 informal investors in Saudi Arabia through the full-investment process. It is argued that using PLS in informal market could provide insights and practical lessons for IFIs to apply such contracts. The researchers in this study built their hypotheses on the assumption that investors and entrepreneurs face higher **search cost** in the informal capital market due to the lack of intermediary and asymmetry of information. Another assumption applied to the research sample is that informal investors are likely to depend on referral networks and

<sup>12</sup> Abalkhail and Presley (2002).

dedicate all of their resources to collect information about the **qualities of the entrepreneur** (e.g. track record) to control associated risks where moral hazard could prevent the transfer of information. There is evidence from the literature<sup>13</sup> that informal investors resort to **co-investments** to check their thinking against other knowledgeable resources, and the willingness of other investors to invest in the same project could lead to the investor's decision to invest. This could also enhance the informal investors network, provide more capital and expertise support and spread the risks. Moreover, the researchers have tested how informal investors in Saudi Arabia control agency cost through **staged financing** which is viewed in the literature<sup>14</sup> as one of the most important mechanisms used to control agency risks and reduce monitoring cost. Staging of finance allows investors to reevaluate the project in each stage as they gather more information before making a refinance decision and preserve the right to abandon the project if proved unprofitable. Moreover, investors' interest is in high returns while entrepreneurs could have an incentive to invest in low-value projects that provide high personal benefit. Therefore, staging of finance protects investors against losing all of their capital and provides them an exit from unprofitable projects. The results of researchers' statistical analyses showed, and opposed to the literature, that Saudi informal investors use active personal search for sources of investments and informal business network (e.g. friends and business associates), where formal sources (e.g. banks, chambers of commerce) are the least used. The use of informal sources of information by Saudi investors could be due to their conservative view about

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<sup>13</sup> Aram (1989), Learner (1994).

<sup>14</sup> Sahlman (1990), Gompers (1995).



agency risks and the possible conflict of interest in such market which led them to search for entrepreneurs they personally know and can trust. In an attempt to avoid adverse selection in the pre-investment stage, Saudi informal investors are shown to place great importance on the personal qualities of entrepreneurs (e.g. honesty, trustworthiness), and are more likely to invest when the entrepreneur has a good reputation as a good founder of previous businesses. However, after a decision is made on an investment opportunity, Saudi informal investors are shown to prefer outcome-based contracts rather than behavior-based contracts, even with good reputation and extensive evaluation. They tend to write comprehensive outcome-based contracts that provide incentives for entrepreneur if certain milestones are achieved, which allows for *ex post* control to reduce moral hazard in the presence of high asymmetry of information and higher cost of monitoring in informal capital market. Saudi informal investors are shown to use co-investment to reduce the adverse selection where 80 percent of them have frequently used co-investment and it is mostly with people they personally know such as friends and family members while co-investment with formal organization is less reported. The reasons to co-invest as explained by the investors are to reduce the risks of choosing low-quality ventures, provide different expertise to the venture and to improve their networks. The analysis also showed that staged financing is a popular method among informal investors in Saudi Arabia to avoid agency problems resulting from asymmetry of information. In contrast to literature that shows informal investors (i.e. business angels) placing more emphasis on *ex ante* investment and actively involved in their investee ventures, Saudi informal investors are shown to be rarely involved in business operations and prefer other methods of monitoring

that do not require hands-on involvement such as consultation, and reviewing periodic reports.

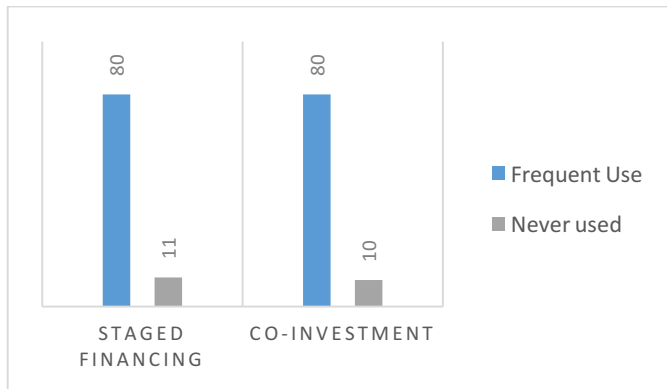


Figure 6: Use of Staged Financing and Co-investment by Saudi Informal Investors. Source: Based on Statistical Analyses of Abalkhail and Presley (2002).

### 3.3 Information Sharing and Credit Reporting in Saudi Arabia

Agency problems resulting from asymmetry of information are more likely to occur in PLS contracts which lead to less than efficient markets than those with effective information sharing. Access to information is very important for financial markets because it enables the lenders to overcome asymmetry information, evaluate risks more effectively and price their financial products accordingly. Credit information is usually accessible through Public Credit Registries (PCR) and Private Credit Bureaus (PCB). An efficient information sharing system reduces the risks and uncertainties in the domestic credit market which could reduce the cost of finance than would otherwise be possible. Imperfect information could give rise to credit rationing where banks become unwilling to advance additional funds to borrowers at the prevailing interest rate. That is, demands for loans exceeds the supply on the interest rate quoted by the bank, and changes in interest rate

cannot be used to clear excess demand for funds in the market<sup>15</sup>. In Saudi Arabia, one of the main features of the financial market is credit rationing, and it is the main obstacle facing SMEs in access to finance from banks. In one of the studies done on financing Saudi SMEs<sup>16</sup>, only 5 percent sought finance from commercial banks while the rest used personal sources of finance (e.g. family and friends). Moreover, only 32 percent of loans applicants were approved for bank finance, and 78 percent of them attributed the approval to having a personal connection with banks managers. Almost 93 percent of rejected applications were due to lack of collateral. The high asymmetry of information in Saudi Arabia led to a reduction in the size of finance and increased its cost. Despite the importance of information sharing between banks on the quality and creditworthiness of borrowers, no attempts have been made to establish public credit registry yet. All previous attempts to establish credit bureaus were outside the banking sector, precisely by installment-selling companies who had a strong need for credit information. Consequently, chambers of commerce in different provinces established local credit bureaus that provide credit information to businesses and institutions for a subscription fee. However, they were limited to negative information only. In 1995, the Saudi Arabian Monetary Agency (SAMA) established an exclusive data base for banks that worked as a “black-list” and banks were obligated to provide information on borrowers. The data base was limited to negative information as well. In 2002, the first and sole private credit bureau (Simah) was

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<sup>15</sup> Al-Suhaibani (2002), Dwight M. et al. (1976)

<sup>16</sup> A sample of 200 SMEs (Sijini 1997; Al- Al-Suhaibani)

established under the supervision of SAMA to collect and share credit information on individuals and businesses (Al-Suhaibani 2002).

Both (PCR and PCB)	PCB only	PCR only	N/A - Negligible
Egypt United Arab Emirates	Bahrain Kuwait Morocco <b>Saudi Arabia</b>	Algeria/ Iran Jordan/ Qatar Lebanon/ Oman Tunisia/ Palestine Yemen	Iraq

Table 2: Public Credit Registries (PCR) and Private Credit Bureaus (PCB) in MENA Region

An efficient Information sharing system could facilitate the use of PLS contracts and reduce the cost of finance for SMEs who need information-based finance due to their inability to provide acceptable collateral. The weak information-sharing system in Saudi Arabia led to the restriction of the use of PLS contracts for small businesses due to the higher cost of monitoring and verification. Most Islamic finance for small businesses, either through banks or other IFIs, is provided on the basis of Murabaha (cost-plus sale) which is highly costly for entrepreneurs, especially in the case of startups. Information sharing and credit reporting industry remain underdeveloped in Saudi Arabia and in the MENA region as a whole due to the absence of proper legal framework and weak financial infrastructure. An underdeveloped financial infrastructure increases the credit risk, and thus increases the cost of finance for both lenders and borrowers. Therefore, a more inclusive credit reporting system that includes credit information from non-banking institutions such as trade creditors, leasing companies, and retailers is needed to reduce the credit gap for small businesses that are usually underserved by formal financial sector and resort to such informal sources of finance.

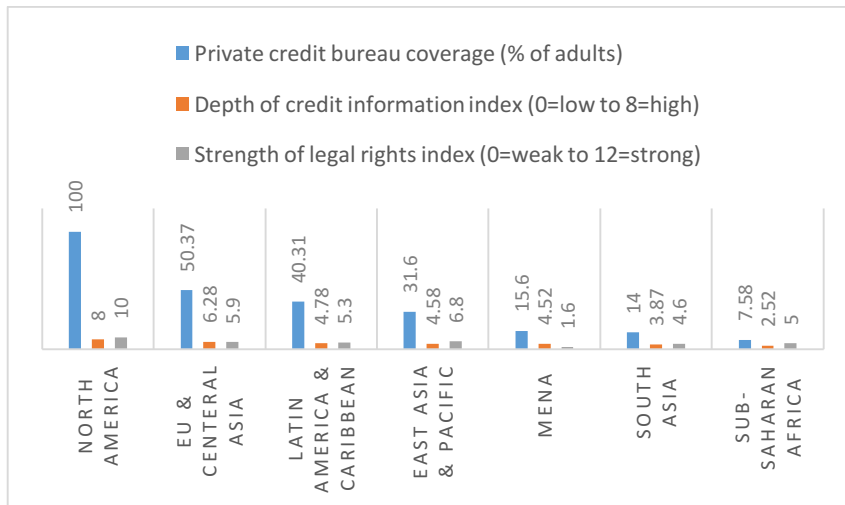


Figure 7: Credit Information and Legal Rights  
Source: World Bank (2016)

### 3.4 Risks Management in Profit-Loss Sharing Contracts

The practice of Islamic financial intermediation has evolved over time and made important contributions to the development of new financial instruments and innovative contracts that comply to Islamic laws and restrictions. This development led to the emergence of the current model for Islamic banking, namely **one-tier Mudaraba**, combined with multiple investment tools. Under this model, the relationship between the bank and the depositors is on the basis of Mudaraba (silent partnership), however, in its relationship with the entrepreneurs, the bank uses different modes of finance (Iqbal *et al.* 1998). Using **one-tier Mudaraba** model changes the nature of risks that face Islamic banks because saving/investment deposits are based on PLS which means return is state-contingent and investors share the business and operational banking risks with the bank. A brief explanation of the most important risks facing Islamic banks are presented below.

### **3.4.1 Fiduciary Risk**

In PLS contracts, the quality of the entrepreneur has a significant importance to Islamic banks where the latter should extend more effort in evaluating the entrepreneur's risks profile before entering into PLS contact because the bank has fiduciary responsibility as an investor of investments accounts funds. The risk profile includes, but not limited to, past records of management, the quality of feasibility study and the human resources involved in the business activity. In their investment appraisal, the bank should also consider the allocation and variation of cash flows and the difficulties in executing exit strategy. A fiduciary risk could occur where the bank is held responsible for the misconduct of the utilization of investors' funds. Moreover, lower returns on investment accounts could make investors lose trust in the bank and may withdraw their deposits. Although banks have control and management rights in case of Musharaka (partnership), an effective contribution of the bank to management needs more than a specification of rights and responsibilities. Moreover, a strong monitoring mechanism is yet to be devised for PLS contracts. The high monitoring cost makes PLS contracts less preferable for Islamic banks compared to debt-like ones which are linked to an underlying asset/good that act as collateral, therefore, no strong monitoring is required.

### **3.4.2 Liquidity Risk**

The liability side of Islamic banks is dominated by short-term demand deposits and saving/investment deposits that could be withdrawn anytime. Therefore, using equity finance implies that investments are long-term which increases the liquidity risk for banks. Liquidity risk arise from the mismatch between maturities of the two side of balance sheet,

either creating a surplus that needs to be invested or a shortage of cash that needs to be funded. Liquidity could limit the bank's ability to meet its liabilities when it falls due (Febianto *et al.* 2007). This is a significant risk for Islamic banks due to the limited availability of Sharia-compliant money market instruments and lender of last resort (LOLR). The liquidity risk in Islamic banks is higher because they generally cannot hold return-producing cash equivalent like conventional banks (Ariffin *et al.* 2009). A sale of debt or interest-bearing loans are prohibited and cannot be used to meet liquidity requirement. Ahmed *et al.* (2011) stated that the standard measures of liquidity in Islamic banks are the liquidity gap for each maturity bucket, and the share of liquid assets to total assets or to liquid liabilities.

### **3.4.3 Operational Risk**

An operational risk arises from inadequate or failure of internal process, system or due to external factors (Ahmed *et al.* 2001). Islamic banks are said to face higher operational risks due to the newness of their practice and other concerns like the lack of expertise in the field and technologies that are specifically designed to Islamic financial operations (e.g. computer software) that are generally designed for conventional use. Moreover, Islamic banks face legal risks such as the enforceability of contracts in the broader legal environment which is considered to be weaker in developing economies.

### **3.4.4 Credit Risk**

Credit risk is generally defined as the possibility of the borrower failing to make required payments on time and in accordance with the agreed terms (Febianto *et al.* 2007). In PLS contracts, the Islamic banks act as a partner with entrepreneurs, therefore, there is

a risk of the entrepreneur failing to meet his obligations in making deferred payments to the bank. Islamic banks advance funds to the entrepreneur where the latter is responsible for the management of the business activity which its revenues are dependent on payments from a third party (ultimate customer). Islamic banks face higher credit risk in PLS contracts due to the asymmetry of information where the entrepreneur could under-report actual profits.



## **Chapter 4: Venture Capital as A Model for Profit-Loss Sharing**

### **4.1 Introduction**

As discussed throughout this paper, small and medium enterprises (SMEs) are presented in the literature as an important factor for economic growth and development in both developed and developing world. Most governments around the globe recognize that smaller firms face more problems and barriers to entry than larger firms and have taken steps to provide assistance, particularly with access to finance. However, SMEs in Saudi Arabia face significant barriers to access credits because banks generally view them as higher risk, and due to lack of tangible collateral. Profit-loss sharing finance has been presented as an appropriate mode of finance for SMEs because it reduces the cost of capital and eliminate the collateral requirement. However, for reasons discussed throughout this research, Islamic banks prefer to use PLS arrangement only for high net-worth companies that have well-established track records and are able to provide the required collateral. As a consequence, Islamic banks became highly reliant on short-term markup-based finance on the asset side which created a sort of disintermediation, lack of long-term finance, and involuntary exclusion of small businesses. This means many viable and innovative businesses go unfunded. The central idea of this section is to represent an alternative finance for SMEs who are excluded from traditional financial institutions and regulated capital markets. In the literature of Islamic finance, venture capital is considered a ‘natural fit’ to profit-loss sharing models and the practice of conventional venture capital conforms

to Islamic restrictions on investments. There are few aspects related to the structuring of contracts and selection of financial instruments that are unacceptable; however, they can be easily adjusted. The Islamic restrictions and the Sharia-compliant alternatives are to be discussed later in this section.

## **4.2 Venture Capital**

Venture capital (VC) is finance provided by financial intermediary to finance and support high-risk ventures who cannot access funds from traditional financial institutions, especially start-ups that usually lack an established track record and acceptable collateral. Venture-backed firms are characterized with high-growth potentials; however, revenues and recovery of capital are not guaranteed in such investments. Venture capital, typically a long-term investment, takes the form of partnership in which investors act as general partners who provide funds for high-risk startups or existing firms in exchange of private equity, and they participate in management and investment decisions of the investee firms. After the investment is sold, investors including general and limited partners recover the initial capital invested plus profits. Venture capital has been associated with financing startups and smaller businesses with high risk, mostly innovative ones; thus, investors carefully examine the economic feasibility of potential investments. The primary goal of the risk analysis is to identify and to measure the risk to ensure that the investors will receive an appropriate compensation (i.e. risk premium) for the amount of risk they are exposed to. Investors in venture capital include governmental agencies, private companies, commercial and investment banks, insurance companies and pension funds. These institutions invest in ventures either directly or through venture capital funds that are

typically managed by specialized VC firms who help identify promising business opportunities, provide finance and non-financial assistance and know-how. Entrepreneurs with novel ideas cannot tap the equity market as well due to the high cost of initial public offering and failure to comply to its terms and conditions. Although venture capital firms invest in businesses of all sizes and in different sectors, it is generally associated with ventures in the early stages, mostly growth-oriented technology-based ventures.<sup>17</sup> Moreover, venture capitalists' role is not limited to the provision of finance but it extends to provide low-cost training services, technical support and business consulting to increase ventures' productivity and profitability. Venture capitalist generally seek to multiply their profits, thus the existence of multiple exit **strategies** is crucial factor for a healthy VC industry; that is, the existence of the appropriate legal framework of capital market and the extent of its enforceability.

#### **4.2.1 The Investment Process of Venture Capital**

In venture capital, the investment process involves a number of distinct stages; however, the exact number of phases is open to debate (Boocock & Woods 1997). For venture capital firms, it has first to raise funds from institutional investors (i.e. long-term fund providers) to be invested in a selection of high potential deals. However, each VC firm has its own investment strategy in sourcing potential deals which leads many firms to specialize in specific sizes, sectors or geographic locations of ventures. (Wright and Robbie 1998). The **generation of the deal** is a crucial step in venture capital where many deals were a result of network within the financial community and in other cases the government

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<sup>17</sup> (Durrani & Boocock 2006) (Freear & Wetzel 1990), (Boocock & Woods 1997).

acted as intermediary by organizing forums to connect entrepreneurs with potential investors. However, VC firms usually hire associates with specific skills to source good investments. Venture capital firms conduct an **initial screening** to sort out unwanted proposals either for not meeting the criteria of the firm or seem unpromising. An analysis based on the available information (e.g. business plan, track record) is performed to minimize agency problems associated with information asymmetry and to ascertain the likelihood of closing the deal. The aim of the **due diligence stage** is to minimize the risks of the investment by conducting a thorough investigation of the available information with more focus on entrepreneurs' qualities (e.g. integrity, management skills) and the product/sector potentials such as the novelty and viability of the project. (Durrani 2006; Klonowski 2010). However, such appraisal could be a lengthy and costly process for VC firms which could affect the due diligence carried out. Therefore, VC firms often specialize in particular industries or stages of ventures in order to reduce the costs of due diligence and to use their resources and expertise more effectively. **Valuation** is considered the final phase of due diligence in which the investors pursue a holistic evaluation approach and carry out a careful risk assessment (e.g. market, technology) to determine the value of the venture. There are a wide range of valuation methods (e.g. discounted cash flow) that varies in accordance with the nature and the stage of the ventures, where it is more difficult to put a value on a startup with little or no revenues comparing to mature listed businesses with steady revenues. A greater range of valuation techniques and sensitivity analysis is needed in early stage investment due to the greater uncertainty of cash flows in uncertain startups environment (Wright and Robbie 1998). The **structure** stage generally involves decisions on which financial instruments to be used (e.g. equity, preferred stock, debt); covenants to

be included in the subscription agreement; and the staging of funds as a control mechanism to minimize the risks associated with the venture. There is relatively less research done on how venture-capital deals are structured and particularly on the selection of different financial instruments (Wright & Robbie 1998). Several researchers claim that the use of convertible securities fits perfectly into venture capital investment as both parties, VC firm and entrepreneur, can gradually obtain more information on the venture. Many studies<sup>18</sup> have showed that the use of preferred stock is the most common instrument used in venture capital deals, particularly for financing startups. On the other hand, debt and common stock are usually used in later stages and/or in industries where monitoring is less difficult. Trester (1998) attributed the use of preferred stock by venture capitalists to the higher asymmetry of information in such deals. After the investment decision, the investors' attentions shift to **monitoring** the entrepreneurs' activities to ensure the efficiency of the venture's operations, development of the venture in line with the pre-agreed business plan, and the venture competitiveness in the market. In this stage, financial performance is reviewed and audited on a regular basis (Klonowski, 2010). Moreover, communication is considered an effective mentoring tool to reduce possible conflicts of interests and increase the likelihood of mutual strategy choices<sup>19</sup>. The timing and the availability of **exit** route is crucial in venture capital investment (Durrani 2006). The two primary exit modes are initial public offering (IPO) and trade sales. If the venture performed well, achieved a considerable market share and have a strong customers base, investors consider the most

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<sup>18</sup> (Norton & Tenenbaum 1992), (Berglof 1994), (Trester 1998), (Ravid & Spiegel 1997)

<sup>19</sup> (Sahlman 1990), (Bygrave and Timmons 1992), (Klonowski 2010)

profitable exit through (IPO) initial public offering (Klonowski 2010). However, IPO appear to become less valuable exit for venture capitalists in contrast to trade sales which have become the most common and prominent exit mode in VC deals.

#### **4.3 Venture Capital as A Model for Profit-Loss Sharing Finance**

The nature of Islamic banks as depository institutions has prevented them from adopting PLS based along with other risks associated with equity-based investments. Therefore, Islamic banks became highly reliant on *Murabaha* (cost-plus sale) and are found to have pursued capital accumulation rather than resources mobilization (Choudhury, 2001). Thus, a different kind of financial intermediation has to be presented to play this role and extend finance on the basis of PLS for SMEs on a larger scale. From an Islamic perspective, venture capital is a ‘natural fit’ for profit-loss sharing modes (Mudaraba & Musharaka), and are highly compatible with the objectives of Islamic finance that place higher emphasis on risk-sharing and the economic viability of investment opportunities. The recent growth of Islamic finance and the high demand for sharia-compatible finance present additional opportunities for the development of Islamic venture capital. Islamic venture capital could be a source of equity-based finance and could offer an approach for IFIs to diversify their portfolios away from fixed-return assets. IFIs who provide PLS-based finance are similar to VC companies that they both act as active partners who invest in collected funds and share profits according to pre-determined ratios with their depositors/investors. Moreover, both IFIs and VC companies in the evaluation process go beyond the entrepreneurs’ ability to repay the loans (e.g. collateral, creditworthiness) and place a higher emphasis on the viability of proposed ventures, market/product characteristics and the entrepreneurs’ personality and experience. As venture capital is usually associated with high-risk ventures

or startups in uncertain environments, venture capitalists have developed complementary mechanisms (e.g. staged finance, comprehensive contracts) to control agency problems which are prevalent in PLS contracts. The contemporary structure of venture capital was designed to limit agency problems in VC deals. However, as investors resort to VC companies to reduce the cost of selecting and monitoring investment proposals, VC companies face agency problems in their relationship with entrepreneurs, particularly at the early stages of the investment process. It is argued that agency concerns vary throughout the life of the ventures and that agency problems are highly likely immediately prior to the initial investment. Therefore, VC companies typically perform due diligence, comprehensive appraisal and stringent contracts beforehand to mitigate agency problems, particularly adverse selection. After an investment decision is made, the likelihood of agency concerns is argued to decline rapidly as the goals of VC company and the entrepreneur are aligned (Arthurs & Busenitz 2003).

Moreover, the role of venture capital firms is not limited to providing finance and it extends to play a more active role comparing to traditional financial institutions, which increase the chances of businesses' growth and stability. In venture capital (VC) firms, the recovery of capital with high return depends highly on the success of the business, which create an incentive for VC firms to get more involved in the management of funded ventures and monitor their activity until ventures materialize. VC firms are more specialized and more experienced in the formalization and commercialization of businesses' products/services; therefore, they usually engage in the selection, recruitment and replacement of the management team of funded ventures, particularly ventures in which the human capital is critical. VC management assumes responsibility and act as

directors of investee firms when necessary. VC firms are usually a part of well-established networks in their sector that include experienced infrastructure providers (e.g. accounting firms, law firms), and other startups and established companies. Such networks could reduce the cost of resource dependence for the investee firms and the search cost for potentials customers, suppliers or partners since new entrepreneurs usually do not have track records or wide contacts in the sector in which they operate to initiate business relationships needed to promote their business.

There is no evidence that Islamic financial institutions have played any role in providing risk-capital for small businesses and they encouraged, even if implicitly, consumerism through the overuse of asset-based finance. However, the current structure of Islamic banks is highly risk-averse which prevent banks from engaging in long-term finance. The role of non-banking IFIs should be addressed in financial inclusion policies to include religious preferences that are usually treated as ‘voluntary’ causes of financial exclusion. The development of Islamic venture capital could fill in the gap for risk-capital to spur innovative and technology-based businesses that is much needed for the Saudi economy.

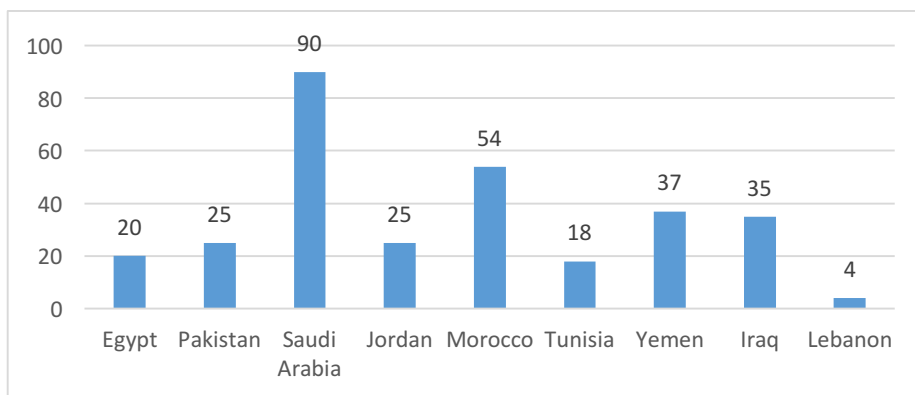


Figure 8: SMEs Preference of Sharia-Compliant finance in MENA Region  
Source: International Finance Cooperation



A hybrid of *Musharaka* (partnership) and *Mudaraba* (silent partnership) offers a suitable option for the development of Islamic venture capital. In the *Musharaka* contract, two or more contribute to a capital, in the form of money or efforts and skills, for investment purposes with pre-agreed profit-ratios. This structure allows investors to include restrictive conditions on the VC fund management and/or entrepreneurs to make any modifications or interventions to ensure the stability and efficiency of their investments. This structure gives equal rights to both parties (fund management and investors) to engage in the decision-making process, business operation and management strategies even after the disbursement of funds. Another option is a hybrid of *Mudaraba* and *Wakalah* (agency) which is an agency arrangement when investors initiate fee-based contract with the VC fund management. This structure is deemed less flexible because it confers the authority, within the agreed upon terms of the contract, to the fund management to make business decision on behalf of the investors. This could make it more difficult to resolve disputes between the investors and the fund management over investment decisions and management of the investee companies. In regards to the relationship between the fund management and entrepreneurs, they can initiate *Mudaraba* or *Musharaka* contract depending on whether the fund provides all the capital or the entrepreneur contribute to the initial capital, respectively. However, the most suitable Islamic structure for venture capital cannot be identified until it moves from the theoretical framework to practical application. Venture capital offers an Islamic venue for IFIs to provide equity-based finance that promote the objectives of profit-loss sharing which Islamic banks have failed to achieve.

### 4.3.1 Structure Issues

In partnerships, all parties are free to structure the contract to achieve their economic mutual interests if does not violate Islamic principles in regard to contractual relationships (Ahmed, 2004). Venture capitalists invest in a long-term investment for an eventual capital gain rather than dividend income; therefore, they rarely commit themselves to pure equity in the initial stage of investment or in the case of startups or new industry due to the extremely high risk. Therefore, investors in conventional venture capital use a variety of financial instruments to structure the deal in order to allocate risks, establish ownership rights and essentially provide them with an incentive to invest. A combination of financial instruments or a hybrid instruments are used. In regards to Islamic finance, the use of **preferred stock** and the use of **convertible debt** are unacceptable. Preferred stock is a hybrid instrument of bonds and stock that has a preference over common stock. Preferred stock has a dividend that has to be paid out before dividend to common shareholders. The Sharia objection<sup>20</sup> is that partnership contract should not include any terms that could eliminate profit-sharing which is the essence of the partnership contract. Moreover, profits should be in the form of common ratios of total profits earned not the capital. Any condition that stipulates fixed ratio or financial instrument that act as debt-instrument to guarantee a risk-free reward is unacceptable. However, this would create disincentives to invest in new or risky ventures. In an analysis on the effect of the firm financial structure on its investment decision, Heinkel & Zechner (1990) concluded that preferred equity (PE) create an incentive for equity-holders to invest and enhances the

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<sup>20</sup> AAOIFI (standard 21, article 2/6)

firm's debt capacity. Moreover, the features of preferred stock reduce the monitoring cost for the stockholder since it shifts part of the risk to the common stockholders. This also explains the wide use of preferred stocks in venture capital. Several Islamic economists have presented acceptable alternatives to preferred stock to create investment incentives without violation of Islamic principles. An acceptable alternative has been presented in many researches; that is a modified version of preferred stock by creating a two classes of shares with each being entitled to a different percentage of profits beyond a defined threshold (Al-Suhaibani & Zarqa 2012). In this case, preferred stockholders are offered a higher percentage of any profits if their stipulated dividend has not been achieved, which means the preferred stockholders have a preference for dividend payments until a fixed threshold of net income is reached (Al-Suhaibani & Naifar 2014). This alternative's compatibility is justified on the basis of two juristic rulings; it is permissible to agree on a profit-sharing ratio different than their capital contribution, and to make the profit-sharing ratio variable according to the level of net income<sup>21</sup>. The development of Islamic preferred share could provide an important financial instrument for Islamic capital markets and increase PLS-based investments. However, the lack of the legal form of dual-class shares should be addressed in respect to contemporary Islamic finance and offer suitable alternatives to protect the investments of venture capitalists. Another Islamic financial structure for venture capital is diminishing Musharaka in which the initial investment can be secured to some extent by using the project's asset as collateral. After profits are achieved, the entrepreneur can buy back equity issued by venture capitalists. In regards to

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<sup>21</sup> AAOIFI (standard 12, article 3/1/5/5)

the use of convertible debt, Islamic bond (Sukuk) is an acceptable alternative to provide part of the initial capital which can be converted into equity after the business stabilizes according to a predetermined conversion formula. (Durrani & Boocock 2006). The Sukuk<sup>22</sup> Sharia-compatibility drives mainly from its asset-backed nature and that Sukuk-holders are rewarded with a share of profits deriving from the underlying asset rather than interests payments in conventional bonds. Furthermore, Sukuk-holders share the risk of investment in the underlying assets; that is, face value is not always guaranteed.

<b>Conventional Venture Capital Practice</b>	<b>Islamic View</b>
Limited partnership structure	Acceptable
Long terms contracts	Acceptable
Contracts can be nullified	Acceptable
Restrictions placed on the activities of fund managers	Acceptable
Equity ratchets to entrepreneurs	Acceptable
Investments in equity, fully convertible bonds (zero coupon)	Acceptable
<i>Preferred stocks, preference shares or convertible debt</i>	<i>Not Acceptable</i>
Greater control rights through restrictive covenants	Acceptable
Staged financing	Acceptable
Liquidation rights	Acceptable
Application of discount rate for valuation	Acceptable

Table 3: Islamic view on the conventional practice of venture capital  
Source: Mansoor Durrani and Grahame Boocock 2006

#### **4.4 Venture Capital in Saudi Arabia**

The over reliance of Saudi economy on oil revenues as the main source of government expenditure has negatively impacted the productivity of the private sector

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<sup>22</sup> Sukuk is best defined as ‘trust certificates’ and it represent undivided shares in the ownership of an asset that generate revenues (e.g. tangible assets, leased assets, assets of special investment vehicles). The Sukuk-holders are entitled to receive payments on the underlying trade transaction/asset and their shares depends on the extent of their initial investment.

which is highly dominated by few large firms; mostly, oil and petrochemicals. The development of venture capital industry could mitigate different challenges facing the Saudi economy such as increasing the resilience of the economy through diversification of its economic base, increase the productivity of SMEs through fostering entrepreneurship and the technology-intensive sectors. However, venture capital activities, particularly seed finance, are still minimal and highly unregulated which has limited researchers from conducting more comprehensive statistical analyses. An Islamic model for VC is non-existent; however, an exception is high net-worth families who finance small business with their own cash (McNamara, P *et al.* 2009). The venture capital compatibility with Islamic finance offers additional opportunities to its development in the country. There are successful experiences of Islamic venture capital in the region which can be duplicated such as the Venture Capital Bank which is the first Islamic venture capital-based investment bank<sup>23</sup> with focus on the development of SMEs. The Saudi private sector is characterized by low-skilled jobs that are concentrated in low added-value activities like construction and trade which has been disadvantageous for the college-educated labor force, and particularly for women. Therefore, it is acceptable to say that restructuring the private sector and fostering entrepreneurship has an important role in reducing unemployment and the skills-mismatch. Venture capital is a promising avenue for entrepreneurship to link the educated labor force with sources of capital and equip them with the necessary business skills which is not offered by traditional financial institutions. Many factors that have restricted the role of venture capital in the country including the

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<sup>23</sup> Based in Bahrain

inadequacy of the current legal framework and its incompatibility to the nature of venture capital activities such as merger and acquisition laws, weak enforcement of collaterals, and the absence of stock exchange market for SMEs which limits exit strategies in VC investments. The inadequacy of the legal framework for a highly speculative industry like venture capital has led to the predominance of traditional “safe” investments and the lack of “risk appetite”. Moreover, the serious lack of academic research and the government’s modest funding for venture capital funds have limited the expansion of venture capital. The limited availability of data shows that venture capital is still at early stages. Laws and regulations directed at venture capital activities are not clearly defined. The legal and regulatory framework is crucial for the development of venture capital industry. Intellectual property and patents could further enhance the prospects for venture capital in the country. Intellectual property protection is necessary condition to attract VC capital, particularly in technology-intensive industries; however, intellectual property legislation in the country remains below expectation (Elsiefy, 2014). Moreover, Institutional investors (e.g. pension funds and insurance companies) are key players in venture capital finance; however, investment in domestic capital market by such institutions is very small and banks are not interested in such investments. Alternatively, large private firms can establish subsidiaries for VC investments; existing examples<sup>24</sup> are limited to technology-based ventures. Wealthy individuals and wealthy merchant families could be another substitute for institutional investors.

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<sup>24</sup> Aramco (Wa’ed VC Fund) and Saudi Arabian Telecom Company (STC ventures).

Government intervention is essential to correct market failure resulting from high asymmetries of information which led to undersupply of risk capital through traditional financial institutions, especially for seed/early stage finance. Government direct intervention acting as VC investor takes priority over providing incentives (e.g. tax incentive, R&D subsidies) to stimulate venture capital investments and correct market failure. This is because venture capitalists have a competitive advantage in dealing with asymmetry of information in financing innovation and technology (Brander et al. 2014). In addition to stimulate an entrepreneurship friendly ecosystem, Saudi Arabia have recently established a Fund of Funds (FOF) with a capital of SAR 4 Billion to support SMEs' access to finance by investing in venture capital and private equity funds. A challenge for public intervention is not to discourage private VC/PE investments or reduce the opportunities available for them; thus, forcing them out of the market. Another challenge is to guarantee the 'additionality' of government intervention and not become so dominant that private investors will rely on government actors in regards to sorting out business opportunities and due diligence instead of building these capacities themselves (Ständer, 2017).

#### **4.5 Conclusion**

Small and medium enterprises (SMEs) play a vital role in most economies through the creation of jobs, nurturing innovation and promoting growth and development. However, access to finance is essential for SMEs growth and profitability. Generally, SMEs face more barriers in access to finance due to the risks usually associated with small businesses and startups and their inability to meet the requirements of traditional financial institutions. In Saudi Arabia, access to finance is the main obstacle facing smaller

businesses where SMEs loans represent a very small share of total loans. Alternative finance is necessary to bolster financial inclusion and support the growth and development of the SME sector. Venture capital plays an important role in providing the scarce risk-capital to finance the inception of innovative business ideas that has high growth potentials. The Sharia-compatibility of the conventional practice of venture capital present an additional opportunity to develop an Islamic model for venture capital in Saudi Arabia and it brings the profit-loss sharing contracts into practice. The establishment of a robust regulatory framework and a healthy infrastructure required for the development of an Islamic venture capital that could offer Saudi Arabia many opportunities to support the culture of ‘entrepreneurship’; nurture business innovation and technology; mitigating financing constraints facing SMEs; diversify the economic base and reduce dependence of government expenditure for economic growth.



## Bibliography

1. Abalkhail, Mohammad, and John R. Presley. "How informal risk capital investors manage asymmetric information in profit and loss sharing contracts." *Islamic Banking and Finance, New Perspectives On Profit-Sharing And Risk* (2002).
2. Abdelhamid, Doha, and Alia El Mahdi. "The small business informality challenge: lessons learned from country experiences and the road ahead of Egypt." *Economic Research Forum Working Papers*. No. 0324. 2003.
3. Abdulsaleh, Abdulaziz M., and Andrew C. Worthington. "Small and medium-sized enterprises financing: A review of literature." *International Journal of Business and Management* 8.14 (2013): 36.
4. Abozaid, Abdulazeem, and Asyraf Wajdi Dusuki. "The challenges of realizing maqasid al-shariah in Islamic Banking and Finance." *Proceeding Paper presented at IIUM International Conference on Islamic Banking and Finance, IIUM Institute of Islamic Banking and Finance*. 2007.
5. Achoui, Mustapha M. "Human resource development in Gulf countries: an analysis of the trends and challenges facing Saudi Arabia." *Human Resource Development International* 12.1 (2009): 35-46.
6. Ahmed, Habib. "An Islamic Framework of the Venture Capital Cycle." *International Seminar on "Non-Bank Financial Institutions: Islamic Alternatives"* Kuala Lumpur, Malaysia. 2004.
7. Ahmed, Habib. "Financing microenterprises: An analytical study of Islamic microfinance institutions." *Islamic Economic Studies* 9.2 (2002): 27-64.
8. Ahmed, Habib. "Incentive compatible profit-sharing contracts: a theoretical treatment." *Islamic Banking and Finance* (2002): 40-54
9. Al Baker, Ahmed. *Challenges to Production Base Diversification in Saudi Arabia*. Working paper no. WP/15/8. N.p.: Saudi Arabian Monetary Agency, 2015. Web. 18 May 2017.
10. Al-Omar, Fuad, and Mohammed Abdel-Haq. *Islamic banking: theory, practice, and challenges*. Atlantic Highlands, NJ: Zed , 1996. Print.
11. Al-Suhaibani, Mohammad, and Muhammad Anas Zarka "Shariah-compatible Preference Shares: The Fiqh Basis and Economic Rationale". *ISRA International Arabic Journal of Islamic Finance* 3.2 (2012): 9-45. *Published in Arabic*.

12. Al-Suhaibani, Mohammad, and Nader Naifar. "Islamic Corporate Governance: Risk-Sharing and Islamic Preferred Shares." *Journal of Business Ethics* 124.4 (2014): 623-632.
13. Al-Suhaibani, Mohammad. "Information Sharing and Saudi Credit Market Efficiency" (2002). *Published in Arabic*.
14. Alam Choudhury, Masudul. "Islamic venture capital-A critical examination." *Journal of Economic Studies* 28.1 (2001): 14-33.
15. Algaoud, Latifa M., and Mervyn K. Lewis. "3 Islamic critique of conventional financing." *Handbook of Islamic Banking* (2007): 38.
16. Ali, Abd Elrahman Elzahi Saaid. *The challenges of islamic trade finance in promoting SMES in IDB member countries*. No. 1435-6. 2014.
17. Angela, Roman. "SMES' Sector access to finance: An overview." *Annals of the University of Oradea, Economic Science Series* 20.1 (2011).
18. Aram, John D. "Attitudes and behaviors of informal investors toward early-stage investments, technology-based ventures, and coinvestors." *Journal of Business Venturing* 4.5 (1989): 333-347.
19. Ariffin, Noraini Mohd, Simon Archer, and Rifaat Ahmed Abdel Karim. "Risks in Islamic banks: Evidence from empirical research." *Journal of Banking Regulation* 10.2 (2009): 153-163.
20. Arthurs, Jonathan D., and Lowell W. Busenitz. "The boundaries and limitations of agency theory and stewardship theory in the venture capitalist/entrepreneur relationship." *Entrepreneurship Theory and Practice* 28.2 (2003): 145-162.
21. Bacha, Obiyathulla I. "Adapting mudarabah financing to contemporary realities: a proposed financing structure." (1997): 26-54.
22. Bascha, Andreas, and Uwe Walz. "Convertible securities and optimal exit decisions in venture capital finance." *Journal of Corporate Finance* 7.3 (2001): 285-306.
23. Beck, Thorsten, Asli Demirgüç-Kunt, and Maria Soledad Martinez Peria. "Bank financing for SMEs around the world: Drivers, obstacles, business models, and lending practices." (2008).
24. Bennett, Lynn. "Combining Social and Financial Intermediation to Reach the Poor: The Necessity and the Dangers." *Strategic Issues in Microfinance, Hants, England: Ashgate Publishing Ltd* (1998): 99-117.

25. Berger, Allen N., and Gregory F. Udell. "The economics of small business finance: The roles of private equity and debt markets in the financial growth cycle." *Journal of banking & finance* 22.6 (1998): 613-673.
26. Boocock, Grahame, and Margaret Woods. "The evaluation criteria used by venture capitalists: evidence from a UK venture fund." *International Small Business Journal* 16.1 (1997): 36-57.
27. Brander, James A., Qianqian Du, and Thomas Hellmann. "The effects of government-sponsored venture capital: international evidence." *Review of Finance* 19.2 (2014): 571-618.
28. Chapra, M. Umer. *The future of economics: An Islamic perspective*. Vol. 21. Kube Publishing Ltd, 2016.
29. Chapra, M. Umer. *Towards a just monetary system*. Vol. 8. International Institute of Islamic Thought (IIIT), 1985.
30. Daskalakis, Nikolaos, Robin Jarvis, and Emmanouil Schizas. "Financing practices and preferences for micro and small firms." *Journal of Small Business and Enterprise Development* 20.1 (2013): 80-101.
31. Deijl, Claudia, Jan de Kok, and Veldhuis-Van Essen. *Is small still beautiful? Literature review of recent empirical evidence on the contribution of SMEs to employment creation*. Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH, 2013.
32. Durrani, Mansoor, and Grahame Boocock. *Venture capital, Islamic finance and SMEs: valuation, structuring and monitoring practices in India*. Springer, 2006
33. Eisenhardt, Kathleen M. "Agency theory: An assessment and review." *Academy of management review* 14.1 (1989): 57-74.
34. Elarag, Hussein. "Enhancing the competitiveness of the Arab SMEs." (2010).
35. Elarag, Hussein. "Islamic Finance for SMES." *Economic and Social Thought* 3.3 (2016): 422. Web. 18 May 2017.
36. Elsiefy, Elsayed. "Fundamental requirements for building an Islamic venture capital model." *Accounting and Finance Research* 3.1 (2014): 55.
37. Farooq, Mohammad Omar. "Partnership, equity-financing and islamic finance: whither profit-loss sharing?." (2007).
38. Febianto, Irawan, and Rahmatina Kasri. "Why Do Islamic Banks Tend To Avoid Profit And Loss Sharing Arrangements?." (2007).

39. Frame, W. Scott, Aruna Srinivasan, and Lynn Woosley. "The effect of credit scoring on small-business lending." *Journal of money, credit and banking* (2001): 813-825.
40. Freear, John, and William E. Wetzel. "Who bankrolls high-tech entrepreneurs?." *Journal of Business Venturing* 5.2 (1990): 77-89.
41. Ganbold, Bataa. *Improving access to finance for SME: international good experiences and lessons for Mongolia*. Institute of Developing Economies, 2008.
42. Gompers, Paul A. "Optimal investment, monitoring, and the staging of venture capital." *The journal of finance* 50.5 (1995): 1461-1489.
43. Gregory, Brian T., et al. "An empirical investigation of the growth cycle theory of small firm financing." *Journal of Small Business Management* 43.4 (2005): 382-392.
44. Grossman, Sanford J., and Oliver D. Hart. "One share-one vote and the market for corporate control." *Journal of financial economics* 20 (1988): 175-202.
45. Hart, Oliver D., and Bengt Holmstrom. "The theory of contracts." (1986).
46. Hasan, Zubair. "Determination of Profit and Loss Sharing Ratios in Interest-Free Business Finance." (1985): 13-29.
47. Heinkel, Robert, and Josef Zechner. "The Role of Debt and Preferred Stock as a Solution to Adverse Investment Incentives." *Journal of Financial and Quantitative Analysis* 25.1 (1990): 1-24.
48. Helwege, Jean, and Nellie Liang. "Is there a pecking order? Evidence from a panel of IPO firms." *Journal of financial economics* 40.3 (1996): 429-458.
49. Hertog, S., 2010d. *Benchmarking SME Policies in the GCC: A Survey of Challenges and Opportunities*. Brussels: Euro-chambers and FGCCC.
50. Iqbal, Munawar, and David T. Llewellyn, eds. *Islamic banking and finance: new perspectives on profit sharing and risk*. Edward Elgar Publishing, 2002.
51. Iqbal, Munawar, and Philip Molyneux. *Thirty years of Islamic banking: History, performance and prospects*. Springer, 2016.
52. Iqbal, Munawar, Auşāf Aḥmad, and Tariquillah Khan. *Challenges facing Islamic banking*. Islamic Research and Training Institute, 1998.
53. Jaffee, Dwight M., and Thomas Russell. "Imperfect information, uncertainty, and credit rationing." *The Quarterly Journal of Economics* 90.4 (1976): 651-666.

54. Jensen, Michael C. "Agency costs of free cash flow, corporate finance, and takeovers." *The American economic review* 76.2 (1986): 323-329.
55. Jensen, Michael C., and William H. Meckling. "Theory of the firm: Managerial behavior, agency costs and ownership structure." *Journal of financial economics* 3.4 (1976): 305-360.
56. Kabir, Mohammad Rokibul, Md Hafiz Ullah, and Md Musa Khan. "Comparative analysis of profit rate of Islamic banks on investment (ROI) and fixed rate of interest on loan of conventional banks in Bangladesh." *World* 2.6 (2012).
57. Kayed, Rasem N. "The entrepreneurial role of profit-and-loss sharing modes of finance: theory and practice." *International Journal of Islamic and Middle Eastern Finance and Management* 5.3 (2012): 203-228.
58. Khan, Tariqullah, and Habib Ahmed. *Risk Management: An Analysis of Issues in Islamic Financial Industry (Occasional Papers)*. No. 91. The Islamic Research and Teaching Institute (IRTI), 2001.
59. Khan, Tariqullah. "Demand for and supply of mark-up and PLS funds in Islamic banking: some alternative explanations." *Islamic Economic Studies* 3.1 (1995): 39-78.
60. Klonowski, Darek. *The venture capital investment process*. Springer, 2010.
61. Kushnir, Khrystyna, Melina Laura Mirmulstein, and Rita Ramalho. "Micro, small, and medium enterprises around the world: how many are there, and what affects the count." *Washington: World Bank/IFC MSME Country Indicators Analysis Note* (2010).
62. Lerner, Joshua. "The syndication of venture capital investments." *Financial management* (1994): 16-27.
63. McNamara, P. (2009) *Islamic investment banking 2009*. Unicorn Development Bank and Doha Islamic, Dubai.
64. Myers, Stewart C. "The capital structure puzzle." *The journal of finance* 39.3 (1984): 574-592.
65. Nienhaus, Volker. "Profitability of Islamic PLS banks competing with interest banks: problems and prospects." *Journal of research in islamic Economics* 1.1 (1983): 31-39.
66. Obaidullah, Mohammed, and Hajah Salma Haji Abdul Latiff. "Islamic finance for micro and medium enterprises." *Islamic Finance for Micro and Medium Enterprises. Islamic Research and Training Institute, Islamic Development Bank*

and Centre for Islamic Banking, Finance and Management, Universiti Brunei Darussalam, Darussalam (2008): 1-13.

67. Ou, Charles, and George W. Haynes. "Acquisition of additional equity capital by small firms—findings from the national survey of small business finances." *Small Business Economics* 27.2 (2006): 157-168.
68. Petersen, Mitchell A., and Raghuram G. Rajan. "The benefits of lending relationships: Evidence from small business data." *The journal of finance* 49.1 (1994): 3-37.
69. Potter, Jonathan, and Alessandra Proto. "Promoting Entrepreneurship in South East Europe: Policies and Tools." *OECD Papers* 6.12 (2007): 1.
70. Pryor, Frederic L. "The Islamic economic system." *Journal of Comparative Economics* 9.2 (1985): 197-223.
71. Reid, Gavin C. "Mature micro-firms and their experience of funding shortages." *Small Business Economics* 8.1 (1996): 27-37.
72. Rickwood, C., and A. Khalil. "Evidence on Agency-Contractual Problems in Mudarabah Financing Operations by Islamic banks." *Fourth International Conference on Islamic Economics and Banking*. 2000.
73. Robbie, Wright, and Ken Mike. "Venture capital and private equity: A review and synthesis." *Journal of Business Finance & Accounting* 25.5-6 (1998): 521-570.
74. Rocha, Roberto de Rezende, et al. "The status of bank lending to SMES in the Middle East and North Africa region: the results of a joint survey of the Union of Arab Bank and the World Bank." (2011).
75. Sadique, Muhammad Abdurrahman. "FINANCING MICRO AND MEDIUM SIZED ENTERPRISES THROUGH DECREASING PARTNERSHIP (MUSHĀRAKAH MUTANĀQISAH): REFINING SHARĪ' AH AND BANKING ASPECTS FOR ENHANCED APPLICABILITY." *Islamic Finance for Micro and Medium Enterprises* (2008): 53.
76. Sahlman, William A. "The structure and governance of venture-capital organizations." *Journal of financial economics* 27.2 (1990): 473-521.
77. Sarker, Md Abdul Awal. "Islamic business contracts, agency problem and the theory of the Islamic firm." *International Journal of Islamic Financial Services* 1.2 (1999): 12-28.
78. Shaban, Mohamed, Meryem Duygun, and John Fry. "SME's lending and Islamic finance. Is it a “win–win” situation?." *Economic Modelling* 55 (2016): 1-5.

79. Siddiqi, Muhammad Nejatullah. *Issue in Islamic Banking*. Islamec Foundation, 1983.
80. Siddiqi, Muhammad Nejatullah. *Partnership and profit-sharing in Islamic law*. Vol. 9. Leicester: Islamic Foundation, 1985.
81. Siddiqi, Shahid Hasan. "Islamic banking: true modes of financing." *New Horizon* 109.2 (2001): 15-20.
82. Smolarski, Jan, and Can Kut. "The impact of venture capital financing method on SME performance and internationalization." *International Entrepreneurship and Management Journal* 7.1 (2011): 39-55.
83. Stulz, RenéM. "Managerial discretion and optimal financing policies." *Journal of financial Economics* 26.1 (1990): 3-27.
84. Sugema, Iman, Toni Bakhtiar, and Jaenal Effendi. "Interest versus profit-loss sharing credit contract: efficiency and welfare implications." *International Research Journal of Finance and Economics* 45.1 (2010): 58-67.
85. Trester, Jeffrey J. "Venture capital contracting under asymmetric information." *Journal of Banking & Finance* 22.6 (1998): 675-699.
86. Ul Haque, Nadeem, and Abbas Mirakhor. "Optimal Profit-sharing Contracts and Investment in an interest-free Islamic Economy." (1986).
87. Van Osnabrugge, Mark. "A comparison of business angel and venture capitalist investment procedures: an agency theory-based analysis." *Venture Capital: An international journal of entrepreneurial finance* 2.2 (2000): 91-109.
88. Vandenberg, Paul, and Job Creation. "Poverty reduction through small enterprises." *SEED Working paper* 75 (2006): 1-60.
89. *World Bank; Islamic Development Bank Group. 2017. Global Report on Islamic Finance : Islamic Finance - A Catalyst for Shared Prosperity?. Washington, DC: World Bank. © Islamic Development Bank Group. <https://openknowledge.worldbank.org/handle/10986/25738> License: CC BY 3.0 IGO.*
90. Yousef, Tarik M. "The Murabaha syndrome in Islamic finance: laws, institutions and politics." *The politics of Islamic finance* (2004): 63-80.
91. Zaher, Tarek S., and M. Kabir Hassan. "A comparative literature survey of Islamic finance and banking." *Financial Markets, Institutions & Instruments* 10.4 (2001): 155-199.

## Appendix

### Glossary

**Murabaha:** Sale at specified profit margin. Now it is used to refer to a sale arrangement where the buyer (i.e. Islamic bank) purchase goods desired by the customer (i.e. bank client) and sells them at an agreed marked-up price on deferred payments, in installments or lump sum. Interest rate is used as a benchmark to determine the profit margin rate.

**Musharaka:** A partnership agreement in which an Islamic financial institution and customers contribute capital to a new or existing enterprise or to the ownership of an asset. Profits are shared according to a pre-agreed ratios and loss is strictly borne by respective capital contribution.

**Mudaraba:** A partnership contract where one party (*Rab al-Mal*) provides capital and the other (*Mudarib*) provides expertise and management to an enterprise. Profits are shared according to pre-agreed ratios and loss is borne only by the capital provider and the manager's liability is limited to his effort. Mudaraba can be restricted where the capital provider can define clear guidelines for the use of capital and risk exposure or it can be unrestricted where the capital provider allows the the manager to manage the capital with no restrictions.

**Diminishing Musharaka:** A form of partnership in investment or purchase of an asset in which one agrees to buy the other's equity share gradually, through a redeeming mechanism agreed by both partners, until all equity is transferred to the buying partner or become the sole owner of the asset. The buying and selling of equity should take a place at market value.

**Ijara (Leasing):** Leasing contract of an asset (e.g. machinery) that generate usufruct over time. The usufruct is sold to the lessee at predetermined price. The lessor retains the ownership of the asset with with all rights and responsibilities that go with ownership.

**Salam (advanced payments for goods):** A forward sale contract in which an advance payment is made for commodities (mainly agricultural crops) to be delivered at a future date. The object of the sale can include anything and mostly tangible things but cannot be gold or silver because these are regarded as monetary values.

**Istisna'a:** an instrument of pre-shipment financing. Manufacturing contract whereby a manufacturer agrees to produce (build) and deliver a well-described good (or premise) at a given price on a given date in the future. This flexibility allows the bank to pre-sell to its clients for future delivery on a cash-on-delivery basis and then negotiate the purchase.

**Sharia-compliant:** Sharia refers to the corpus of Islamic laws on divine guidelines as given by the Qur'an and Sunnah. In Islamic finance, Sharia-compliance describes in detail what is permissible and what is not permissible for all behavioral and contractual relationships.