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Variants of Participatory Financing for Risk Assessment and Mitigation in Islamic Banking

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Abstract

The participatory modes of Islamic financing including Musharakah and Mudarabah are widely accepted as the ideal modes of financing among the jurists of Islamic banking and finance. However, paradoxically, these are not the most popular modes of financing in practice. The practice of the participatory financing in Islamic banking is constrained by several factors. Therefore, Islamic banks are applying the adapted variants of Musharakah. The present study aims to explore the prevailing variants of participatory financing in the Islamic banking industry of Pakistan using multiple case studies strategy. Findings suggest that Islamic banks adapt the participatory financing to make these fit for SME financing, corporate financing, consumer financing, and commodity operations financing within the embedded contractual variants of Musharakah namely diminishing Musharakah and running Musharakah, while pure Musharakah and Mudarabah are not applied in practice. The study also provides insights into the design of participatory financing arrangements and the procedures adopted by Islamic banks for assessing and mitigating the underlying risks associated to the participatory financing, particularly the risk induced by asymmetric information including adverse selection, and moral hazards.

Keywords: *Agency problems, case study, Islamic banking, Musharakah, narrative discourse analysis, Pakistan, participatory finance.*

1. Introduction

The practice of Islamic finance is fundamentally based on various types of participatory and non-participatory contracts devised from Islamic Law (ElGindi, Said, & Salevurakis, 2009; Sundararajan & Errico, 2002). Participation, also called profit and loss sharing, establishes a paradigm that is believed to represent an ideal Islamic finance system (Ayub, 2007; El-Gamal, 2006; Jan & Asutay, 2019; Ullah &

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Al-Karaghouli, 2017; Usmani, 2007). It allows a financial institution to earn profit on invested capital if the financial institution is willing to accept loss in case of the project failure (Aggarwal & Yousef, 2000; Bacha, 1997).

Modes of participatory financing include *Mudarabah* (partnership of capital) and *Mudarabah* and *Musharakah* (partnership of capital and skill). A *Mudarabah* contract is a type of partnership between investor(s) (*Rab-ul-Mal*) and entrepreneur(s) (*Mudarib*) where an investor contributes capital while the entrepreneur employs effort and exercises complete control over the business (Abdouli, 1991; Aggarwal & Yousef, 2000). Profits are divided according to a pre-agreed ratio while, in the event of a loss, the losses are exclusively borne by the investor whereas the entrepreneur loses compensation for his efforts (Bacha, 1997; ElGindi et al., 2009).

On the other hand, a *Musharakah* contract is a type of partnership where all partners jointly contribute capital and manage the business venture (Abdouli, 1991; ElGindi et al., 2009). Profits are shared based on a pre-negotiated ratio, while losses are borne in proportion to the capital contribution by the partners (Aggarwal & Yousef, 2000; Hearn, Piesse, & Strange, 2012; Kayed, 2012; Yousefi, McCormick, & Abizadeh, 1995). The non-participatory modes on the contrary do not involve profit and loss sharing and usually entail a rather predetermined return. These modes include *Murabahah* ('mark-up' or cost plus sale), *Ijarah* (lease), *Salam* (differed delivery), *Istisna'* (commission to manufacture), *Bai Muajjal* (deferred payment), *Jo'alah* (service fee), and *Qard Al Hasana* (charity loan) (El-Komi & Croson, 2013; Khan, 2010).

The advocates of Islamic banking and finance claim that participatory financing is preferable over non-participatory financing for several reasons (Dar & Presley, 2000; Ebrahim & Safadi, 1995; Farooq, 2007; Jan, 2013). Moreover, it is the essence of Islamic banking (Algaoud & Lewis, 2007; Ariff, 1988; Lewis, 2008; Zaher & Hassan, 2001). Therefore, Islamic banks are supposed to apply and promote participatory financing (Hashim, Nouman, & Khan, 2018). This is because the promotion of participatory financing can play an important role in gearing up economic growth in several ways. For example, it is usually argued that participatory financing would ensure availability of more financial resources to small businesses, and would therefore gear up employment creation and growth of gross domestic products (Huda, 2012; Nouman & Ullah, 2014). Moreover, it would promote justice and equity in society since it would finance all deserving ventures, not just the ventures with well-established credit history or excellent collateral (Jan, Ullah & Khan, 2018). Thus, a financial system based on risk sharing would lead to greater allocative efficiency, equity, GDP growth, and financial system stability (Iqbal & Molyneux, 2005).

Inconsistently, while the pertinent literature continues to emphasize participatory modes as the main modes, in practice Islamic Financial Institutions (IFIs) have deliberately and systematically avoided them (Chong & Liu, 2009; Khan, 2010). The IFIs, particularly Islamic banks, adopt partnership contracts for the scheme of deposits, especially for term deposit accounts (Nouman & Ullah, 2014, 2016). However, it is usually claimed that they do not adopt participatory financing as the main financing scheme due to their inherent high risks (Abdul-Rahman, Latif, Muda, & Abdullah, 2014; Abdul-Rahman & Nor, 2016; Al-Muharrami & Hardy, 2013; El-Komi & Croson, 2013; Sadique, 2012; Shaikh, 2011).

However, Islamic banking industry of Pakistan has shown significant progress in terms of the application of participatory financing in the recent years (Nouman, Ullah, & Jan, 2019; Vizcaino, 2015). During the past few years the portion of *Musharakah* financing in the overall financing portfolio has raised to 19.7% compared to its previous level of less than 1% in 2012 (Nouman, 2019). Moreover, Diminishing *Musharakah* is the most dominant mode of financing having 32.9% share in the overall financing of the Islamic banking industry. Thus, *Musharakah* based participatory financing constitute more than 50% financing of the overall Islamic banking industry of Pakistan (See Table 3, Section 4).

In Pakistan several studies have been conducted related to the practice of participatory financing. However, the major focus of these studies is the constraints to participatory financing (See for example Dar, Harvey, & Presley, 1999; Dar & Presley, 2000; Farooq & Ahmed, 2013; Farooq, 2007; Hanif & Iqbal, 2010; Khan, 1995; Mansoori, 2011; Nouman & Ullah, 2014, 2016; Nouman, Ullah, & Gul, 2018; Sadique, 2010). Hence the recent spur of participatory finance in Pakistan, being a contemporary development, provides a well-timed research opportunity (Nouman et al., 2019) in terms of two focal questions: i) what are the prevalent variants of participatory finance in the Islamic banking industry of Pakistan? and ii) what strategies do the banks adopt to assess and mitigate the underlying risk related to participatory finance. To answer these questions an exploratory qualitative study is undertaken, using multiple case studies as a research strategy, with the aim of exploring the variants of participatory financing arrangements in the Islamic banking industry of Pakistan and the strategies adopted for the assessment and mitigation of the underlying risks in these arrangements.

The rest of the paper is organized as follows: Section 2 presents insights from the extant literature to highlight the underlying risks of participatory finance and develop the overall context for the present study. The methodological stance of this paper is presented in section 3. Section 4 presents the findings and discussions. Section 5 presents implications for practice and future research while section 6 concludes the paper.

2. Literature Review

In banning *Riba*, Islam seeks to establish a society based upon fairness and justice (Holy Qur'an 2:239). An interest-based loan promises a fixed return to the lender irrespective of the outcomes of the venture. However, sharing the outcomes of the venture (whether profit or loss) is fairer instead. According to Ayub (2007) participatory financing encompassing *Mudarabah*, *Musharakah* and their variants is the main tool near the majority of Islamic economists for replacing interest based system. Advocates of the Islamic banking and finance are unanimous on the fact that the Islamic financial institutions must rely on participatory modes of financing to achieve the objectives of the economic system stability, efficiency and socio-economic justice (Iqbal & Molyneux, 2005).

The participatory financing has provided foundation for Islamic banking (Al-gaoud & Lewis, 2007, p. 46; Ariff, 1988; Lewis, 2008; Zaher & Hassan, 2001). The idea of using participatory arrangements instead of interest in the depositor vs. bank and bank vs. business (borrowers) relationships was first introduced during the time period 1940s to 1960s. However, this idea gained significant acceptance in the 1980s and 1990s (Ayub, 2007, p. 195). According to Gafoor (1995, pp. 37-38) the earliest references to the reorganization of banking system on the basis of participation instead of interest can be found in the pioneering work by Anwar Iqab Qureshi, (Qureshi, 1946), Mahmud Ahmad, (Ahmad, 1947), and Naiem Siddiqi (Siddiqi, 1948) in late forties, followed by Abul A'la Mawdudi (Mawdudi, 1961) in 1950.

A number of writers, including Zarqa (1983) and Khan (1986), have predicted macroeconomic stability resulting from the financial system based on participation. This is even more strongly stated by Siddiqi (2001) as he mentions that this stability is only achieved under a participatory system. Moreover, in the light of the Savings and Loan Crisis, the International Debt Crisis, and the current problems confounding the U.S. banking industry, Akacem (1991) has proposed a banking system based on equity participation. Even prominent western economists like Simons (1948) and Kindleberger (1985) have proposed certain banking reforms which in effect, yield a banking system resembling to an Islamic one. Moreover, Weitzman (1986) has advocated the principle of participation as a cure for the problem of stagflation.

While participatory financing has been understood as the essence of Islamic banking and finance, it has rarely been utilized as a tool of financing in the overall financing operations of Islamic banks. (Dar & Presley, 2000; Farooq, 2007; Iqbal & Molyneux, 2005; Kayed, 2012; Khan, 2010; Sadique, 2010; Siddiqi, 1983; Usmani, 2002). The Islamic Financial Institutions (IFIs), especially Islamic Banks, adopt participatory arrangements for the scheme of deposits, especially for term deposit accounts. However, they do not adopt them as the main financing scheme. Rather, the non-participatory arrangements, especially *Murabahah* and *Ijarah* are the most dominant methods of investing funds. This strong and consistent tendency of IFIs to rely on non- participatory financing while investing results from necessity, not from preference. (See for example Bacha, 1995; Karim, 2002). *Musharakah* and *Mudarabah* are characterized by several inherent problems (Sumarti, Fitriyani, & Damayanti, 2014) particularly high risk. To avoid the problems in participatory financing arrangements Islamic banks rely mainly on non-participatory financing (Nouman & Ullah, 2014).

The extant literature indicates that the agency problems including asymmetric information, adverse selection, moral hazards are the most dominant factors that induce high risk in the participatory financing arrangements (Abou-Gabal, Khwaja, & Klinger, 2011; Adnan & Muhamad, 2008; Aggarwal & Yousef, 2000; Archer, Karim, & Al-Deehani, 1998; Kayed, 2012; Khan, 2010; Khan, 1995; Siddiqi, 1983). *Asymmetric information* is a situation that arises when insufficient knowledge of one party involved in the transaction about the other one, makes it impossible to take accurate decisions while conducting a transaction (Mishkin & Eakins, 2011). Since, participatory financing arrangements are formulated in the form of principal-agent arrangements (Bashir, 1996), these are prone to the asymmetric information problem. The entrepreneurs, being the insiders, have better knowledge about the project they wish to undertake. While the bank which provides the funding, being the outsider, usually has less knowledge about the potential returns and the associated risks of the project than the agent does (Khalil, Rickwood, & Murinde, 2002). This asymmetric information/lack of information creates problems in the participatory arrangements on two fronts: before the project is initiated and after.

Adverse selection is the problem faced due to asymmetric information before occurrence of the transaction (Mishkin & Eakins, 2011, p. 25). Borrowers have better inside information about themselves (including their abilities and intentions) and project (including its potential returns and likelihood of success), but they may not credibly signal it to the bank in the wake of exploiting interest of bank for their own benefits (Iqbal & Molyneux, 2005; Sarker, 1999). Since it is difficult for banks to determine the quality of a loan applicant, this creates several adverse selection problems (Mills & Presley, 1999).

Given the asymmetric information, the adverse (undesirable) selection is more likely to occur in case of participatory arrangements because the following type of borrowers actively seek funds on participation basis and are therefore more likely to be selected:

a. The borrowers expecting their projects to provide low profits but high non-monetary benefits because they expect to realize high total returns at artificially low cost of capital (Pryor, 1985).

b. The borrowers expecting high profit from a risky project (Sarker, 1999) because their risk will be shared or even completely borne by bank (i.e., in case of *Mudarabah* because if the project fails, losses will be exclusively borne by the bank whereas, the entrepreneur will lose his efforts).

c. When the ratio of profit-sharing is decided on the basis of expected profit, potential borrowers inflate their declared profit expectation in the hope of profit sharing ratio being set low by bank (Nienhaus, 1983).

Due to adverse selection, it is more likely that funds might be lent to inappropriate applicants, banks decide not to invest on participatory basis even though there are suitable parties (with promising projects) in the marketplace (Nouman et al., 2018).

Moral hazard is the problem faced due to asymmetric information after a project is initiated (Mishkin & Eakins, 2011, p. 26). Moral hazard in participatory arrangements is the risk (hazard) that borrower might involve in activities that are undesirable (immoral) from the bank's point of view. These problems are associated with the under reporting or artificial reduction of the actual profit and the difficulty of observing the entrepreneur's actions (Amrani, 2012). The Islamic bank would therefore need to incur costly monitoring expenses to ensure that the behaviour of entrepreneur is consistent with the bank's interests. The additional dead weight costs in pre-contract project appraisal and post-contract monitoring to control the adverse selection and moral hazards make participatory financing less attractive for Islamic financial institutions (Sarker, 1999), therefore Islamic banks avoid such arrangements.

Besides the asymmetric information and its associated problems of adverse selection and moral hazards, the extant literature also highlights several other constraints to participatory financing[4]. These studies suggest that Islamic banks avoid participatory financing because the viability of *Musharakah* and *Mudarabah* based financing is restrained by several factors. However, it is difficult to conceptualize the constraints because the extant literature is divergent. Nouman and Ullah (2014) in the wake of integrating the divergent literature, came up with a list of 24 factors that restraints the practice of participatory financing in Islamic banking. Table 1 presents the list

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4 *(See for example, Ahmed, 2011; Akacem & Gilliam, 2002; Ariff, 1988; Ariss, 2010; Ascarya & Yumanita, 2006; Asutay, 2007; Chong & Liu, 2009; Dar et al., 1999; Dusuki, 2007; Farooq, 2007; Jaffar, 2010; Kayed, 2012; Khan, 2010; Lewis, 2008; Mirakhor & Zaidi, 2007; Sadique, 2010; Shahid, Shagufta, Ahmad, Ahmad, & Shafique, 2015; Shinsuke, 2012; Siddiqi, 1985; Sugema, Bakhtiar, & Effendi, 2010; Vahed & Vawda, 2008; Vogel & Hayes, 1998; Yousef, 2004; Zandi, Ariffin, & Shahabi, 2012).*

Table 1: Key Constraints to Participatory Financing

Inefficient accounting and auditing systems	**Adverse selection**
Tax shield benefits	Asymmetric information
Non-supportive government	Risk averse depositors
Weak regulatory and legal framework	Shallow secondary market
Weak properly rights	Protection of depositors' interest
External interference	Complications
Disclosure of business secrets	Less applicability
Cost preference	Higher risk
Higher appraisal and monitoring costs	Unawareness
Severe competition	Weak accounting procedures
Reluctance to share profit	Lack of skilled HR
Moral hazards	Untrustworthiness

Source: Nouman and Ullah (2014); Nouman et al. (2018)

of these constaints.

Though Nouman and Ullah (2014) sucesfully integrated the constriants however, they didn't develop the typology of constraints. Therefore, buildding upon their study, Nouman et al. (2018) have synthesised a coherent constraints framework which catagorizes constaints to participatory financing into three major catagories namely uncertainty, lower demand, and reglatory constaints. This framework outlines the holistic typology of constraints which indicates that the seemingly rather abstract constaints are actually interlinked. All these restraining factors interact together and contribute to the less application of participatory finaning in practice. The present study further expends this thought to expore how Islamic banks create variants of *Musharakah* to increase their viability.

3. Methodology

The present study adopts 'case study' as the research strategy. The case study is a research strategy which focuses on understanding the dynamics present within single settings. Compared to other methods, the strength of the case study method is its ability to examine, in depth, a contemporary phenomenon within its real life context (Yin, 2014). A multiple case study design is adopted, which is believed to be stronger than the single-case designs (Ullah, 2014).

In a case study design the researcher has to define the case itself and determine its boundaries (Yin, 2014). According to Miles and Huberman (1994) the case is, "a phenomenon of some sort occurring in a bounded context. The case is, "in effect, your unit of analysis" (p. 25). Islamic banks are currently applying two variants of *Musharakah* on the financing side including Running *Musharakah* and Demining *Musharakah.* Therefore, these two variants of *Musharakah* are selected as individual case studies to explore how these variants are created and what strategies are adopted for the assessment and mitigation of their underlying risks.

Once the cases are defined, the case study strategy then requires determining the unit of analysis for the inquiry. The unit of analysis of case study can be an individual, entity, event, decision, program or an implementation process (Yin, 2014). Currently, Islamic banks are applying running *Musharakah* for working capital financing (WCF) and commodity operations financing (COF). Therefore, these two areas of financing are considered as the embedded units of analysis in the first case. Similarly, the diminishing *Musharakah* is currently applied for the financing of durable consumer products particularly house, and car financing. Therefore, the car financing and house financing products of Islamic banks are the embedded units of analysis for the second

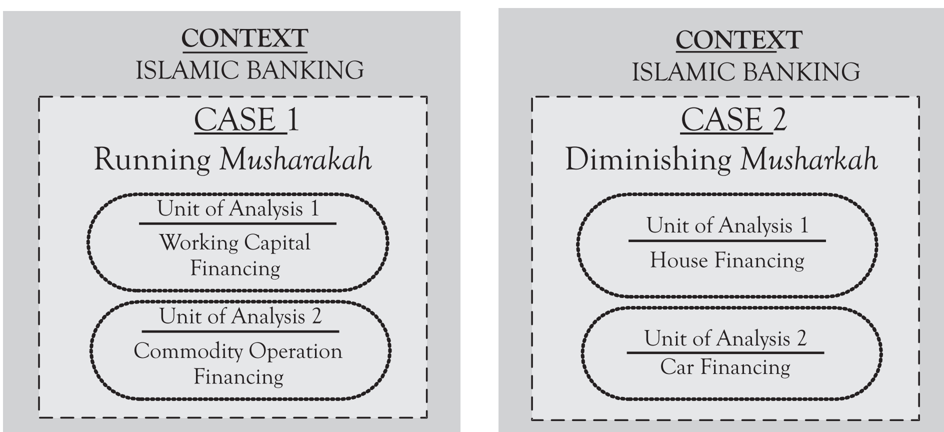

Figure 1: The Case Study Design Based on Yin (2014)

case study. Figure 1 shows the case study design.

Within the embedded case studies, interviews and documents, are amongst the popular data collection tools (Stake, 1995). The narrative interviews are used as the primary source of evidence in the present study, where the implementation of products is narrated as stories.

In total 20 narrative interviews are conducted in the present study. The interview participants include those employees of Islamic banks who are directly involved in: i) dealing the cases of *Musharakah* based financing products including working capital financing, commodity operations financing, and consumer financing (house financing and car financing), ii) designing financial services, and/or iii) the assessment of projects, assets, and/or applicants. The potential participants are identified through snowball sampling technique. On the other hand, the number of interviews in each

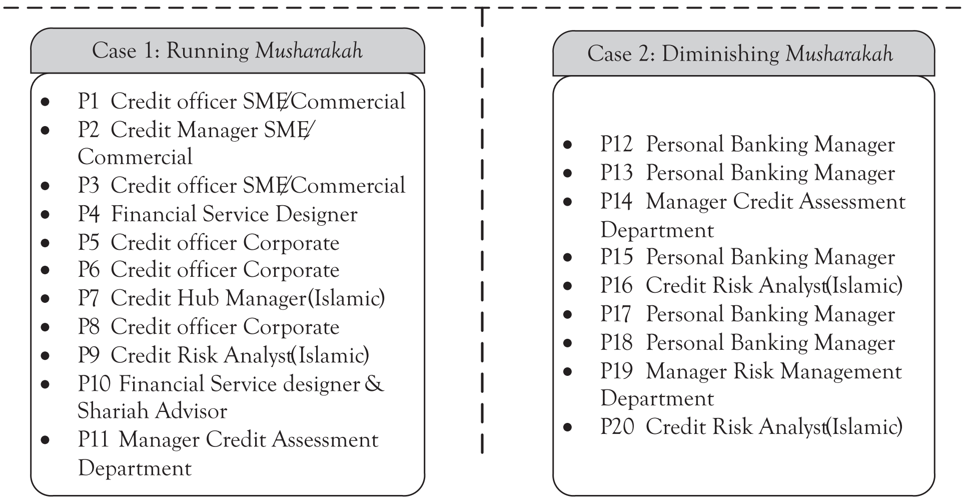

Figure 2: Structure of Case Studies

case study is determined through saturation principle following Brown (2008). Figure 2 illustrates the structure of the case studies.

Furthermore, multiple banks are considered for each financing product. The

Table 2: Number of Banks and Participants in Each Case Study

Case	No. of banks consulted	No. of interviews
Running Musharakah	04	11
Diminishing Musharakah	04	09

contextual differences help in enhancing the validity of findings by establishing a repeated chain of evidence within different contexts (Yin, 2014). Table 2 presents the number of banks consulted and the number of interviews conducted in each case study.

Respondents were asked about the design and practice of the *Musharakah* in each individual case study and the underlying procedures adopted to ensure the reliability of clients and the viability of the project under consideration. Respondents were also asked to suggest relevant personnel to be interviewed, as well as the other relevant sources of evidence. Following is the checklist of questions for interview which are adopted with modifications from Ullah (2014).

- Please explain the product you are responsible to deal with. How your organization design and practice this service package?
- Please narrate a complete story of a financing case based on *Musharakah*.
- How the reliability of the applicant was ensured in the case you narrated?
- How suitability of the project was assessed in the case you narrated?
- What procedures were used to mitigate the underlying risks in the service you narrated?

Besides in-depth narrative interviews official websites of the selected Islamic banks and related documents are also used as a source of data to establish triangulation following Yin (2014). Rather than handling individually, evidence from the three sources (including official websites, related documents, and in-depth narrative interviews) is converged in the analysis following Baxter and Jack (2008). The following documents were used as a source of evidence:

i. The recent version of Islamic banking bulletins issued by the State Bank of Pakistan

ii. Broachers of the various financing products of Islamic banks

iii. The eligibility check lists used by managers during the application processing

iv. Documents submitted by applicants for financing.

The collected narratives are analyzed using the following three step process: Firstly, descriptive and analytic codes were extracted from the data. Descriptive codes focuses on the manifest content and reflect the patterns or themes in the text that are stated directly by the research subjects or are obvious on the surface. Analytic codes, on the other hand, reflect themes in the data the researcher is interested in. Unlike descriptive codes which focuses on the surface meaning, 'analytic codes typically dig deeper into the processes and context of phrases or actions' (Cope, 2010, p. 283). Therefore, the analytic codes cover the latent content which 'represent the meanings underlying the elements that appear on the surface of a message' (Nouman, 2019, p. 86-87). Secondly, the data was displayed using the narrative and discussion quotes and graphs. Finally, the graphs and quotes were interpreted, and conclusions were drawn.

The qualitative approach has few limitations as well including: i) high cost, ii) participants' biases, and iii) time and labor intensive data collection, transcription and analysis mechanisms. To save the time and labor required in applying qualitative method, Nvivo software has been used for the efficient management and analysis of qualitative data. To avoid participants' bias the narrative structure of the in-depth interviews have been used which involve stories of actual events rather than the reflecting opinions.

4. Findings and Discussions

4.1 Variants of Musharakah financing

Findings reveal that Islamic banks are applying participatory modes of financing (*Mudarabah*) on the deposits side. However, these are not applied on the assets side in the true sense due to several constraints to pure *Musharakah*, particularly higher risks. Therefore, the practice of participatory financing in the Islamic banking industry of Pakistan is based on the adapted variants of *Musharakah*. Islamic banks have introduced two variants of *Musharakah*, namely diminishing *Musharakah* and running *Musharakah*, by adapting the design of pure *Musharakah*. Table 3 presents the makeup of the financing portfolio of the Islamic industry of Pakistan.

Table 3: Financing Mix of Islamic Banking Industry of Pakistan (As of March 2019)

Mode	% share
Diminishing Musharakah	32.9
Musharakah	19.7
Mudarabah	
Murabahah	0.00
14.1	
Istisna	9.3
Ijarah	6.2
Salam	2.4
Others	15.3
Total	100.0

Source: Islamic Banking Bulletin March 2019 (SBP, 2019)

The statistics presented in the Table 3 indicate that Diminishing *Musharakah* retains the highest share (32.9%) in the overall financing portfolio of the Islamic banking industry of Pakistan followed by *Musharakah* (19.7). However, our findings reveal that pure *Musharakah* is not applied in Pakistan. The 19.7% share of *Musharakah* in the statistics published by State Bank of Pakistan (Table 3) represents the share of running *Musharakah*.

"Pure Musharakah is not applied on the financing side because it is not suitable for financing purposes.... running Musharakah has been introduced recently as a product."

Participant 2, Credit Manager SME/Commercial Sector

Thus the two variants of *Musharakah* dominate the practice of Islamic modes. The total share of participatory finance accounts to 52.6% of the overall financing of Islamic banking industry. Islamic banks are offering *Musharakah* based participatory financing in several key areas including SMEs financing, corporate financing, consumer financing and government financing:

i) SME and corporate financing

Islamic banks are providing *Shari'ah* compliant banking services including deposit, trade and financing related services to the small and medium sized enterprises (SMEs) and corporate clients. The leading Islamic banks are providing *Shari'ah* compliant financing solutions to meet the project financing, long-term finance, export re-finance, import finance, working capital finance (WCF), documentary credit requirements, and trade finance needs of the corporations and SMEs.

Islamic banks are offering a variety of products to meet the working capital financing needs of SMEs and corporations. Various WCF products are available in the term structure and running *Musharakah* structure. Moreover, various specialized products are also offered by Islamic banks to cater the off balance sheet financing needs of multinational corporations (MNCs) and large corporations. The WCF products are based on different modes of financing including *Murabahah*, *Istisna*, *Tijarah*, *Musawamah*, *Bai Salam*, and Running *Musharakah*.

Running *Musharakah* has emerged from the pure *Musharakah* (*Shirkat-al-Aqad*) as an alternative to conventional running finance structure. In the *running Musharakah* arrangement bank invests funds in the business, usually for short term, on profit and loss sharing basis. These funds are utilized to meet the operational needs of a business. Unlike pure *Musharakah* where actual profit and loss of the business is shared among all partners, a ceiling rate is decided in *running Musharakah* for the distribution of profit. If the actual profit of the business is below the ceiling rate, the actual profit is shared with the bank in the ratio of capital contribution. However, if the profit exceeds the ceiling rate, bank's share of profit is calculated on the basis of the ceiling rate. The profit above the ceiling rate goes to the client while bank has no or a negligible claim on the additional profit.

ii) Consumer financing

Islamic banks are offering *Shari'ah* compliant financing facilities for a variety of consumer products including house financing, car/automobile financing, and durable goods financing facility based on different modes of financing including *Murabahah*, *Musawamah*, and diminishing *Musharakah*. The house and car/automobile financing products are based on the principle of diminishing *Musharakah* which has emerged from *Musharakah* (*Shirkat-al-Milk*). In house financing arrangement Islamic bank and the customer contribute a certain amount of financing which is utilized for purchasing, construction, or renovation of the property. Customer participates with the Islamic bank in the joint ownership of the property under consideration.

The bank's share in the property is divided into ownership units. Customer promises (through undertaking to purchase) to buy the bank's share in the property gradually over a certain period of time. Customer uses the property and in return agrees to a periodic rent (usually monthly) to the bank for the use of home. Customer buys bank's ownership units every month. Therefore, the bank's ownership decreases in the property every month and vice versa. The rent is adjusted every month on the basis of bank's remaining ownership (units) in the property. Eventually, title to the

Table 4: Terms and Conditions of the House Financing Scheme

	Purchase of new house/apartments		**Construction of house/apartments**		**Renovation/Improvement**	
	Bank 1	**Bank 2**	**Bank 1**	**Bank 2**	**Bank 1**	**Bank 2**
Financing limit	PKR 0.5 to 50 million	PKR 40 million per client	PKR 0.5 to 50 million	PKR 40 million per client	PKR 0.5 to 10 million	PKR 5 million
Financing tenure	3 years to 20 years	05 to 20 years	02 years (excluding construction period of max 12 months) to 20 years Maximum 25 years tenure for Salaried & SEP customer	05 to 20 years	02 years to 15 years	03 to 10 years

Bank Investment Ratio	Up to 75% for Salaried / SEP / NRP. Up to 65% for Business persons	Up to 75%	Up to 75% for Salaried / SEP / NRP. Up to 65% for Business persons.	Up to 75%	Up to 30%	Up to 75%

SEP = "Self Employed Professionals" includes Engineers, Doctors, Architects and Auditors.

NRP = Non Resident Pakistanis

Source: Official websites of the banks under consideration

property is completely transferred. Thus, the customer becomes sole owner of the property while the bank's ownership diminishes. Table 4 presents terms and conditions for house financing product of the selected Islamic banks.

On the other hand, the car financing product of most of the major Islamic banks is based on the principle of *Ijarah*. However, two Islamic banks have based their car

Table 5: Terms and Conditions of the Car Financing Scheme

	Bank 1	**Bank 2**
Bank Investment Ratio	Up to 85% of the car value	Up to 80% of the car value for new car Up to 75% of the market value assessed for used and imported car
Financing limit Minimum age at the time of application	Rs.100,000 to Rs. 5,000,000.	Rs.350,000 to Rs. 5,000,000.
Salaried	21 years	22 years
SEP/SEB	21 years	24 years
Maximum Age at the time of finance maturity		
Salaried	60 years	62 years
SEP/SEB	65 years	65 years
Minimum monthly income		
Salaried	PKR 25,000	PKR 35,000
SEP/SEB	PKR 25,000	PKR 50,000

Minimum work experience		
Salaried	3 Months	Continuous working experience of 2 years with a minimum of 6 months with the current employer
SEP/SEB	6 Months for SEP	In business for a minimum continuous period of 3 years
	12 Months for SEB	

SEP = "Self Employed Professionals" includes Engineers, Doctors, Architects and Auditors

SEB= “Self Employed Businessman”

Source: Official websites of the banks under consideration

financing based on the principle of diminishing *Musharakah.* The mechanism of the car financing is similar to the house financing. However, unlike house financing the ownership of the car is not divided into distinct units. Moreover, the monthly rent is adjusted in a way that it remains constant throughout the financing period. This is done to distribute the rent equally throughout a year. Table 5 presents terms and conditions for the car financing product of the selected Islamic banks.

iii) Commodity operations financing

Islamic banks are also offering financing to government departments for commodity operations financing (COF). COF refers to the financing provided to government, public sector corporations, or private sector for procurement of commodities to support the prices of domestic products, particularly wheat. Previously Islamic banks used to apply *Murabahah* mode for COF. However, recently running *Musharakah* has been introduced for COF because it is more flexible than the *Murabahah* mode of financing.

The running *Musharakah* is based on the two tariff profit distribution system. In this system the bank enters in to a restricted *Musharakah* with the client whereby commodities to be purchased and their buying and minimum selling rates are determined in advance. The selling price is usually set higher than the buying price. The difference between the buying and selling price is paid as a return to the bank. Therefore, bank tries to ensure their expected profit by restricting the client to sell the assets / products of *Musharakah* at the predetermined or a higher price. If the commodities are sold at a higher rate, banks get a negligible share in the additional profit. However, if government decides to sell the commodities at a price lower than the determined rate then the deficit is paid by the government form the subsidies account. Thus, the expected profit rate of the bank is predictable to much extent. Since, the main objective of the government is to support the prices of agriculture commodities through commodities operations. Therefore, government usually sells the commodities at a price lower than the buying price to support the local prices in the wake of encouraging local production and discouraging smuggling.

4.2 Assessment and mitigation of risks

4.2.1 Procedures for assessment and mitigation of risks in running Musharakah

Musharakah is a risky product because, being partner in the venture/project, the bank is responsible to share the profit and losses of the venture. Therefore, Islamic banks are currently practicing running *Musharakah* on a limited scale, offering it to reliable clients for secure projects only. In Pakistan running *Musharakah* is offered to i) corporate sector and SMEs for working capital financing, and ii) government sector for commodity operations financing. Among corporations only the blue chip organizations are allowed to use this product because in such business the chances of loss are negligible. Moreover, their operations are mostly transparent since they have to issue audited financial statements. Therefore, banks are less vulnerable to the inherent problems of the *Musharakah*, particularly the asymmetric information, adverse selection and moral hazards.

"The blue chip companies follow accounting standards and issue audited financial statements, therefore their performance can be measured easily. They have internal auditors and external auditor board which ensures the authenticity of their information. Thus, their business is comparatively transparent."

Participant 8, Credit Officer Corporate Sector

On the other hand, its application in SME sector is very limited. This is because the current accounting and auditing system is weak. Businesses prepare many versions of financial statements to avoid taxation. Thus in the absence of a strong accounting system, the chances of asymmetric information are very high which may lead to adverse selection and moral hazards. For this purpose Islamic banks are currently allowing working capital financing on running *Musharakah* basis only to leading SMEs that are willing to share their actual financial information with the banks.

"We have few businesses that are though sole proprietorship or partnership type of businesses, but they are performing very well and their activities are transparent up to much extent."

Participant 3, Credit Officer SME/Commercial Sector

Besides offering *running Musharakah* to reliable and profitable business only, Islamic banks have devised an extensive mechanism for the assessment and selection of applicants and projects. All cases of SME and corporate financing including *running Musharakah* are handled in the selected business banking branches. The credit officer prepares each case of financing on the request of client after the checking the minimum eligibility of the client and sends it to the credit risk management department for further assessment. The case is approved by head office on the recommendation of credit risk management department.

Banks have set criteria for the assessment of businesses, whereby many factors are considered including their minimum eligibility, business cycle, current financial position, credit history, performance, experience in using the external financing, and prior experience with the bank etc. This helps in reducing the adverse selection and moral hazards problems significantly.

"There are different criteria for selection of cases... We do detail scrutiny of the

Table 6: Documents Required for Working Capital Financing

Small Enterprises	Medium Enterprises
Company Profile	Company Profile
Request for Financing	Request for Financing
Last three years accounts signed by Proprietor/ Partners/Directors of the firm	Audited Accounts of last three years accounts
Projections with assumptions (in case of long term finance)	Projections with assumptions (in case of long term finance)
Memorandum & Article of Association (In case of Private Limited Company)	Memorandum & Article of Association (In case of Private Limited Company)
Basic Borrower Fact Sheet duly signed & stamped by Proprietor/Partners/Directors	Basic Borrower Fact Sheet duly signed & stamped by Proprietor/Partners/Directors
Personal net worth statement of Proprietor/ Partners/Directors	Personal net worth statement of Proprietor/ Partners/Directors
Stock Report	Stock Report
Ageing of Receivables	Ageing of Receivables
Copy of CNIC of Proprietor/Partners/Directors	Copy of CNIC of Proprietor/Partners/Directors
Import/Export business certificates from banks. (If applicable)	Import/Export business certificates from banks. (If applicable)

Last One year bank statement	Last One year bank statement
Form-H and Partnership Deed (in case of partnership Firm)	Security /Collateral Documents
Valuation report and legal opinion etc	Valuation report and legal opinion etc

customers until we become sure that customer will not default… Customers are selected very carefully keeping in view their credibility, their business cycle, their revenue, their profitability and many other factors."

Participant 7, Credit Hub Manager (Islamic)

Table 6 presents the list of documents to be submitted by small and medium enterprises for working capital financing.

The assessment is done in various phases by different departments. For example, risk management department is responsible to mitigate the risks in each case, while the credit department performs the credit risk assessment and assigns rating to the applicant. This rating is based upon client's previous history, balance sheets, turnover in accounts, import export history, and other factors. The case is then sent to the risk management department which is responsible to: i) ensure whether the rating is assigned correctly, and ii) check the current market exposure of the clients to ensure their credit worthiness. Finally, the case is sent to the competent authority to decide whether the case should be approved.

"We have several departments for customer assessment including CAD [Credit Assessment Department], SAM [Special Asset Management], and RMD [Risk Management Department]."

Participant 9, Credit Risk Analyst (Islamic)

Moreover, since banks usually do not have enough access to the internal information of the business. Furthermore, banks have limited expertise in the assessment of business. Thus, the lack of skilled human resource and limited access to information can make bank vulnerable to adverse selection and moral hazards problem. To avoid this problem bank also seeks help from external bodies during the assessment process. For example, to ensure the profitability of a business, bank does income estimation in advance. However, if their income is not verifiable then the services of independent agencies are used for the income estimation of the applicant.

"We take help from external bodies in the evaluation of business. For example we may take search report, DNB report, or Credit information report (e.g., CIB report) from external institutions to assess the credit worthiness of the business in the market."

Participant 11, Manager Credit Assessment Department

Furthermore, the physical operations of the business are checked during the analysis process. The financial information is cross matched with the physical operations to ensure the reliability of the business.

"We check their financials and cross check it with their operations for which we may visit the customer's business facilities."

Participant 3, Credit Officer SME/Commercial Sector

Finally, Islamic banks allow *running Musharakah* in only certain situations keeping in view the business needs. Once reliability of a business gets ensured, the credit officer evaluates its business cycle to determine the most appropriate mode of financing. This helps in further reducing the chances of moral hazard because bank do not go for *running Musharakah* if the needs of the business can be fulfilled through other less risky modes of financing.

"Product selection comes after customer fulfills the selection criteria…Customers usually do not know which product suits their needs. We try to understand their business cycle and then decide which product better suits their needs."

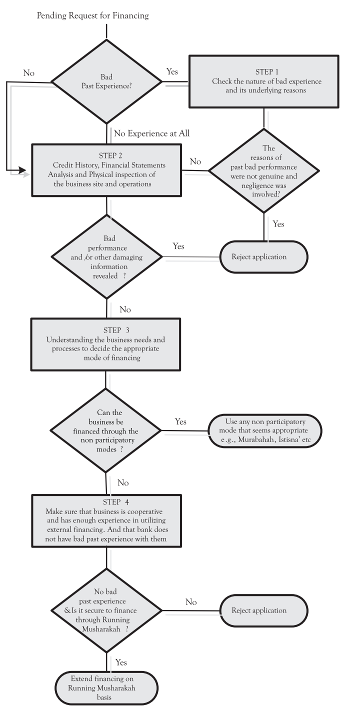

Figure 3: The Business Assessment and Mode Selection Process for the Eligible Firms

Participant 6, Credit Officer Corporate Sector

In the nutshell, in the first stage the case of each applicant is assessed systematically to determine whether this case should be considered for financing while in the second stage the appropriate mode of financing is determined keeping in view the operating cycle and needs of the business. Figure 3 depicts the business assessment and product selection process employed by the banks after checking the minimum eligibility criteria.

Besides working capital financing, Islamic banks are also applying running *Musharakah* for commodity operations financing (COF). COF is a very attractive short term investment opportunity for Islamic banks because risk is very low in such investments. Furthermore, the size of each contract is very large (usually in billions). Therefore, it is more convenient to manage a single risk free project of multi-billion Rupees worth than several small risky projects.

"Our exposure to running *Musharakah* is around PKR 20 billion but our client is only one."

Participant 4, Financial Service Designer

"We do running *Musharakah* mostly with government. Recently we have done a running *Musharakah* of PKR 9 billion worth with the Punjab food department."

Participant 7, Credit Hub Manager (Islamic)

On the other hand, Islamic banks are offering running *Musharakah* under commodity operations financing (COF) to government departments only. Thus reliability of the clients is not an issue in the COF arrangements. However, banks have to do proper assessment to ensure the suitability of the project/commodities under consideration. For this three important things are ensured in running *Musharakah* based commodity operations financing: *i)* the conversion of money into assets, *ii)* identification of assets and estimation of revenue generated from these assets, and *iii)* the assessment of revenue i.e., whether the shared profit is earned from the sale of the underlying assets.

"In the running *Musharakah* which we did with the Punjab government, the cash was converted into wheat. We had devised mechanism to identify the wheat. Then from the balance sheet, which is issued quarterly, we used to identify the cost of goods sold. We do running *Musharakah* with such departments because these departments sell wheat in the market at the rate which has been announced by the government... Moreover, the revenue generated from the sale of these assets is easy to determine. We estimate it by taking inventory figures from their balance sheet i.e., the assets have been reduced by how much amount. Then the selling price determines the revenue to be shared with the bank."

Participant 10, Financial Service Designer and Shariah Advisor

Compared to SMEs and corporations, government is more reliable and trustworthy. When running *Musharakah* is applied for COF, banks do not need to worry about the reliability of the client because these arrangements are done with the government bodies where each financing arrangement is backed by the sovereign guarantee of the federal government[5]. Therefore, there is no adverse selection issue in COF while the moral hazards are very low.

Furthermore, there is no risk of default in such arrangements because government departments seldom default. Moreover, Guarantees issued against commodity operations are secured against the underlying commodity which are essentially self-liquidating on short term basis and thus should not create a long term liability for the government (Ministry of Finance, 2018).

"There is no credit risk in government financing. State bank has mentioned under the Basel II requirements that banks have to deduct the government financing from the total lending when they have to mention their risk exposure. Moreover, we even do not apply the risk estimation modes for government financing because the prudential regulations do not ask us to do so."

Participant 9, Credit Risk Analyst (Islamic)

Similarly, the risk of loss is also negligible in commodity operations financing. In the normal conditions bank is responsible to share the losses, if any, in the ratio of its capital contribution. However, if government wants to sell the commodities at a price lower than the predetermined minimum selling price; the bank would not be responsible to bear the losses; rather the loss is covered through food subsidies by government.

"If the actual selling price is lower than the predetermined selling rate the deficit would be paid by the food department from the food subsidies allocated to them by the federal government. Last year KPK food department got a food subsidy of approximately PKR 2.7 billion."

Participant 10, Financial Service Designer and Shariah Advisor

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5 These guarantees are issued against the commodity financing operations undertaken by TCP, PASSCO and provincial governments. The outstanding stock of guarantees issued against commodity operations were Rs 875 billion at end June 2018 (Ministry of Finance, 2018).

4.2.2 Procedures for assessment and mitigation of risks in Diminishing Musharakah

Islamic banks consider only reliable clients and secure assets for diminishing *Musharakah* to reduce the underlying risks since bank becomes joint owner of the asset. Banks have defined proper criteria for assessment and selection of clients and the asset to be financed. Banks usually do three types of assessments including the personal assessment of the client, the financial assessment of the client, and the assessment of the underlying property/asset.

In the personal assessment bank assesses the person himself by considering his education, police track record, and financial track record. Moreover, his profession is also considered because it matters a lot.

"Banks are usually reluctant to finance lawyers because lawyers know the complexities and loopholes in the legal system and may use these to cheat the bank. Similarly, we do not finance employees of police department because bank may face difficulties in recoveries from them."

Participant 13, Personal Banking Manager

A minimum eligibility criterion has been defined for each type of customer. Moreover, a formal mechanism has been designed for the assessment of each client. In the first step the concerned manager checks the minimum eligibility of the appli-

Table 7: Documents Required for House and Car Financing *

House Financing	Car Financing
a. Personal Information:	Copy of primary applicant's CNIC.
Copy of CNIC	Copy of co-applicant's CNIC (if applicable).
2 passport-sized colored Photographs of Applicant	2 passport size photographs.
Copy of Rental Documents (if applicable)	Latest salary slip (For Salaried)
Copy of last paid Utility Bills (Electricity/Gas/ Telephone).	Last 6 months Bank statement.
Bank Statement - last 12 months	Bank certificate (if applicable)
Copy of recent Credit Card Bills	Proof of three years in continuous business e.g., Letter of Proprietorship/Partnership Deed/ last 3 years tax returns with receipts (For Business Person).
Income Information:	Copies of any two latest paid Utility Bills of residence & business (For Business and Self-employed customers)

Original or certified copy of recent Pay Slip	
Employer's Certificate including Tenor/Designation/Salary	
Professional Association Membership Certificate / Practice License (For self-employed professionals)	
Property Title Documents (copies at initial stage & original before disbursement)	

* Requirements may vary from bank to bank

cant seeking consumer financing. If the client meets the minimum eligibility criteria, his application is forwarded for detailed assessment. Bank's representatives visit the area where the client lives and work. They check the market reputation of the client, and confirm the profession of the client. They may even confirm the conduct of the applicant in the society where he lives. In case of salaried person the service card, joining date and salary slips of the applicant are checked. Moreover, in some cases the employer is also contacted to confirm his profession. Table 7 presents the list of documents that has to be submitted by the applicant for car and house financing.

Furthermore, the credit history of the client is checked by consulting the ECIB report. The Credit Information Bureau department of State bank of Pakistan maintains a database in which credit history of every individual and business is maintained. This database has information on each person that has used the financing facility of any bank. The ECIB report is generated from this database and shows whether the person has defaulted in the past. Moreover, it also shows the repayment behavior of each person and entity.

In the financial assessment the financial position of customer is estimated. For this purpose bank estimates the monthly installment the client has to pay including the rentals, unit price and insurance charges. Moreover, the monthly income of the customer and his monthly expenditure on the bare necessities like children schoolings, medical expenditures, and groceries etc is estimated. Finally, the monthly savings of the client are estimated by deducting expenditures from the income to check whether the client is able to pay the monthly installments. Bank has set standards for the minimum acceptable financial credibility of the clients e.g., for few banks the acceptable level of income is the one that is is at least two times higher than the installment the customer has to pay. If the bank feels that customer's saving is not enough to cover the installment, the client is asked to either increase his equity position so that the rental payments may get reduced, or increase the time period of financing to reduce the price of units (since the number of units increases with the increase in time period and the price of units decreases consequently).

On the other hand, assessment of the asset/property to be financed involves i) the estimation of the market value of the asset and ii) detailed assessment of its underlying risks. Bank determines the market value of the asset though proper assessment in the market since financing is done on the basis of the estimated market value of the asset. In case of property, the property dealers of the particular area are involved in the estimation of its current market value. Moreover, the underlying risks are assessed by the team of experts. Furthermore, a team of legal experts also checks the legal aspects because the cases of property are very complicated.

Banks consider only secure assets for financing. For example, most of the banks do not finance those cars that are older than 2010 model because these cars have many problems. Similarly, the properties in each region are divided into two zones: the positive zone and the negative zone. The positive zones include secure areas where property rights can easily be enforced for example Cantonment area, defense area, and secure townships. On the other hand, the properties in the neighborhoods, being transferred through inheritance, involve a high probability of disputes. Thus by considering properties in positive zones only, the bank reduces significantly reduce risk.

"Take the case of Hayatabad area in Peshawar as an example. This project was started by government and properties were transferred from government to the individuals. The properties are transferred through PDA [Peshawar Development Authority] and all the sales and purchase deeds are done in the PDA office. The track record of each plot/house is available there and it can be confirmed easily. Therefore the chances of disputes and frauds become negligible."

Participant 20, Credit Risk Analyst (Islamic)

Moreover, a formal mechanism has been devised for the assessment of assets. The assessment of the asset is done in various phases by trained persons. Moreover, different departments and teams of experts are involved in the assessment process. For example, in one of the selected bank all cases of consumer financing are first sent to the consumer finance department (CFD). CFD after proper analysis sends the case the Risk Management Department (RMD). RMD, after thorough analysis, sends the case to the Credit Assessment Division (CAD) and Special Assets Management (SAM) department for further analysis. CAD checks the property documents and other legal requirements to secure the legal risk. On the other hand, SAM checks the credit history and payment behavior of the applicant to ensure whether it would be possible to recover funds from the applicant. After the approval of CAD and SAM the case is sent to the Credit Committee for the final approval. The heads of the Islamic

Assets, CAD, RMD, CFD, and Islamic banking division (IBD) etc are the members of the Credit Committee.

Bank also seeks help from external bodies during the assessment process. For this purpose Islamic banks use the services of registered companies having expertise in property assessment.

"We do proper assessment of the property. For this purpose we estimate the market value and post sales value of the property... These estimations are done by property evaluators who are registered members Pakistan Bank's Association (PBA). We also seek legal opinion from the approved legal team.... Evaluation is done through different evaluators included in our panel. Similarly, the income estimation is done, in certain cases, through approved income estimators."

Participant 20, Credit Risk Analyst (Islamic)

Manager's visit reports are also integral part of the assessment process. This report does not show market and post sales values but demonstrates situation of a property e.g., age and quality of construction, dimensions of the property, and road access to it. Finally, information from different sources is cross matched.

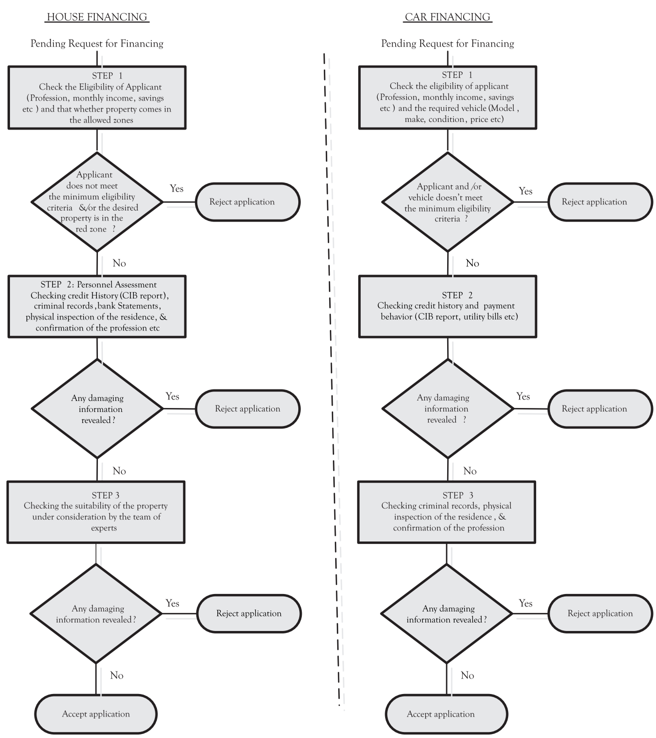

Figure 4: The Assessment and Selection Process for House and Car Financing

“We cross match the manager visit report, property evaluation report, and the title documents. The information in all these documents should be consistent.”

Participant 14, Manager Credit Assessment Department

In the nutshell, the case of each applicant is assessed systematically to determine the reliably of client and suitability of the asset under consideration. Figure 4 depicts the generalized assessment process employed by the Islamic banks for car financing and house financing schemes.

Finally, to mitigate the chances of loss in case of default, the asset being financed is mortgaged by the bank. Three types of mortgages including token mortgage, equitable mortgage, and registered mortgage are used by banks in different situations depending upon the level of risk. In equitable mortgage bank only keeps the title documents of the property in their custody. In the token mortgage bank keeps the property documents in their custody and a contract is signed on a legal Stamp paper that bank has purchased the property and a certain amount (e.g., Rs. 100,000) has been given as the token money for this purpose. Thus the bank becomes partner in this property. However, the title of the property is not transferred to the bank, thus the bank only has a lien on the property. On the other hand, the registered mortgage is the most secure form. In this form of mortgage the title of the whole or a part of the property is transferred to the bank through registrar of deeds office.

“The type of mortgage to be used varies from situation to situation. We decide the type of mortgage to be used keeping in view the underlying risks. In banks usually the token mortgage is practiced because the registered mortgage is very expensive.”

Participant 18, Personal Banking Manager

Similarly, the bank uses the *Takaful* (Islamic insurance) coverage to reduce the accidental damages and losses from natural calamities. Both car financing and house financing involve *Takaful*. Moreover, to reduce the chances of loss in case of default, bank finances only a portion of asset. Similarly, in case of car financing bank uses trackers to reduce the chances of theft. These steps help in reducing the chances of loss significantly:

“To cover the losses in case of liquidation the fore-sale value of the property is estimated in start and only 70% of the fore-sale value is financed by the bank. The rest has to be financed by the client himself”.

Participant 17, Personal Banking Manager

In the nutshell, Islamic banks have devised extensive assessment and risk management procedures to ensure the reliability of clients and suitability of assets to be financed. These strategies have enabled Islamic banks to mitigate the underlying problems in participatory financing arrangements, particularly the adverse selection and moral hazards problems. Consequently, the viability of participatory financing has increased in practice.

5. Implications

The present study implies the following agenda for practice and future research:

First, this study conceptualizes the adaptations in *Musharakah* in response to the constraints. The findings of the study offer interesting leads to the managers and product designers regarding the potential of adaptation that could help to understand the role of adaptation and innovation in enhancing the performance of the firm and its capabilities to cope with the underlying risks. Moreover, it also elaborates what strategies and measures managers and planners need to understand and adopt in dealing with the inherent risks in different products. These pragmatic strategies can be further researched and developed to enable the application of *Mudarabah* based financing which is still marginalized in the financing portfolio of Islamic banks throughout the world.

Second, The participatory finance constraints framework synthesized by Nouman et al. (2018) indicates that participatory financing is constrained by three sets of factors including: i) factors inducing uncertainty in participatory financing, ii) factors responsible for the lower demand of participatory financing, and iii) regulatory hurdles. However, the present study focuses only on the strategies employed by Islamic banks to cope with the factors inducing uncertainty in participatory financing, particularly the agency problems. Therefore, further insights are required to reflect upon the adaptations in *Musharakah*. Future studies should develop a coherent framework of *Musharakah* adaptations that could provide a holistic view of the adaptations in *Musharakah* financing in response to the constraints and their underlying outcomes.

Finally, *Musharakah* and *Mudarabah* are considered as the ideal financing modes due to their several inherent benefits. For example it is usually argued that participative financing would ensure availability of more financial resources to small businesses, make accruing unearned income more difficult, and promote justice and equity in society since it would finance all deserving ventures, not just the ventures with well-established credit history or excellent collateral (Khan, 2010). Thus, most advocates of Islamic Banking and Finance hold that a financial system based on participation and risk sharing would lead to greater allocative efficiency, equity, GDP growth, and financial system stability (Iqbal & Molyneux, 2005). However, the present study indicates that the basic structure of *Musharakah* has been adapted. Future studies should therefore investigate whether the adapted variants of *Musharakah* have the ability to offer the inherent benefits of pure *Musharakah*.

6. Conclusion

Findings of the study are consistent with the notion that participatory finance is a dependent system which needs economic and social settings consistent with the Islamic principles. However, the existing environment of Pakistan is characterized by weak regulatory framework, weak property rights, and weak judicial system. Thus, participatory financing schemes are prone to the agency problems including asymmetric information, adverse selection, and moral hazards besides several other inherent problems. Therefore, Islamic banks have introduced new variants of *Musharakah* through adaptation in the pure *Musharakah*. Moreover, they have devised alternative mechanisms to cope with these constraints and increase the viability of participatory financing.

Islamic banks are currently offering *Musharakah* financing to reliable clients for secure projects only. Moreover, they have devised extensive mechanisms for the assessment and mitigation of the underlying risks particularly the agency problems including asymmetric information, adverse selection, and moral hazards. These strategies have enabled Islamic banks to mitigate the inherent risks in the *Musharakah* based financing, and apply it in several key areas including SMEs financing, corporate finance, government commodity operations financing, and consumer financing. These findings are consistent with the view of Nouman et al. (in press) that adaptation allows the Islamic banks to increase the viability of participatory financing and reduce their reliance on the current regulatory and legal framework for disputes resolution and protection of their property rights.

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