

DETERMINANTS OF ROI IN MUDARABAH & MUSHARAKAH CONTRACTS IN PAKISTAN: AN APPRAISAL

Sara Zafar*

Universiti Sains Malaysia (USM)

Eliza Nor

Universiti Sains Malaysia (USM)

ABSTRACT

This study attempts to analyze the impact of agency cost, risk, monitoring cost and taxation on ROI in Mudarabah and Musharakah contracts in Pakistan. The data for this study were collected from annual reports of twenty-three Mudarabah companies in Pakistan, listed in Pakistan Stock Exchange, during the period 2011-2015. The results of panel data analysis indicate that for both Mudarabah and Musharakah contracts, agency cost show a positive and significant impact on ROI while monitoring cost has a negative and significant relationship with ROI. The positive relationship between agency cost and ROI could be due to the fact that the managers who are responsible in the project management are also having a stake in the project in the form of equity. As for Mudarabah contract, risk also plays a significant role in affecting ROI, indicating that Mudarabah contract is riskier than Musharakah contract, as in the former the capital provider does not involve in the management of the project. Monitoring cost has a negative impact on ROI as increasing monitoring cost could increase the overall cost of the project and hence reduces ROI. There is no significant impact of taxation on ROI for both contracts, implying that most of Mudarabah companies in Pakistan distributed ninety percent of their net income to shareholders in the form of dividends to be eligible for tax exemption.

Keywords: Mudarabah, Musharakah, Return on investment, Agency cost, Risk, Monitoring cost, Taxes.

Received: 8 July 2018

Accepted: 9 September 2019

1. INTRODUCTION

There are two types of contracts in Islamic finance; partnership contracts and non-partnership contracts (Sundararajan & Errico, 2002; ElGindi, Said, & Salevurakis, 2009; Nauman & Ullah, 2014). Non-partnership contracts are debt-based contracts that allow fixed return on investment, while partnership contracts are equity-based in nature that works on the paradigm of profit and loss sharing (PLS). They allow the investors to earn profits on their investment, if they are willing to bare losses in case of failure (Bacha, 1997; Aggarwal & Yousef, 2000). Islamic partnership contracts are designed in accordance with Shariah law. The risk and reward allocation and the

*Corresponding Author: Sara Zafar, School of Management, Universiti Sains Malaysia, 11800 USM, Penang Malaysia; Email: sarazaffar@gmail.com Tel: +60 17 5985910

distribution of duties and responsibilities among the parties involved are all implemented by the social and ethical standards of Shariah (Hearn, Piesse, & Strange, 2012; Nauman & Ullah, 2014).

Partnership contracts in Islamic finance is based on the concept of profit-loss sharing. It works on the principle of the return on investment, as the *rabul-mal* provides the capital and the entrepreneur puts in his efforts and if the business is successful, the profits in return for the investment capital are shared between the parties (Sapuan, 2016).

Mudarabah and Musharakah contracts are two partnership-based contracts in Islamic finance. Mudarabah contract is a type of partnership between the capital provider (*rabul-mal*) and the entrepreneur (*mudarib*). The profits earned from the project are shared between both the parties at a pre-determined ratio. But in case of failure, the loss is borne completely by the capital provider. The *mudarib* is not liable for losses because he invests his labor and expertise, except in the cases of misconduct (Rahman, 2007). On the other hand, Musharakah is a partnership contract where more than one investor come together and jointly contribute the capital in a business venture (ElGindi *et al.*, 2009). The capital providers can participate in the management of the project. The profits earned are distributed at a pre-agreed ratio, while the losses are borne by all the partners according the proportion of their capital contribution (Febianto, 2009).

Experts have conceded that Islamic partnership contracts are the ideal mode of financing and they truly represent the spirit of Islamic finance (Dusuki, 2007; Ahmad, 2000). Hence partnership contracts should dominate Islamic banks and institutions. However, in reality when it comes to investment, Islamic institutions avoid partnership contracts and they heavily rely on Shariah compliant non-partnership contracts because they provide fixed return on investment (Nauman & Ullah, 2014).

The major reason why Islamic partnership contracts are so unpopular among the investors is because of their low return on investment. Return on investment (ROI) can be considered as the profits earned on an investment, after the deduction of all the expenses. ROI is used to measure the efficiency of a project. In Mudarabah and Musharakah contracts, the return on investment is the profit earned by the business venture. As they are equity-based contracts, they do not offer fixed return on the investment.

This makes Islamic partnership contracts extremely risky and less preferable because conventional finance, offer debt contracts which provide capital protection and fixed return on the investment (Rosly & Zaini, 2008). An investor in the partnership contract must realize that Mudarabah and Musharakah contracts offer no security on the investment and there is a possibility of negative or no return (Mirakhor and Zaidi, 2007).

Many studies in the past have given different explanation as to why partnership contracts are underutilized. However, past literature remains scattered. Different studies focuses on different dimensions of the issue (Nauman & Ullah, 2014) and they do not offer a clear solution to reduce the problem (Jouaber & Mehri, 2012).

Most literature discusses the factors affecting the returns on investment in Mudarabah and Musharakah contract are theoretical or conceptual in nature. There is very minimal empirical

literature that discusses the impact of agency cost, risk, monitoring cost and taxation which could greatly affect ROI of these contracts.

Therefore, the present study attempts to fill up the gap in the literature by providing empirical evidence on the determinants of ROI in Mudarabah and Musharakah contracts with focus on Pakistan. The present study will also provide a clear view on how these determinants affect ROI of Mudarabah and Musharakah contracts and offers recommendations on how these issues should be resolved.

1.1. Background Of Mudarabah Companies in Pakistan

Mudarabah companies were established in Pakistan in 1984, when the Islamic Ideology Council came up with the idea of Islamic partnership companies in order to Islamize Pakistan's economy. These companies are governed with Mudarabah Companies and Mudarabah Floatation and Control Ordinance 1980 (Khan, 1996; Hasan, Mikail & Afirin, 2011). They are purely Shariah compliant companies and offer Islamic financing contracts like Musharakah, Murabaha, Ijarah, Istisna and Salam.

The total number of Mudarabah companies at one time went up to as high as fifty two, but as of 2016, they have reduced to only twenty five. Low return on investment as one of the reasons why almost half of these companies failed (Kazmi, 2014). After the initial success of these companies, most of the Mudarabah companies failed to reward risk and to increase the wealth of the investors as compared to banks. Moreover, their performance is also found lower than the average Karachi Stock Exchange (KSE) returns (Asghar and Afzal, 2013).

The main aim of Mudarabah companies in Pakistan is to engage in activities that will maximize return on investment through Shariah mode of financing for Certificate holders of the Mudarabah. Even though some of these companies in Pakistan continue to improve their performance, but most of the others are just struggling to remain afloat. In the year 2009, total assets of Mudarabah companies shrank to Rs23.1 billion from Rs28.6 billion a year earlier (Aazim, 2013).

In Pakistan, the majority of Islamic financing contracts is not through profit-loss sharing contracts. Instead, Murabahah and Ijarah contracts are more preferred by customers. They constitute of forty three and twenty four percent of total Islamic financing contracts. The pure profit and loss sharing (partnership) contracts, Mudarabah and Musharakah, constitute a very small fraction of the market, that is, only two and one percent, respectively (Baele, Farooq & Ongena, 2014).

1.2. The Issues

Even though the Islamic partnership contracts fits perfectly into the spectrum of Islamic finance and Islamic economic scholars constantly encourage and support them, but Islamic banks and other financial institutions are hesitant in adopting these contracts as their main investment scheme.

The State Bank of Pakistan reported in their financial stability review that the major reason why Islamic banks and financial institutions are reluctant to undertake partnership contracts as modes of financing is agency problem and the presence of asymmetric information. Since the partnership contracts are based on the paradigm of principal and agent, hence they are open to agency problem.

These situations occur when there is an imbalance of information, between the principal and the agent, which is caused by asymmetric information. This problem arises when the principal, who provides the capital, has no part in the management of the project and therefore has less information as compared to the agent, who is running the project and has all the inside information associated with the risk and return of the project.

Asymmetric information further affects partnership contracts by creating adverse selection and moral hazards. Adverse selection may occur before the project starts where the agent can hide information about his abilities to carry out the project and the risk associated with it and moral hazard occurs during the project, when the agent takes unnecessary risks or acts in his own self-interest by using firm's resources and increasing the firm's value and acting in the best interest of the principal are not his/her top priority. This conflict of interest between the principle and the agent could have a negative impact on the ROI of the firm.

Since Mudarabah and Musharakah contracts involve agency problem, it becomes necessary to closely monitor the activities of the managers. Besides, these contracts are equity-based in nature and hence they are considered extremely risky as they offer no fixed returns on investment. Monitoring the daily activities of the manager is necessary to reduce the chances of failure if the manager lacks experience in managing the project.

Lack of support from the government, in terms of incentives and tax exemptions are considered another major obstacle in the application of Mudarabah and Musharakah contracts (Mutalip & Lutfi, 2009). Unfair tax treatment and legal discrimination against profit-loss sharing contracts force Islamic banks and other financial institutions to opt for non-partnership contracts. The tax-exempt status of Mudarabah companies in Pakistan was lifted in early 1992, which made the income earned on these contracts taxable. Since Mudarabah and Musharakah are equity-based contracts and dividend income is taxable income, the withdrawal of the tax-exempt status of these companies could serve a negative impact on the ROI of these companies.

The major issues associated with the underutilization of Mudarabah and Musharakah contracts are their risky nature, agency problem and unfair tax treatment by the government which cause uncertainty in the return on investment. However along with all these issues there are some internal problems that make the investor hesitant to invest their capital in the Islamic partnership and investment firms. These issues are related to the increased monitoring cost and lack of proper management which induce more risk.

2. LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

The following paragraphs present the literature review on the factors that affect ROI of Mudarabah and Musharakah contracts and the development of the hypotheses for the study.

2.1. Agency Problem

The failure of the application of Mudarabah and Musharakah (profit and loss sharing) contracts is due to the serious agency problem which leads to moral hazards and adverse selection (Khan, 1985; Haque and Mirakhor, 1986; Bashir, 1996; Bashir, 2001; Al-Jarhi, 2004; Jouaber & Mehri, 2012).

Islamic partnership contracts involve a principal and an agent; therefore conflict of interest may arise between both the parties. There are cases when the agent might have other interests and maximizing the firms value is not their top priority, in these cases the entrepreneur do not put their best efforts in the project (Samadzadeh & Melande, 2012).

Sarker (2000) stated that the unfaithful behaviors of the entrepreneur about not reporting the outcome of the project accurately is the main cause of asymmetric information in Mudarabah contracts. Later it was discovered that equity contracts are favored by the entrepreneurs with below average profit over debt contracts to minimize loss in case of failure (Iqbal & Lewis, 2009; Sapuana, 2016). There are only 20% of the projects being financed by PLS contracts in Islamic banks worldwide because of the insufficient information about the entrepreneur, their background and their capabilities (Jouaber & Mehri, 2012). Based on the above literature discussion, the following hypothesis is developed.

H_1 There is a negative relationship between agency cost and ROI in Mudarabah and Musharakah contracts in Pakistan.

2.2. Risk

Among all of the modes of financing in Islamic finance, profit loss sharing (PLS) contracts are considered the most risky ones (Jouaber & Mehri, 2012). The lack of PLS contracts is basically due to the high risks arising by the application of Islamic partnerships. High risk associated with PLS contracts are due to the following factors; agency relationship, equity-based in nature, credit risk, liquidity risk and operational risk. These risks contribute to the uncertainty in the ROI of Mudarabah and Musharakah contracts. Investors would require higher reward for taking higher risk. Based on the above argument, the following hypothesis is developed.

H_2 There is a positive relationship between risk and ROI in Mudarabah and Musharakah contracts in Pakistan.

2.3. Monitoring Cost

Agency problem in Islamic partnership contracts arise from information asymmetry between the parties (principal and agent/manager) involved in the contract and further give rise to higher monitoring cost (Bacha, 1997; Jouaber & Mehri, 2012). Monitoring is a mechanism that can be used to align the incentives of the principal and the managers (Kuypers, 2011). In order to reduce agency problem, intensive monitoring is required to keep in check the activities of the managers, to reduce information asymmetry and to prevent the agents from taking unnecessary risk.

Hence Islamic partnership contracts require costly monitoring, which overall increases the cost of the project and has a negative impact on the return on investment. Islamic banks and other institutions are reluctant to use partnership contracts because they would have difficulty in monitoring their investment (Hooker, 2013).

Based on the above literature discussion, the following hypothesis is developed.

H_3 There is a negative relationship between monitoring cost and ROI in Mudarabah and Musharakah contracts in Pakistan.

2.4. Taxes

Partnership contracts face unfair tax treatment which is considered a major obstacle in the use of profit-loss sharing contracts. Interest is tax exempted on the grounds that it adds up as a cost item, while the profits earned are taxed. This legal discrimination in equity and debt financing creates further problems like tax evasion, which makes profit-loss sharing contracts less reliable tool for reward sharing. This argument is quite true in the case of Mudarabah companies in Pakistan, as these companies showed an impressive growth till 1992 when the government withdrew their tax-exempt status (Dar & Presley, 2000). Lack of support from the government, in terms of incentives and tax exemptions are considered a major obstacle in the application of Mudarabah and Musharakah contracts (Mutalip & Lutfi, 2009). Based on the above literature discussion, the following hypothesis is developed.

H_4 There is a negative relationship between **tax rates** and ROI in Mudarabah and Musharakah contracts in Pakistan.

3. DATA AND METHODOLOGY

3.1. Data

Data will be collected from the annual reports of Mudarabah companies listed in the Pakistan Stock Exchange (PSX). The details of the companies are summarized in Table 1. As of 2016, the total number of Mudarabah companies listed in PSX is twenty five. However, only twenty three companies are selected through purposive sampling technique. Two companies were excluded from the study as they are relatively new and/or they do not offer Musharakah contract. Secondary data from the year 2011 to 2015 will be extracted from the annual reports of these companies to analyze the effects of agency cost, risk, monitoring cost and tax rate on the ROI of Mudarabah and Musharakah contracts. Panel data techniques will be utilized to analyse the effect of the independent variables on ROI. The appropriate model, either the fixed effect or the random effect model, will be selected after Hausman test is performed.

Table 1 lists down the Mudarabah companies listed in PSX, Islamic contracts they offer and the year of their establishment.

Table 1: Mudarabah Companies in Pakistan

No.	Company	Islamic Contracts Offered	Year
1	BRR Guardian Modaraba	Musharakah, Murabahah & Ijarah	1984
2	First Elite Capital Modaraba	Musharakah, Murabahah & Ijarah	1989
3	First Fidelity Leasing Modaraba	Musharakah, Murabahah & Ijarah	1995
4	First Habib Modaraba	Musharakah, Diminishing Musharakah, Murabahah, Ijarah, Salam and Istisna	1986
5	First IBL Modaraba	Musharakah, Murabahah & Ijarah	1989
6	First National Bank Modaraba	Musharakah, Murabahah & Ijarah	2003
7	First Punjab Modaraba	Musharakah, Murabahah & Ijarah	1992

No.	Company	Islamic Contracts Offered	Year
8	Trust Modaraba	Musharakah, Murabahah & Ijarah	1996
9	BF Modaraba	Musharakah, Murabahah & Ijarah	1989
10	Crescent Standard	Musharakah, Murabahah & Ijarah	1990
11	First Al-Noor Modaraba	Ijara, Murabaha, Musharakah, Musawamah	1992
12	First Equity Modaraba	Musharakah & Murabahah	1991
13	First Imrooz Modaraba	Musharakah & Murabahah	1993
14	Allied Rental Modaraba	Musharakah, Murabahah & Ijarah	2007
15	First UDL Modaraba	Musharakah, Murabahah & Ijarah	1991
16	KASB Modaraba	Musharakah, Diminishing Musharakah, Murabahah & Ijarah	1990
17	First Prudential Modaraba	Musharakah, Diminishing Musharakah, Murabahah & Ijarah	1989
18	First Pak Modarabah	Musharakah, Diminishing Musharakah, Murabahah, Ijarah, Salam and Istisna	1991
19	Modaraba Al-Mali	Musharakah, Murabahah & Ijarah	1987
20	Standard Chartered Modaraba	Musharakah, Murabahah & Ijarah	1987
21	UniCap Modaraba	Musharakah, Murabahah, Ijarah, Salam and Istisna	2005
22	Popular Islamic Modaraba	Musharakah, Murabahah, Ijarah, Salam and Istisna	1994
23	First Paramount Modaraba	Musharakah, Diminishing Musharakah & Murabahah	1992
24	First Tree Manufacturing Modaraba*	Murabaha & Ijarah	2005
25	Sindh Modaraba**	Diminishing Musharakah, Murabahah, Ijarah, Salam and Istisna	2015

Note: * & ** indicate companies that are not included in this study. First Tree Manufacturing does not offer Musharakah contract and Sindh Modaraba is a new company and the data required for this study are not available for this particular company.

3.2. Empirical Model

This section shows the empirical models of this study. The first model is the basic model which includes all the basic independent variables, while the second model is the extended model where four additional variables, the agency cost, risk, monitoring cost and taxes are included in the model.

Basic Model

$$ROI_{it} = \alpha + \beta_1 SZ_{it} + \beta_2 AGE_{it} + \beta_3 FL_{it} + \varepsilon_{it}$$

Extended Model

$$ROI_{it} = \alpha + \beta_1 SZ_{it} + \beta_2 AGE_{it} + \beta_3 FL_{it} + \beta_4 AC_{it} + \beta_5 R_{it} + \beta_6 Ln(MC)_{it} + \beta_7 Ln(T)_{it} + \varepsilon_{it}$$

Where *ROI* is ROI of Mudarabah/Musharakah contract; *SZ* is size of the firm; *AGE* is age of the firm; *FL* is financial leverage; *AC* is agency cost; *R* is risk; *MC* is monitoring cost, logged; *T* is

taxes (logged); α is a constant; β_1 - β_7 are the coefficient parameters; i stands for firm i ; and t stands for the year t .

ROI of Mudarabah contracts will be calculated by dividing net profit by total investment in assets. This measure is consistent with the measurement used in the previous studies (Alazzam, 2014). While ROI of Musharakah contracts will be measured using Musharakah profits, because Musharakah contract is one of the contracts offered by Mudarabah companies, so profits of Musharakah contract will be an appropriate measure to calculate its ROI, as suggested by Drury & Shishini (2005). Total assets will be used as a proxy to measure total investment, which is based on the study by Touny & Shusha (2014).

As for the independent variables; first, asset turnover ratio is a very popular measure for agency cost and is used in several previous studies, for instance, Johan (2002); Li & Cui (2003); Nyaboga (2008) and Sarwar & Khan (2015). This ratio measures how effectively the firm's management deploys its assets. In this ratio, agency costs are inversely related to the sales-to-asset ratio. These costs arise because the manager, who makes poor investment decisions, exerts insufficient effort which results in lower revenues and/or consumes executive perquisites (James, Rebel & James, 2000). The ratio is calculated by dividing annual sales with total assets. The higher the ratio, the lower the agency cost.

Second, earning variability is used as a proxy for risk. Earnings variability is considered as the fluctuation in a company's net income or earning per share over a given period (Ball & Brown, 1969; Hill & Stone, 1980; Langemeier, 2015). Therefore, earning variability is considered as an appropriate measure for risk. Third, for the cost of monitoring, past literature suggests that the sum of auditing fee and directors' remunerations is the appropriate measure for this variable (Mustapha, 2014). This formula will be used to calculate the monitoring cost for Mudarabah contract. Monitoring cost for Musharakah contract will be calculated by dividing the sum of auditing cost and directors' remunerations with Musharakah revenue because Musharakah contracts is one of the contracts offered by Mudarabah companies, so the total cost is divided by the contract's revenue, as suggested by Merchant (1998) and Drury and Shishini (2005). Fourth, the amount of tax paid by the firm will be extracted from the income statement of the respective companies.

For the basic model, the common variables included are firm size, age of the firm and financial leverage. Previous literature uses the log of total assets to measure the size of the firm (Harford, 1999; Graham, Li, and Qiu, 2012). The size of the firm can have a positive impact on the performance of the firm when firm is able to reduce costs through economies of scale (Chandler, 1962). On the other hand, big firms may have problems adapting to the new technology due to bureaucracy and operational inflexibilities, therefore their large size give a negative impact on their performance (Tripsas and Gavetti, 2000; Touny and Shusha, 2014). Therefore, firm size can have a positive or negative impact on ROI.

The age of the firm is measured as the number of years elapsed since the year of the company's IPO (Shumway, 2001). Age of the firm may influence a firm in their efficiency in adapting to changing environment and adopting to new technology (Vassilakis, 2008; Touny and Shusha, 2014). It is expected that age of the firm will have a positive impact on ROI. Financial leverage is measured by calculating the firm's debt to equity ratio (VO & Phan, 2013). Financial leverage refers to the effects in earning profits on the net profit, as it results in the firm

bearing fixed financial cost, such as dividends of preferred stocks, bond payments and interest. It may have a positive or a negative impact on the ROI of a firm, and this impact depends on the firm's ability to use its resources efficiently and effectively.

The summary of variable measurement is presented in Table 2 below.

Table 2: Summary of Variable Measurement

Variable	Proxy	Measurement
<i>ROI</i>	Return on Investment Ratio	(Net Profit/Total Investment in Assets) × 100
<i>Agency Cost</i>	Asset Turnover Ratio	Annual Sales/Total Assets
<i>Risk</i>	Earnings Variability	Standard deviation of company's EPS for the previous 5 years
<i>Monitoring Cost</i>	Total Monitoring Cost (MD)	Log(Sum of Auditing Fee and Directors' Remunerations)
<i>Monitoring Cost</i>	Total Monitoring Cost (MS)	(Sum of Auditing Fee and Directors' Remunerations)/Musharakah Revenue
<i>Taxation</i>	Taxation	Log (Amount of Tax paid by the firm)
<i>Firm's Size</i>	Log of Total Assets	Log (Total Assets)
<i>Firm's Age</i>	Age of Firm	Number of years elapsed since the year of the company's IPO
<i>Financial Leverage</i>	Financial Leverage ratio	Total Debt / Total Equity

4. EMPIRICAL RESULTS AND DISCUSSION

This section discusses the empirical results for both Mudarabah and Musharakah contracts, which include the descriptive statistics of the variables and followed by the discussion of the results based on panel data analysis.

4.1. Descriptive Statistics

Table 3 displays the descriptive statistics for all variables employed in this study for Mudarabah and Musharakah contracts in Pakistan. The average return on investment from the total investment made by Mudarabah Companies in Pakistan is 5.29%. Which means 5.29% of the total investment invested by Mudarabah Companies in Pakistan generates efficient profitability. The minimum and the maximum value of the ROI ratio are 0.03% and 21% respectively. This implies that, to the minimum 0.03% of the total investment invested by the Mudarabah companies in Pakistan, generates efficient profitability and the maximum goes up to 21% of the total investment. The standard deviation of 4.33 indicates a wide variation in ROI among sampled Mudarabah companies.

Table 3: Descriptive Statistics of Variables (Mudarabah)

Variables	No. of Observations	Mean	Median	Max.	Min.	Std. Dev.
ROI	115	5.2979	4.2200	21.0300	0.0300	4.3315
Agency Cost	115	0.2021	0.1684	0.6164	0.0253	0.1289
Risk	115	0.7707	0.6600	3.1891	0.0000	0.6911
Monitoring Cost	115	6.7586	6.8034	7.6562	5.4771	0.4436
Taxes	115	3.2669	4.6021	7.5148	0.0000	2.8180
Firm's Size	115	8.6514	8.5753	9.8351	6.2856	0.7014
Firm's Age	115	20.7391	22.0000	31.0000	4.0000	5.8731
Financial Leverage	115	1.6819	0.3300	44.4300	0.0000	4.6042

Table 4 below reveals that, the average return on investment from the total investment made by Mudarabah companies in Pakistan for Musharakah contracts is 15.53%. Which means that 15.53% of the total investment invested in Musharakah contracts by Mudarabah Companies in Pakistan generates efficient profitability, which is comparatively better than Mudarabah contracts. The minimum and the maximum value of the ROI ratio are 0.00% and 66.87% respectively. This implies that, to the minimum 0.00% of the total investment invested in Musharakah contracts by the Mudarabah companies in Pakistan, generates efficient profitability and the maximum goes up to 66.87% of the total investment. The standard deviation of 11.38 indicates a wide variation in ROI among the Musharakah contracts.

Table 4: Descriptive statistics of variables (Musharakah)

Variables	No. of Observations	Mean	Median	Max	Min	Std. Dev.
ROI	115	15.5364	14.0000	66.8700	0.0000	11.3806
Agency Cost	115	0.59305	0.1726	11.7833	0.0000	1.7097
Risk	115	0.08666	0.0560	0.6229	0.0000	0.1093
Monitoring Cost	115	1.1491	0.6215	11.4286	0.0000	1.6758
Taxes	115	3.2668	4.6021	7.51481	0.0000	2.8180
Firm's Size	115	8.6513	8.5753	9.8351	6.2856	0.7014
Firm's Age	115	20.7391	22.0000	31.0000	4.0000	5.8731
Financial Leverage	115	1.6819	0.3300	44.4300	0.0000	4.6042

4.2. Results of Panel Data Analysis

Prior to performing the panel data analysis, Hausman test was performed to identify the best model for both Mudarabah and Musharakah contracts. Based on the Hausman test results, random effect model is selected for both contracts. The results of the panel data analysis (random effect) will be discussed in the subsequent paragraphs.

Table 5: Results of Regression Model for Mudarabah (Random Effects)

Variable	Coefficient	Std. Error	t- Statistics	Prob.
<i>Constant</i>	21.3886	8.0930	2.6429	0.0095
<i>AC</i>	17.9310	3.6934	4.8548	0.0000***
<i>R</i>	1.3486	0.6330	2.1307	0.0354**
<i>Ln(MC)</i>	-4.4249	2.1696	-2.0396	0.0439**
<i>Ln(T)</i>	-0.0424	0.1415	-0.2994	0.7652
<i>SZ</i>	1.3134	1.3350	0.9839	0.3274
<i>AGE</i>	-0.1009	0.0934	-1.0804	0.2824
<i>FL</i>	0.0120	0.0854	0.1404	0.8886
R – squared	0.2645		F – statistic	5.4981
Adjusted R – squared	0.2164		Prob (F – statistic)	0.0000
Durbin – Watson stat	1.8228			

Note: *** and ** indicate significant at 1% and 5% levels, respectively. *AC* is Agency Cost, *R* is Risk, *Ln(MC)* is Monitoring Cost, Logged; *Ln(T)* is Taxation, Logged; *SZ* is size of the firm, *AGE* is age of the firm and *FL* is financial leverage.

Based on the results presented above, the empirical equation of Mudarabah contracts for this study is presented below:

$$ROI_{it} = 21.39 + 17.93AC_{it} + 1.34R_{it} - 4.42MC_{it} + \varepsilon_{it}$$

Agency cost, risk and monitoring cost have a significant relationship with ROI, whereas taxes has no significant impact on ROI. This implies that taxes does not affect ROI of Mudarabah contracts as per the model. Furthermore, none of the basic independent variables (firm's size, age and financial leverage) are statistically significant.

The result disclosed that, agency cost and risk have a positive relationship with ROI, while monitoring cost shows a negative impact on ROI. This means that 1 unit increase in Agency Cost or Risk will increase the ROI by 17.93 units or 1.34 units respectively, keeping all the other independent variables constant. While 1 unit increase in Monitoring Cost will decrease the ROI by 4.42 units, keeping all the other independent variables constant.

Table 6: Results of Regression model for Musharakah (Random Effects)

Variable	Coefficient	Std. Error	t- Statistics	Prob.
<i>Constant</i>	16.4309	23.1067	0.7112	0.4786
<i>AC</i>	2.3006	0.6932	3.3187	0.0012***
<i>R</i>	11.4950	10.4313	1.1020	0.2729
<i>MC</i>	-1.6016	0.4800	-3.3370	0.0012***
<i>Ln(T)</i>	-0.3030	0.3359	-0.9021	0.3690
<i>SZ</i>	-0.7491	2.6950	-0.2779	0.7816
<i>AGE</i>	0.2905	0.2716	1.0694	0.2873
<i>FL</i>	0.0188	0.1952	0.0963	0.9235
R – squared	0.2286		F – statistic	4.5300
Adjusted R – squared	0.1781		Prob (F – statistic)	0.0002
Durbin – Watson stat	2.0234			

Note: *** indicate significant at 1% level. *AC* is Agency Cost, *R* is Risk, *Ln(MC)* is Monitoring Cost, Logged; *Ln(T)* is Taxes, Logged; *SZ* is size of the firm, *AGE* is age of the firm and *FL* is financial leverage.

Based on the results presented in Table 6 above, the empirical equation of Musharakah contracts is derived as:

$$ROI_{it} = 16.43 + 2.30AC_{it} - 1.60MC_{it} + \varepsilon_{it}$$

For Musharakah contract, only two variables; agency cost and monitoring cost, are statistically significant at 1% level while risk and taxes are not statistically significant. This implies that Risk and Taxation do not affect ROI of Musharakah contracts as per the model. Moreover, none of the basic determinants; Firm's size, age and financial leverage, are statistically significant with the dependent variable, ROI.

As in Mudarabah contract, agency cost has a positive coefficient while monitoring cost has a negative coefficient. This means that 1 unit increase in Agency Cost will increase the ROI by 2.30 units, keeping all the other independent variables constant. Whereas, 1 unit increase in Monitoring Cost will decrease the ROI by 1.60 units, keeping all the other independent variables constant. There will be no effect of Risk and Taxes on ROI, as they are not statistically significant.

4.3. Discussion of Findings

4.3.1. Agency Cost

The result shows that agency cost has a positive and significant relationship with ROI in both Mudarabah and Musharakah contracts. Even though the results state that agency cost is significant for both the contracts, this positive influence is not consistent with the existing literature, where studies found that the major obstacle in the application of Mudarabah and Musharakah financing is agency problem (Bashir, 2001; Al-Jarhi, 2004; Jouaber & Mehri, 2012). Whenever we talk about Islamic partnership, agency problems arising with these contracts, becomes a popular topic (Visser, 2009). This is because PLS contracts are based on the arrangement of principal and agent and hence they are prone to agency problem.

The positive relationship between agency cost and ROI could be related to the equity holding for both contracts. According to James, Rebel and James (2000), the impact of agency cost is inversely related to the shareholding of the managers. From this argument, it can be implied that if the manager is holding a high equity stake in the project, the agency cost would be reduced. There is a possibility that the managers who manage the project are also contributing capital to the project. To avoid failure of the project, the manager will manage and monitor the project closely to avoid incurring losses from the funds invested in the project.

Another explanation for the positive influence of agency cost in Mudarabah and Musharakah financing is explained in a study by Khan (1996). He explained that the PLS contracts in Islamic finance are trust contracts. The whole reason behind creating Shariah based contracts is trust, honesty and goodwill between the two parties and if this concept is followed then the honest entrepreneurs will force dishonest entrepreneurs out of the market.

4.3.2. Risk

For risk, the results indicate that Mudarabah financing is riskier than Musharakah financing, because risk has a positive and significant relationship with Mudarabah, while it is not significant for Musharakah contracts. This is because Mudarabah contracts has only one capital provider and all the losses are borne by him alone, whereas Musharakah has more than one capital providers and the losses and risks are diversified between them. This high risk associated with Mudarabah contracts were proven in a study by Rahman & Shifa, (2016).

Another reason why ROI of Musharakah contracts is unaffected by risk in Musharakah contract is because unlike Mudarabah, the capital providers of Musharakah are allowed to take part in the activities of the project. Their involvement in the project reduces asymmetric information and moral hazards, as they have access to inside information and they can prevent the entrepreneur from taking unnecessary risk.

4.3.3. Monitoring Cost

Monitoring cost has a negative and a significant relationship with both Mudarabah and Musharakah contracts. The results are consistent with the findings from past researchers where most of them found that monitoring cost has a negative effect on Mudarabah and Musharakah contracts. For instance Mirakhor & Zaidi (2007) stated that agency cost gives rise to high monitoring cost, which decreases the demand of Mudarabah contracts. As for Musharakah contracts, the decrease in the demand of these contracts is due to high monitoring cost, which was shown in a study by Muhammad, (2014).

Mudarabah companies in Pakistan may use extensive monitoring to overcome issues like, agency problem and asymmetric information. This may have reduced agency cost, but it has given rise to high monitoring cost. This issue is more magnified in Mudarabah contracts, than in Musharakah contracts. Because as mentioned above, in Musharakah, the finance provider can take part in the management of the project, while in Mudarabah the capital provider is not allowed to play any part in the management of the venture.

4.3.4. Taxes

The results indicate that taxes is not significant for both Mudarabah and Musharakah contracts in Pakistan. Unfair tax treatment is the intention behind this argument, but the results of this study states that taxes do not affect ROI of Mudarabah and Musharakah financing in Pakistan. This can be explained by the government law, which states that the Mudarabah companies in Pakistan are exempted from the corporate tax if they distribute 90% of their profits as dividends. Generally by law, all the Mudarabah companies in Pakistan are subject to 25% income tax on their corporate income, like other companies (Khan, 1996). To avoid paying high taxes, Mudarabah companies in Pakistan distribute 90% of their profits as dividends, and hence they are tax exempted.

4.4. Summary of Hypothesis Testing

Tables 7 and 8 below summarizes the results of hypothesis testing for Mudarabah and Musharakah contract. For Mudarabah contract, H1-H3 are supported. For Musharakah contract, only H1 and H3 are supported.

Table 7: Hypothesis Testing (Mudarabah)

H₁	There is a relationship between agency cost and ROI in Mudarabah contracts in Pakistan.	Supported
H₂	There is a positive relationship between risk and ROI in Mudarabah contracts in Pakistan.	Supported
H₃	There is a negative relationship between monitoring cost and ROI in Mudarabah contracts in Pakistan.	Supported
H₄	There is a negative relationship between tax rates and ROI in Mudarabah contracts in Pakistan.	Not Supported

Table 8: Hypothesis Testing (Musharakah)

H₁	There is a relationship between agency cost and ROI in Musharakah contracts in Pakistan.	Supported
H₂	There is a positive relationship between risk and ROI in Musharakah contracts in Pakistan.	Not Supported
H₃	There is a negative relationship between monitoring cost and ROI in Musharakah contracts in Pakistan.	Supported
H₄	There is a negative relationship between tax rates and ROI in Musharakah contracts in Pakistan.	Not Supported

In summary, it can be concluded that there is a significant relationship between ROI of Mudarabah contracts in Pakistan with agency cost, risk and monitoring cost. Whereas there is no relationship between ROI of Mudarabah contracts in Pakistan and taxes.

For Musharakah contract, it can be concluded that there is a significant relationship between ROI of Musharakah contract with agency cost and monitoring cost. While there is no relationship between ROI of Musharakah contracts in Pakistan with risk and taxes.

5. CONCLUSION

Islamic institutions rely on non-partnership contracts for investment purposes because partnership contracts, Mudarabah and Musharakah have serious practical issues. These include agency cost, risk, monitoring cost and taxes. The empirical results of this study reveal that agency cost has a positive relationship with ROI for both Mudarabah and Musharakah contracts. The positive relationship could be associated with the high equity stake of the manager in the project that they are managing. To avoid incurring losses for the project, the manager would ensure the project would earn reasonable return on investment. Monitoring cost has a negative and significant impact

on ROI for both contract, implying that proper monitoring of the activities of the managers also plays a significant role in the success of the project in generating positive ROI. One gap in the existing literature about Islamic partnership contracts is that it gives overwhelming attention to academia's point of view, while relatively ignoring the practitioners' viewpoint. Therefore, if the future studies can investigate practitioners' perspective, it will help them identify and better understand the issues surrounding these contracts. This could be a step towards economic growth and stability by playing a major role in promoting Islamic partnership contracts. Because partnership contracts are the most authentic modes of financing in Islamic finance and they should dominate Islamic banks and institutions.

ACKNOWLEDGEMENT

This paper is revised and rewritten based on the working paper presented at 12th Asian Academy of Management International Conference 2017 (AAMC 2017) that was held in Parkroyal Penang Resort, Batu Feringghi, Penang, Malaysia from 6th-9th October 2017.

REFERENCES

- Aazim, M. (2013). Modarabas over-invest in financial products. Retrieved from <https://www.dawn.com/news/1053876>.
- Aggarwal, R. K., & Yousef, T. (2000). Islamic banks and investment financing. *Journal of Money, Credit and Banking*, 32(1), 93-120.
- Ahmad, K. (2000). Islamic Finance and Banking: The challenge and prospects. *Review of Islamic Economics*, 9, 57-82.
- Al-Jarhi, M. A. (2004). Islamic banking and finance: Philosophical underpinnings. *Islamic Banking and Finance: Fundamentals and Contemporary Issues. Islamic Research and Training Institute, Seminar Proceedings Nr. 47: 13/25, Brunei*.
- Alazzam, F. A. (2014). Measuring the impact of some determinants of return on investment in industrial companies in Aqaba City. *Business Management and Strategy*, 5(2), 33.
- Asghar, A., & Afza, T. (2013). Efficiency of modaraba and leasing companies in Pakistan. *Middle-East Journal of Scientific Research*, 17(3), 305-314.
- Bacha, O. I. (1997). Adapting Mudarabah financing to contemporary realities: A proposed financing structure. *The Journal of Accounting, Commerce & Finance*, 1(1).
- Baele, L., Farooq, M., & Ongena, S. (2014). Of religion and redemption: Evidence from default on Islamic loans. *Journal of Banking and Finance*, 44(6), 141-159.
- Ball, R., & Brown, P. (1969). Portfolio theory and accounting theory. *Journal of Accounting Research* 7.
- Bashir, A. H. M. (1996). Investment under profit-sharing contracts: The adverse selection case. *Managerial Finance*, 22(5/6), 48-58.
- Bashir, A. (2001). Profit-sharing contracts and investment under asymmetric information. *Research in Middle East Economics*, 1, 173-186.
- Chandler, A. (1962). *Strategy and structure: Chapters in the history of industrial enterprise*. MIT Press: Cambridge, MA.
- Dar, H. A., & Presley, J. R. (2000). Lack of profit loss sharing in Islamic banking: Management and control Imbalances. *International Journal of Islamic Financial Services*, 2(2), 3-18.

- Drury, C., & El-Shishini, H. (2005). Divisional performance measurement: An examination of the potential explanatory factors. *The Chartered Institute of Management Accountants*.
- Dusuki, A. W. (2007). The ideal of Islamic banking: A survey of stakeholders' perceptions. *Review of Islamic Economics*, 11(Special Issue), 29-52.
- El-Gindi, T., Said, M., & Salevurakis, J. W. (2009). Islamic alternatives to purely capitalist modes of finance: A study of Malaysian banks from 1999 to 2006. *Review of Radical Political Economics*, 41(4), 516-538.
- Febianto, I. (2009). Risk Management in Mudharabah and Musharakah Financing of Islamic Banks. Available at SSRN: <http://ssrn.com/abstract=1672180> or <http://dx.doi.org/10.2139/ssrn.1672180>.
- Graham, J., Li, S., & Qiu, J. (2012). Managerial attributes and executive compensation. *Review of Financial Studies*, 25, 144-186.
- Harford, J. (1999). Corporate cash reserves and acquisitions. *Journal of Finance*, 54, 1969-97.
- Hasan, R., Mikail, S. A., & Afirin, M. (2011). Historical Development of Islamic Venture Capital: An Appraisal. *Journal of Applied Sciences Research*, 7(13), 2377-2384.
- Haque, N., & Mirakhor, A. (1986). Optimal Profit-Sharing Contracts and Investment. *IMF Working Paper, WP/86/12, IMF, Washington, DC*.
- Hearn, B., Piesse, J., & Strange, R. (2012). Islamic finance and market segmentation: Implications for the cost of capital. *International Business Review*, 21, 102-113.
- Hill, N., & Stone, B. (1980). Accounting betas, systematic operating risk, and financial Leverage: A risk composition approach to the determinants of systematic risk. *Journal of Financial and Quantitative Analysis* 15.
- Hooker, S. (2013). More than a matter of faith: The factors that Shape Islamic banking. *Department of Political Science Carleton College Northfield, Minnesota*.
- Iqbal, Z., & Lewis, M. K. (2009). An Islamic Perspective on Governance. *USA, Massachusetts: Edward Elgar Publishing Inc*.
- James S. A., Rebel A. C., & James W. L. (2000). Agency costs and ownership Structure. *Journal of Finance*, 55(1), 81-106.
- Johan, W. (2002). Ownership and Agency Cost. School of Economic and Commercial Law. Goteborg.
- Jouaber, K., & Mehri, M. (2012a). A theory of profit sharing ratio under adverse selection: The case of Islamic venture capital. Available at SSRN Electronic Journal. doi: 10.2139/ssrn.1928861.
- Jouaber, K., & Mehri, M. (2012b). Agency problems in venture capital contracts: Islamic profit sharing ratio as a screening device. Available at SSRN: <http://ssrn.com/abstract=2181416> or <http://dx.doi.org/10.2139/ssrn.2181416>.
- Kazmi, S. (2014). Pakistan: Investing in Modaraba Companies. <http://shkazmipk.com/pakistan-investing-in-modaraba-companies/>.
- Khan, W. M. (1985). Towards An Interest-free Economic System. *Islamic economic series, the Islamic foundation, Leicester, UK*.
- Khan, T. (1996). Practices and Performance of Mudarabah Companies: A case study of Pakistan's Experience. *Jeddah: Islamic Research and Training Institute, Islamic Development Bank, Research paper No. 37*.
- Kuypers, A. (2011). How is dealt with the agency problem and what is the role of the board of directors in it? <http://arno.uvt.nl/show.cgi?fid=129369>.
- Langemeier, M. (2015). Measuring Risk and Uncertainty. *Purdue University Center for Commercial Agriculture*.

- Li, H., & Cui, L. (2003). Empirical study of capital structure on agency cost of Chinese listed firms. *Nature and Science* 1(1), 12-20.
- Merchant, K. A. (1998). *Modern Management Control Systems: Text and Cases*. Prentice Hall, Upper Saddle River, New Jersey.
- Mirakhor, A., & Zaidi, I. (2007). Profit-and-loss sharing contracts in Islamic finance. In Hassan, M. K., & Lewis, M. K. (Eds.), *Handbook of Islamic Banking* (pp. 49-63): Edward Elgar Publishing.
- Muhammad, A. M. (2014). Critical analysis of some of the major internal hindrance factors in the application of Musharakah financing by the Islamic Banks. *International Journal of Education and Research* 2(9), 125-142.
- Mustapha, M. (2014). Monitoring Costs of Multinational Companies: An Agency Theory Perspective. *Asian Journal of Business and Accounting* 7(2).
- Mutalip, A., & Lutfi, A. (2009). Islamic Venture Capital and Private Equity: Legal Issues and Challenges. *Global Financial Services and Islamic Banking*, Azmi & Associates.
- Nauman, M., & Ullah, K. (2014). Constraints in the Application of Partnerships in Islamic Banks: The Present Contributions and Future Directions. *Business & Economic Review*, 6(2), 47-62.
- Nyaboga, E. K. (2008). Relationship between Capital Structure and Agency Cost for Companies Listed at the Nairobi Stock Exchange. <http://erepository.uonbi.ac.ke/>.
- Rahman, A. R. A. (2007). Islamic Microfinance: A Missing Component in Islamic Banking. *Kyoto Bulletin of Islamic Area Studies*, 1-2 (2007), 38-53.
- Rahman, A. A., & Shifa, M. N. (2016). Challenges of profit-and-loss sharing financing in Malaysian Islamic banking. *Malaysian Journal of Society and Space*, 12(2), 39 – 46.
- Rosly, S. A., & Zaini, M. A. M. (2008). Risk-return analysis of Islamic banks' investment deposits and shareholders' fund. *Managerial Finance*, 34(10), 695-707.
- Samadzadeh, N., & Melander, H. (2012). The Implications of Agency Theory on Mudarabah and Musharakah Agreements: A Comparison with Conventional Debt. *Stockholm School of Economics Department of Finance Thesis in Finance*.
- Sapuan, N. M. (2016). An Evolution of Mudarabah Contract: A Viewpoint from Classical and Contemporary Islamic Scholars. *Procedia Economics and Finance* 35, 349 – 358.
- Sarker, A. (2000). Islamic Business Contracts, Agency Problem and Theory of the Islamic Firm. *International Journal of Islamic Financial Services* 1(2).
- Sarwar, S., & Khan, M. K. (2015). Ownership of Blockholders and Agency Cost: Evidence from Pakistan. *Scholars Journal of Economics, Business and Management*, 2(4), 379-382.
- Shumway, T. (2001). Forecasting bankruptcy more accurately: A simple hazard model. *Journal of Business* 74, 101-124.
- Sundararajan, V., & Errico, L. (2002). Islamic Financial Institutions and Products in the Global Financial System: Key Issues in Risk Management and Challenges Ahead. *IMF Working Paper, WP/02/192*. Washington: International Monetary Fund.
- Touny, M. A., & Shusha, A. A. (2014). The determinants of the return of investment: An empirical study of Egyptian listed corporations. *Journal of Applied Finance & Banking*, 4(4), 127.
- Tripsas, M., & Gavetti, G. (2000). Capabilities, cognition, and inertia: evidence from digital imaging. *Strategic Management Journal*, 21(10-11), 1147-1161.
- Vassilakis, S. (2008). Learning by doing. In: *The New Palgrave Dictionary of Economics*: Steven, N. D., and Lawrence, E. B. (2 ed.): Palgrave Macmillan.
- Visser, H. (2009). *Islamic Finance: Principles and practice*. Edward Elgar Publishing, UK (2009).

Vo, D., & Phan, T. (2013). Corporate governance and firm performance: Empirical evidence from Vietnam. *Journal of Economics Development*. 218, 62-77.