



## **Role of Managerial Competencies and Risk-Taking Behavior in Financial Service Outreach of Microfinance Banks in Pakistan**

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### **Abstract**

This study aims to investigate the relationship between the managerial risk-taking, managerial competencies and financial service outreach of microfinance banks in Pakistan. Primary data was collected from 36 branches of microfinance banks (MFBs) in nine cities. The unit of investigation is the branch manager and senior credit officer of each MFB branch. Descriptive statistics, correlation and regression, are used for data analysis. This study found a positive relationship between financial service outreach of MFBs and managerial competencies; financial service outreach also has a positive relationship with the risk-taking behavior of managers. There is a positive relationship between risk-taking behavior and financial service outreach of banks. The risk-taking behavior partially mediates the relationship between the managerial competencies and financial service outreach. The magnitude of the relationship between managerial competencies and outreach is significant, and its magnitude reduces when there is the mediation of managerial risk-taking behavior between them. Thus, managerial competencies, along with risk-taking behavior are the keys drivers of financial service outreach of MFBs. This study informs MFB's top management and policymakers that competencies of managers and their calculated risk-taking propensities determined outreach performance of the MFBs.

**Keywords:** Micro-finance, managerial competencies, financial service outreach, Risk-taking behavior, mediating effect, Pakistan

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## INTRODUCTION

This study investigates the relationship between the managerial risk-taking, managerial competencies and financial service outreach of microfinance banks in Pakistan. Furthermore, this study also examines whether the relationship between managerial competencies and financial service outreach is mediated by the risk-taking behavior of managers.

Over the last two decades, the Pakistani microfinance sector has provided uncollateralized loans to mostly low income underserved rural population of the country who has no access to other formal financial services. For developing countries like Pakistan, poverty reduction, financial inclusion, and outreach are essential elements of concern. According to the annual report by Pakistan Micro finance Review, there are 5.5 million active borrowers in Pakistan, out of which 2.7 million are women. As of June 2018, there are 11 microfinance banks in Pakistan having 984 branches in different parts of the country. Recently Pakistani microfinance industry has experienced an all-round rapid growth. The industry witnessed a 27% growth in credit outreach, approx. 63 billion increase in gross loan portfolio (2017: PKR 200 Billion, 2016: 137 Billion) and a 31 percent growth in active borrowers, i.e. from 4.2 million in 2016 to 5.5 million in 2017 (Pakistan Microfinance Network, 2017).

The success of microfinance institutions (MFIs) is generally measured through the outreach of their financial services. The performance of outreach is assumed as the number of indigent clients served (Kereta, 2007). Outreach has two components, i.e. breadth and depth. The breadth of outreach is the number of borrowers getting loans, and the depth of outreach is the level of poverty of the people who have been offered small loan (Quayes & Hasan, 2014). An increase in outreach to the poor, i.e. depth will increase the financial performance of MFIs (Quayes, 2015). Recent research suggests that financial service outreach of the MFIs may be explained by the managerial competences and risk-taking behavior of the managers.

Managerial competencies are the characteristics that are required in managers for the excellent performance of the firm. Lee (2009) defined competency as “a cluster of related knowledge, attitudes, and skills that (1) affect a major part of one’s key roles or responsibilities; (2) correlate with performance on the job; (3) can be measured against well-accepted standards; and (4) can be improved via training and development.” Competencies are the set of behavior patterns of an individual that are required to perform a job with competence (Wodruffe, 1993). Managerial efficiency improves outreach; social and financial performance of MFIs and trade-off between outreach to the poor and efficiency of microfinance institutions.

Risk-taking behavior is defined as the decision-making behavior of an individual in risky situations, and it is characterised by the amount of risk involved in decision making (Sitkin & Weingart, 1995). The attitude towards risk-taking is varied from person to person. Some individuals are risk-takers while others are risk-averse. People behave differently to the risk when involved in decision making. The inefficient management practices, i.e. unable to meet the financial needs of poor

borrowers, combined with the low risk-taking attitude of managers, would result in lower financial service outreach of MFIs.

In developing countries, several studies have established that managerial efficiency improves outreach (e.g. Ssekakubo, Ndiwalana, & Lwanga (2014) and Nkundabanyanga, Opiso, Balunywa, & Nkote (2015) in Uganda, Mia & Chandran (2016) in Bangladesh. Whereas, others like (Cull, Demirgüç-Kunt & Morduch, 2007); Kaboski & Townsend (2012); Hermes, Lensink, & Meesters (2011) ; Bayai & Ikhide (2016) have investigated the social and financial performance of MFIs and trade-off between outreach to the poor and efficiency and financial performance of microfinance institutions. Similarly, another set of studies like Gohar & Batool (2015); Alman (2012) explored the impact of governance variables in both Islamic and conventional MFIs of Pakistan. Khan (2015) explored different internal and external factors and their impact on the credit constraints faced by the Pakistani microfinance sector. Among others, previous studies in Pakistan, Zulfikar (2017a, 2017b) focused women in microfinancing landscape, and Ahmad, Hussain, Umer, and Parveen (2017) looked at the efficiency of MFIs in Pakistan whereas Mohsin, Bashir and Tariq (2018) analyzed performance and outreach of Pakistani microfinance banks. However, the role of managerial competencies and risk-taking behavior in explaining financial service outreach of Pakistani microfinance banks has remained inadequately examined.

Therefore, this study aims at addressing this gap by analysing the mediating effect of risk-taking on the relationship between the managerial competencies and financial service outreach in Pakistan.

The rest of this paper is structured as follows: Section 2 explains the literature review and hypothesis development, followed by methodology in section 3. Section 4 explains the results, and finally, section 5 presents the conclusion.

## **LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT**

### **Managerial Competencies and Financial Service Outreach**

Due to the globalization and increase in the competitive pressures, the role of managerial competencies in improving organizational performance has become more important than ever. Regardless of organization type or industry, managerial competencies are essential for an organization's survival and sustainable growth. In today's world, organizational success is more because of competent human resources and less because of the material resources of an organization (Veliu & Manxhari, 2017). Competencies like leadership, problem-solving, strategic competence and the customer focus directly influence organizations performance (Hawi, Alkhodary, & Hashem, 2015). Furthermore, factors like "business knowledge", "spirit of competitiveness", and "dimensions of leadership" also significantly influence organizational performance (Jena & Sahoo, 2014).

Managerial competencies are critical for achieving organizational objectives. Veliu & Manxhari (2017) linked managerial competencies and performance for Kosovan SMEs, whereas using a sample of Ugandan commercial banks, Kamukama,

Kyomuhangi, Akisimire, & Orobia (2017) asserts that bank's competitive advantage is enhanced by managerial competencies and affect financial performance through competitive advantage. Similarly, Mufti (2016) confirmed the relationship between human resource competencies and organizational performance for a sample of Pakistani private commercial banks. Maryam, Alhabshi, & Abideen Adeyemi (2016) used MFIs types, i.e. banking or non-banking as a moderating variable while testing the relationship between intellectual capital and MFIs performance. Their results showed that in both non-banking and banking MFIs, intellectual capital is significantly related to microfinance institution's performance.

The primary purpose of a microfinance institution is to enable the poor by providing access to financial services, opportunities for building financial capacity and self-sufficiency. Without focusing on outreach, these objectives cannot be achieved. Therefore, among other performance measuring yardsticks, financial service outreach is an important one. It is expected that competent managers would increase financial service outreach of MFBs while maintaining profitability. Several studies have argued that there is a relationship between the competencies of managers and microfinance services outreach. Ssekakubo et al. (2014) reported a positive relationship between managerial competency and financial performance of saving, credit and cooperative societies of Uganda. Other studies like Kyereboah-Coleman & Osei (2008) measured expertise and competencies of the board of 52 MFIs of Ghana and showed that competencies of board members ( measured by the number of university graduates on the board) have a positive impact on financial service outreach. Mia & Chandran (2016) noted that 4.3 % of overall productivity improvement in Bangladeshi microfinance sector is mainly due to better managerial efficiency. Nkundabanyanga et al. (2015) found out a positive relationship between managerial competencies and financial service outreach among Ugandan MFIs.

The competent managers have relevant skills, domain knowledge and a positive attitude. These competencies can help the managers in making a proposal for donations to MFIs, designing financial product and services that could increase the depth and breadth of MFIs outreach, and developing suitable lending methodologies. Based on the preceding discussion, the following hypothesis is proposed.

**H1. There is a positive relationship between managerial competencies and financial service outreach in MFBs.**

### **Managerial Competencies and Risk-Taking Behavior**

Trait theory suggests that more a manager has job related traits, more they exhibit certain types of behavior that are associated with that trait which will result in increased performance (Korzaan & Oswell, 2008). Hoskisson, Chirico, Zyung, & Gambeta (2017) suggested that to achieve organizational objectives, and to gain and maintain competitive advantage; managers have to take risks, especially in uncertain environments. García-Granero, Llopis, Fernández-Mesa, & Alegre (2015) suggested that risk-taking behaviors in risk-taking climate could lead to innovation performance.

Nyakundi (2017) argued that a knowledgeable manager who is also familiar with

changes and developments in his domain is more likely to take better quality financing decision, especially under uncertainty. Thus, it could be argued that competent managers have more experience and knowledge of the market that increase their risk-taking abilities which in case of MFBs would be lending more loans. Galema, Lensink, & Mersland (2012) showed that if a CEO is competent and also the primary decision-maker in MFIs, takes risky decisions.

Nkundabanyanga et al. (2015) showed a positive relationship between perceived managerial competencies and risk-taking behavior. Competent managers are overconfident and take more risks. In addition to giving more loans, competent managers can also recover a diverse variety of loans on time. However, mere risk-taking in the absence of required managerial competencies could be fatal for banks. Garcia-Alcober, Prior, Tortosa-Ausina, & Illueca (2019) found that inefficient banks were lending to worst-performing firms which resulted in losses or profits there were not associated with the higher level of risk-taking. Based on the above discussion, the following hypothesis is formulated.

## **H2. There is a positive relationship between managerial competencies and risk-taking behavior in MFBs.**

### **Risk-Taking Behavior and Financial Service Outreach**

Finance theory has well established the argument that credit markets mainly suffers from high information asymmetry. Furthermore, additional imperfections like the presence of moral hazard and problems of adverse selection could affect the effectiveness of the credit market (Dusuki, 2008). MFIs have successfully addressed the issue of credit risk by using social collateral and making groups. The social groups have significantly reduced the asymmetric information problem (Rahman & Dean, 2013). In conventional terms, a loan to poor and often without any collateral presents a high-risk situation. However, in order to increase financial outreach, MFIs managers must take these risky decisions. Thus, through higher risk-taking, the main objective of MFIs is to lift the people from poverty can be achieved. A study of SMEs in Kenya showed that the risk-taking behavior of managers has a positive impact on firm performance (Wambugu, Gichira, Wanjau, & Manga'atu, 2015). Wang & Poutziouris (2010) argued that the intensity of the risk-taking correlates with firm performance. They conducted a quantitative survey and concluded that higher risk-taking firms have higher growth performance as compared to low and average risk-taking firms.

Many studies (Dehejia, Montgomery, & Morduch, 2012; Kraus, Rigtering, Hughes, & Hosman, 2012; Nkundabanyanga et al., 2015; Pratono, 2018) have shown that there is a relationship between risk-taking behavior and performance. To achieve the goal of financial sustainability and profitability, MFIs may have to increase interest rates. However, with the increase in interest rates, the demand for microloans would decrease which suggests that a lower risk-taking behavior would ultimately reduce the financial service outreach (Dehejia et al., 2012). Using a sample of 366 respondents from 2 Indian states, Panda (2018) concluded that greater the outreach of the microfinance institutions larger the risk-taking ability of microenterprises. Kraus et al. (2012) pointed out that in less developed volatile markets, the level of

risk-taking is negatively related to the performance of SMEs.

Nkundabanyanga et al. (2015) showed a positive relationship between managerial risk-taking behavior and financial service outreach. Lower interest rate shows higher risk-taking behavior, as when the interest rate is low people are more interested in borrowing. For MFIs, the lower interest rate would translate to higher outreach to the poor. Thus, through higher risk-taking, the main objective of MFIs to lift the people from poverty can be achieved. Thus, the following hypothesis is formulated:

**H3. There is a positive relationship between risk-taking behavior of managers and financial service outreach of microfinance banks.**

### **Risk-taking Behavior, Managerial competencies and Financial Service Outreach**

The mediating effect of risk-taking behavior of managers in the relationship between managerial competencies and financial service outreach has not been explored enough. Previous studies have not taken into account the importance of managerial risk-taking in the relationship between managerial competencies and financial service outreach.

Previous literature has established the link between managerial risk-taking and organizational performance. For example, Ahmad et al. (2017) conducted a study to determine the efficiency of microfinance institutions in Pakistan. They concluded that by taking higher risk in the way of giving more loans and training the employees increases the efficiency of MFIs. Rachdi and Ameer (2011) reported a similar relationship for 11 Tunisian commercial banks. They reported that smaller boards are competent and are associated with more risk-taking behavior which increases banks performance. Mollah, Hassan, Al Farooque, & Mobarek (2017) concluded that risk-taking and financial performance of Islamic banks are highly influenced by the governance structure that is comparatively distinct from conventional banking. In Islamic banks, the governance structure permits them to take higher risks and attain superior performance.

Nkundabanyanga et al. (2015) surveyed 52 branches of MFIs in Uganda. They reported a significant positive relationship between the managerial competencies and the outreach, and there is a mediating effect of managerial risk-taking behavior. The managerial competencies have an impact on risk-taking behavior which in turn influences financial service outreach. The risk-taking behavior is shaped by the competencies of managers as the managers with diverse skills and experience are overconfident and more risk-taker as compared to the manager with insufficient management skills. Competencies of managers and their risk-taking behavior may work in collaboration to influence financial service outreach performance. Based on the above discussion, the following hypothesis is formulated:

**H4. The relationship between managerial competencies and financial service outreach is mediated by managerial risk-taking behavior.**

## DATA AND METHODOLOGY

### Population & Sample

As of 2018, there were 11 microfinance banks in Pakistan with 984 branches countrywide. The population for this study consists of all the branches of microfinance banks in Pakistan. Due to financial and accessibility constraints, this study selected all the MFB branches (convenience sampling) located in Hazara division and twin cities of Rawalpindi and Islamabad. There are a total of 36 MFB's branches located in this area. A total of 72 questionnaires were distributed, and 62 completed questionnaires were returned, i.e. a response rate of 86.11%. The sampling unit is a microfinance bank branch, whereas the senior loan officer and branch manager are the units of inquiry. The branch managers, with the help of senior loan officers, are usually responsible for decision making in rural locations which includes credit appraisal and risk-assessment of potential borrowers (Fletcher, 1995). Given the technical nature of many questions asked in the questionnaire, the loan officer and branch managers were the appropriate choice as a unit of inquiry.

Research Design, Data Collection and Management

This study uses a cross-sectional survey design. A self-administered questionnaire was used for data collection, and it was physically delivered to sampled MFBs branches. The questionnaire design for the study was taken with permission from the work of Nkundabanyanga et al. (2015) on the MFIs of Uganda. This questionnaire had four sections; section A collects the demographic characteristics of managers, section B for measuring managerial competencies (MC), section C for risk-taking behavior (RTB) of managers and section D for measuring financial service outreach (FSO). A Five-point Likert scale is used for enlisting the opinion of the respondents, ranging from “strongly disagree = 1” to “strongly agree = 5”.

### Data Analysis

Data is checked for completeness then recorded and screened out for the missing values. SPSS version 20 was used for the data analysis. Stability and internal consistency of the questionnaire were tested through Cronbach alpha's coefficient. Descriptive statistics (mean, standard deviation, maximum and minimum values of the data) was computed. The relationship between the variables of the study is analyzed using Spearman's correlation coefficient. The degree of variation in FSO due to MC and RTB is determined using the regression model. Sobel test was used to determine the significance of mediation. The study followed the Baron and Kenny's (1986) four-step approach to examine the mediating effect of managerial RTB in the relationship between MC and FSO. The regression models tested are as follows.

1.  $FSO_i = \beta_0 + \beta_1 MC_i + \epsilon_i$  ----- Equation 1
2.  $RTB_i = \beta_0 + \beta_1 MC_i + \epsilon_i$  -----Equation 2
3.  $FSO_i = \beta_0 + \beta_2 RTB_i + \epsilon_i$  -----Equation 3
4.  $FSO_i = \beta_0 + \beta_1 MC_i + \beta_2 RTB_i + \epsilon_i$  -----Equation 4

## RESULTS AND DISCUSSION

### Demographic of the Respondents

Table 1 shows the demographics of the respondents. 82% of the respondents were male. Only four females were senior branch managers, whereas seven were loan officers. Overall, 90% of the respondents were less than 40-years-old. 45.2% were less than 30-years-old whereas 45.2% were in the age bracket of 30-39 years. 77.4% of respondents hold a master's degree, whereas 16.1% have a bachelor's degree. 58.1% of the respondents were senior branch managers, whereas 41.9% were loan officers. Among these, 80.7% were having less than ten years of experience.

Table 1: Respondents' demographics

		No of Respondents	Percentage
Gender	Male	51	82.3
	Female	11	17.7
Age	Less than 30	28	45.2
	30-39 years	28	45.2
	40-49 years	4	6.5
	50 and above	2	3.2
Qualification	Master	48	77.4
	Bachelor	10	16.1
Position	Professional	4	6.5
	Bank Manager	36	58.1
	Senior Credit officer	26	41.9
Experience	Less than 5 Years	35	56.5
	5 – 9 Years	15	24.2
	10 – 14 Years	8	12.9
	15 – 19 Years	4	6.5

### Descriptive statistics

Table 2 presents descriptive statistics. The mean score for managerial competency



(MC), risk-taking behavior (RTB) and financial service outreach (FSO) is between 3.83 and 4.14, with a standard deviation between 0.41 and 0.53. Compared to the mean values, the standard deviation is small which indicates that the mean values are a good representation of the reality.

Table 2: Descriptive Statistics

	N	Mean	Std. Deviation	Minimum	Maximum
MC	62	4.14	0.41	2.35	5.00
RTB	62	3.83	0.53	2.40	5.00
FSO	62	3.88	0.45	2.52	4.90

Demographics based mean comparison of managerial competencies, risk-taking behavior and financial service outreach

We compared the means scores (t-test and one-way ANOVA) of the three variables, i.e. MC, RTB and FSO across demographic characteristics.

Table 3: Mean Comparison (Gender and Position)- Independent Sample t-test

	Managerial Competency (MC)	Risk-taking Behavior (RTB)	Financial Service Outreach (FSO)
Gender			
Male	4.14	3.80	3.90
Female	4.15	3.94	3.81
t-test (p-value)	0.93	0.42	0.57
Position			
Senior Branch Manager	4.22	3.85	3.96
Loan Officer	4.02	3.79	3.77
t-test (p-value)	0.06	0.68	0.08

Although the mean score for the female is higher for MC and RTB, the mean difference is statistically insignificant. Similarly, the mean score for FSO is higher for men, but the difference is statistically insignificant. The branch managers are significantly more competent than loan officers and focus more on financial service outreach. Although the mean score for managers indicates more risk-taking by

them, but the difference is statistically insignificant.

Table 4: Mean Comparison (Age, Qualification and Experience) – One-way ANOVA

	Managerial Competency (MC)	Risk-taking Behavior (RTB)	Financial Service Outreach (FSO)
Age			
Mean Square (Between Groups)	0.07	0.44	0.34
Mean Square (Within Groups)	0.17	0.27	0.19
F-statistics	0.44	1.63	1.80
p-value	0.72	0.19	0.15
Qualification			
Mean Square (Between Groups)	0.51	0.86	1.00
Mean Square (Within Groups)	0.15	0.26	0.17
F-statistics	3.24	3.33	5.77
p-value	0.04	0.04	0.00
Experience			
Mean Square (Between Groups)	0.24	0.03	0.32
Mean Square (Within Groups)	0.16	0.29	0.19
F-statistics	1.50	0.10	1.66
p-value	0.22	0.95	0.18

The mean scores for different age groups (not reported here) indicate that MC, RTB and FSO increase with age. However, the difference between the group's mean in terms of age is statistically insignificant. Similarly, in the case of experience, no statistically significant difference between or within groups was found. On the other

hand, in the case of qualifications, there is a significant difference among group means. The Tucky HSD test (for comparing mean score for each qualification group, not reported here) indicates that branch managers with professional qualifications are more competent, risk-taker and focusing more on financial service outreach than master's or bachelor's degree holders. However, the same is not valid while comparing master' degree holders with bachelor's degree holders.

**Correlation analysis**

Spearman's correlation is used to determine the magnitude of linear association between MC, RTB and FSO. The correlations scores indicate the direction and magnitude of the association between two variables.

Correlation results in table 5 reveal that MC is positively correlated with both RTB and FSO. The correlation is statistically significant at 1% level of significance. Similarly, RTB is significantly and positively correlated with FSO, which indicates that the risk-taking managers would increase the outreach of financial services for poor and underserved.

Table 5: Reliability and Correlation Matrix

	Managerial competencies	Risk-taking behavior	Financial service outreach	Cronbach $\alpha$
Managerial competencies	1			0.87
Risk-taking behavior	0.51**	1		0.78
Financial service outreach	0.44**	0.43**	1	0.81

\*\* . Correlation is significant at the 0.01 level (2-tailed).

**Regression analysis**

A linear regression model was used to determine the degree of variation in financial service outreach due to managerial competencies and managerial risk-taking behavior.

Table 6: Linear Regression

Model		Unstandardized Coefficients		t	Sig.	Collinearity Statistics (VIF)
		$\beta$	SE			
1	(Constant)	1.075	.471	2.28	0.02	
	MC	0.45	0.13	3.45	0.00	1.41
	RTB	0.24	0.10	2.35	0.02	1.41
Model Summary						
R = 0.62 R <sup>2</sup> = 0.38 Adj. R <sup>2</sup> = 0.36 F = 18.63 Sig = 0.000						

where FSO = Financial Service Outreach (Dependent Variable): MC = Managerial Competencies, RBT = Risk-taking Behavior

The linear regression results indicate that 38.8% of the variance in FSO is due to MC and managerial RTB. The strongest predictor of FSO is MC having  $\beta = 0.45$  ( $p < 0.05$ ) as compared to risk-taking behavior having  $\beta = 0.24$ . For all the variables considered in this model, the VIF score is 1.417, indicating the absence of multicollinearity. These results established the relationship between competencies of managers, their risk-taking behavior and financial service outreach of MFBs.

Table 7: Partial Regressions for Testing Mediation Effects

Regressions	Unstandardized							
	Constant	X	M	t	Sig.	Adjusted R <sup>2</sup>	F	F
								Sig
XY	1.303	0.624		5.437	0	0.319	29.558	0
	-0.478	-0.115						
XM	0.942	0.697		5.002	0	0.283	25.023	0
	-0.58	-0.139						
MY	2.226		0.434	4.632	0	0.251	21.457	0
	-0.362		-0.094					
XMY	1.075	0.456	0.241	3.459	0.001	0.367	18.673	0
	-0.471	-0.132	-0.103					

Where Y = financial service outreach; X = managerial competencies; M = risk-taking behavior

When the relationship between the independent and the dependent variable is statistically significant, then the mediating variable is usually examined (Bennett, 2000). Mediation means that the variables are linked, i.e. the first variable would affect second which in turn affects the third variable. Let say Y is the outcome variable (which in our case is FSO), X is the predictor or casual variable (MC in our case), and M is the mediating variable (RTB in our case). For mediation effect to exist, Jose (2008) outlined the four conditions. First X and Y should be significantly correlated. Second, the X should explain a significant proportion of variance in M. Third, M should explain a significant proportion of the variance in Y, and fourth, the effect of X on Y should be less in the 2nd model where M is introduced.

Since environment can shape the risk-taking behavior of managers in which they work, so in the relationship of managerial competencies (MC) with financial service outreach (FSO), it is possible to consider risk-taking behavior (RTB) as a mediating variable.

In the first regression (XY), the p-value of 0.00 indicates the significant positive relationship between MC and FSO. Therefore, H1 is accepted, indicating the positive relationship between MC and FSO. 33% of the variation in FSO is due to MC ( $R^2 = .33$ ). These results are similar to Kyereboah-Coleman and Osei (2008), Ssekakubo et al. (2014) and Nkundabanyanga et al., (2015). The crucial strategic position of managers in MFBs enhances financial service outreach.

In the 2nd regression (XM), the relationship between MC and RTB is positive and significant ( $\beta = .697$ ; p-value-.00). Thus H2 is accepted. Competent managers can take more risks because they understand the market dynamics of microfinancing, thus improving/increasing FSO of MFBs. These findings are similar to earlier studies like Galema et al. (2012), and Nkundabanyanga et al., (2015).

A positive and significant relationship between RTB and FSO can be seen in the third regression model (MY), thus accepting H3. Similar findings were reported by Dehejia et al. (2012), Kraus et al. (2011) and Nkundabanyanga et al. (2015).

Finally, in the 4th regression (XMY), the relationship of MC with FSO when RTB of managers is controlled is positive and significant. The  $\beta$  value reduces from .624 (total effect) to .456 (direct effect) in the first regression model to the fourth regression model. The direct effect on the outreach of financial services by managerial competencies is .456. This confirms that managers' risk-taking behavior partially mediates the relationship between competencies of managers and financial service outreach. The results of mediation test revealed that managers' risk-taking behavior mediates the relationship of managerial competencies with financial service outreach i.e. risk-taking behavior of managers is determined by managerial competencies, and in turn, financial service outreach is determined by managerial risk-taking. As all of the conditions of mediation have been fulfilled; therefore, these results supported H4 which stated that managers' RTB mediates the relationship between MC and FSO. Similar findings were also reported by Nkundabanyanga et al. (2015).

### Sobel Test

Sobel test shows that the mediation is significant as  $p < 0.05$ , i.e. the relationship between competencies of managers and financial service outreach is significantly mediated by managers' risk-taking behavior.

Table 8: Sobel test

Test statistic	Std. Error	p-value
3.39876501	0.08913002	0.0006

Our results endorsed the findings of earlier studies such as Nkundabanyanga et al. (2015). This study hence shows that in the Pakistani context, financial service outreach of MFBs is influenced by the competencies of managers and their risk-taking behavior. Managers who could find risk embedded opportunities and quickly avail them could increase the outreach of Pakistani MFBs.

### CONCLUSIONS AND IMPLICATIONS

This study investigated the relationship between the managerial competencies (MC), managerial risk-taking behavior (RTB) and financial service outreach (FSO) of microfinance banks in Pakistan. It also examined whether the relationship between MC and FSO is mediated by RTB of the managers. An adapted questionnaire was sent to 72 respondents across 36 branches in 9 cities, and the survey response rate was 86.11%. Based on the uni and multivariate analysis of the survey data, this study found a positive relationship between FSO and MC and a positive relationship between MC with managers' RTB in Pakistani MFBs. There is also a positive relationship of RTB with the outreach of microfinance banks' financial services. The study's findings suggest that the managers' RTB is mediating the positive relationship between MC and FSO.

Opposite to above point of view that risk-taking is shaped by different factors such as operating and regulatory environment etc., in line with Nkundabanyanga et al. (2015), this study assumed that the risk-taking behavior of managers is intrinsically determined. Therefore, managerial competencies and risk-taking behavior are two critical determinants/predictors of MFBs' outreach. A competent risk-taking manager will enhance the outreach of microfinance banks. As MC and RTB are positively and significantly related; therefore, these two will work in sync to increase the outreach of MFBs.

This study informs MFB's top management and policymakers that competencies of managers and their calculated risk-taking propensities determined outreach performance of the MFBs. MFBs/MFIs should hire qualified and competent professionals and enhanced training programs for managers should be introduced. The effective functioning of MFBs depends on the availability of competent managers. There is a need for internal and external training to build their capacity continually. Managers of MFBs need to take higher risk in their lending to the poor. Thus, through higher risk-taking, the main objective of MFBs, to lift the people

from poverty, can be achieved.

Limitations of the study and Further Research: The current study focused on MFBs' only. Further studies need to consider all the MFIs' including NGOs' and National Support Programs and make a comparison between them. This study has not considered the clients of MFBs and tried to find out their opinions on the outreach. Due to financial and accessibility constraints, the sample size of the current study is small, i.e. limited to 9 cities only. Further studies could use a more prominent and geographically wider sample.

## REFERENCES

- Ahmad, R., Hussain, A., Umer, M., & Parveen, K. (2017). Efficiency of microfinance providers in Pakistan: An empirical investigation. *Review of Economics and Development Studies*, 3(2), 177.
- Alman, M. (2012). Shari'ah supervisory board composition effects on Islamic banks' risk-taking behavior. *Journal of Banking Regulation*, 14(1), 134–163. <https://doi.org/10.2139/ssrn.2140042>
- Baron, R. M., & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, 51(6), 1173–1182.
- Bayai, I., & Ikhida, S. (2016). Financing and financial sustainability of microfinance institutions (MFIs): A conceptual view. *Banks and Bank Systems*, 11(2), 21–32. [https://doi.org/10.21511/bbs.11\(2\).2016.03](https://doi.org/10.21511/bbs.11(2).2016.03)
- Bennett, J. A. (2000). Mediator and moderator variables in nursing research: Conceptual and statistical differences. *Research in Nursing and Health*, 23(5), 415–420. [https://doi.org/10.1002/1098-240X\(200010\)23:5<415::AID-NUR8>3.0.CO;2-H](https://doi.org/10.1002/1098-240X(200010)23:5<415::AID-NUR8>3.0.CO;2-H)
- Cull, R., Demirgüç-Kunt, A., & Morduch, J. (2007). Financial performance and outreach : A global analysis of leading microbanks. *The Economic Journal*, 117(517), F107–F133.
- Dehejia, R., Montgomery, H., & Morduch, J. (2012). Do interest rates matter? Credit demand in the Dhaka slums. *Journal of Development Economics*, 97(2), 437–449. <https://doi.org/10.1016/j.jdeveco.2011.06.001>
- Dusuki, A. W. (2008). Banking for the poor: the role of Islamic banking in microfinance initiatives. *Humanomics*, 24(1), 49–66. <https://doi.org/10.1108/08288660810851469>
- Fletcher, M. (1995). Decision making by Scottish bank managers. *International Journal of Entrepreneurial Behaviour & Research*, 1(2), 37–53.
- Galema, R., Lensink, R., & Mersland, R. (2012). Do powerful CEOs determine microfinance performance? *Journal of Management Studies*, 49(4), 718–742. <https://doi.org/10.1111/j.1467-6486.2012.01046.x>
- García-Alcober, M. P., Prior, D., Tortosa-Ausina, E., & Illueca, M. (2019). Risk-taking behavior, earnings quality, and bank performance: A profit frontier approach. *BRQ Business Research Quarterly*. <https://doi.org/10.1016/j.brq.2019.02.003>
- García-Granero, A., Llopis, Ó., Fernández-Mesa, A., & Alegre, J. (2015). Unraveling the link between managerial risk-taking and innovation: The mediating role of

- a risk-taking climate. *Journal of Business Research*, 68(5), 1094–1104. <https://doi.org/10.1016/j.jbusres.2014.10.012>
- Gohar, R., & Batool, A. (2015). Effect of corporate governance on performance of microfinance institutions: A case from Pakistan. *Emerging Markets Finance and Trade*, 51(October), S94–S106. <https://doi.org/10.1080/1540496X.2015.1080559>
- Hawi, R. O., Alkhodary, D., & Hashem, T. (2015). Managerial Competencies and Organizations Performance. *International Journal of Management Sciences*, 5(11), 723–735.
- Hermes, N., Lensink, R., & Meesters, A. (2011). Outreach and efficiency of microfinance institutions. *World Development*, 39(6), 938–948. <https://doi.org/10.1016/j.worlddev.2009.10.018>
- Hoskisson, R. E., Chirico, F., Zyung, J. (Daniel), & Gambeta, E. (2017). Managerial Risk Taking: A Multitheoretical Review and Future Research Agenda. *Journal of Management*, 43(1), 137–169. <https://doi.org/10.1177/0149206316671583>
- Jena, S., & Sahoo, C. K. (2014). Improving managerial performance: A study on entrepreneurial and leadership competencies. *Industrial and Commercial Training*, 46(3), 143–149. <https://doi.org/10.1108/ICT-10-2013-0066>
- Kaboski, J. P., & Townsend, R. M. (2012). The impact of credit on village economies. *American Economic Journal: Applied Economics*, 4(2), 98–133. <https://doi.org/10.1257/app.4.2.98>
- Kamukama, N., Kyomuhangi, D. S., Akisimire, R., & Orobia, L. A. (2017). Competitive advantage: Mediator of managerial competence and financial performance of commercial banks in Uganda. *African Journal of Economic and Management Studies*, 8(2), 221–234. <https://doi.org/10.1108/AJEMS-10-2016-0142>
- Kereta, B. B. (2007). Outreach and financial performance analysis of microfinance institutions in Ethiopia. Paper Presented at the African Economic Conference 2007: Opportunities and Challenges of Development for Africa in the Global Arena. Retrieved from <http://hdl.handle.net/10855/1309>
- Khan, M. M. (2015). No Credit constraints for microfinance sector in Pakistan, an analysis of internal and external factors. *International Letters of Social and Humanistic Sciences*, 47, 164–173. Retrieved from <https://www.learntechlib.org/p/176958/>
- Korzaan, M. L., & Boswell, K. T. (2008). The Influence of Personality Traits and Information Privacy Concerns on Behavioral Intentions. *Journal of Computer Information Systems*, 48(4), 15–24. Retrieved from [http://iacis.org/jcis/articles/Korzaan\\_Boswell\\_2008\\_48\\_4.pdf](http://iacis.org/jcis/articles/Korzaan_Boswell_2008_48_4.pdf)
- Kraus, S., Rigtering, J. P. C., Hughes, M., & Hosman, V. (2012). Entrepreneurial orientation and the business performance of SMEs: A quantitative study from the Netherlands. *Review of Managerial Science*, 6(2), 161–182. <https://doi.org/10.1007/s11846-011-0062-9>
- Kyereboah-Coleman, A., & Osei, K. A. (2008). Outreach and profitability of microfinance institutions: The role of governance. *Journal of Economic Studies*, 35(3), 236–248. <https://doi.org/10.1108/01443580810887797>
- Lee, Y. (2009). Competencies needed by Korean HRD master’s graduates: A comparison between the ASTD WLP competency model and the Korean study. *Human Resource Development Quarterly*, 20(1), 107–133.



- Maryam, H., Alhabshi, S. M., & Abideen Adeyemi, A. (2016). The Role of Intellectual Capital on Microfinance Institutions Performance : MFI Types as Moderator. Paper Presented at the 4th Asean Unversities International Conference on Islamic Finance, 6-8 December 2016, IIUM, Malaysia.
- Mia, M. A., & Chandran, V. G. R. (2016). Measuring financial and social outreach productivity of microfinance institutions in Bangladesh. *Social Indicators Research*, 127(2), 505–527. <https://doi.org/10.1007/s11205-015-0979-5>
- Mohsin, S., Bashir, M. F., & Tariq, Y. Bin. (2018). Outreach and performance analysis of microfinance banks in Pakistan. *Business and Economics Reveiw*, 10(3), 1–28.
- Mollah, S., Hassan, M. K., Al Farooque, O., & Mobarek, A. (2017). The governance, risk-taking, and performance of Islamic banks. *Journal of Financial Services Research*, 51(2), 195–219. <https://doi.org/10.1007/s10693-016-0245-2>
- Mufti, O., Parvaiz, G. S., Wahab, M., & Durrani, M. (2016). Human resource competencies and organizational performance: A study on banking sector managers in Pakistan. *Journal of Managerial Sciences*, X(1), 83–104.
- Nkundabanyanga, S. K., Opiso, J., Balunywa, W., & Nkote, I. N. (2015). Financial service outreach correlates: Managerial Competence and risk-taking behaviour. *International Journal of Social Economics*, 42(4), 404–420. <https://doi.org/10.1108/ijse-10-2013-0241>
- Nyakundi, J. B. K. (2017). Effect of behavioral biases on ranking of financing decisions by financial managers of firms listed in the Nairobi securities exchange (Doctoral Dissertation). United States International University-Africa, Nairobi, Kenya.
- Pakistan MicroFinance Network. (2017). Pakistan microfinance review 2017: Annual assessment of the microfinance industry. Retrieved from <http://www.pmn.org.pk/assets/articles/da6af2f0f19ca541bbc04db2f158cf98.pdf>
- Panda, D. K. (2018). Entrepreneurial orientation, intermediation services, microfinance, and microenterprises. *Managerial and Decision Economics*, 39(2), 253–265. <https://doi.org/10.1002/mde.2900>
- Pratono, A. H. (2018). Does firm performance increase with risk-taking behavior under information technological turbulence?: Empirical evidence from Indonesian SMEs. *Journal of Risk Finance*, 19(4), 361–378. <https://doi.org/10.1108/JRF-10-2017-0170>
- Quayes, S., & Hasan, T. (2014). Financial disclosure and performance of microfinance institutions. *Journal of Accounting and Organizational Change*, 10(3), 314–337. <https://doi.org/10.1108/JAOC-12-2011-0067>
- Quayes, S. (2015). Outreach and performance of microfinance institutions: A panel analysis. *Applied Economics*, 47(18), 1909–1905. <https://doi.org/10.1080/00036846.2014.1002891>
- Rachdi, H., & Ben Ameer, I. G. (2011). Board Characteristics, Performance and Risk Taking Behaviour in Tunisian Banks. *International Journal of Business and Management*, 6(6), 88–97. <https://doi.org/10.5539/ijbm.v6n6p88>
- Rahman, R. A., & Dean, F. (2013). Challenges and solutions in Islamic microfinance. *Humanomics*, 29(4), 293–306. <https://doi.org/10.1108/H-06-2012-0013>
- Sitkin, S. D., & Weingart, L. R. (1995). Determinants of risky decision-making behavior: A test of the mediating role of risk perceptions and propensity. *The Academy of Management Journal*, 38(6), 1573–1592. Retrieved from <https://>

[www.jstor.org/stable/pdf/256844.pdf](http://www.jstor.org/stable/pdf/256844.pdf)

- Ssekakubo, J., Ndiwalana, G., & Lwanga, F. (2014). managerial competency and the financial performance of savings, credit and cooperative societies in Uganda. *International Research Journal of Arts and Social Science*, 3(3), 66–74.
- Veliu, L., & Manxhari, M. (2017). The impact of managerial competencies on business performance: SME's in Kosovo. *Journal of Management*, 30(1), 59–65.
- Wambugu, A. W., Gichira, R., Wanjau, K. N., & Manga'atu, J. (2015). The relationship between risk-taking and performance of small and medium agro processing enterprises in Kenya. *International Journal of Economics, Commerce and Management*, 3(12), 441–455.
- Wang, Y., & Poutziouris, P. (2010). Entrepreneurial risk taking: Empirical evidence from UK family firms. *International Journal of Entrepreneurial Behaviour and Research*, 16(5), 370–388. <https://doi.org/10.1108/13552551011071841>
- Wodruffe, C. (1993). What is meant by a competency? *Leadership & Organization Development Journal*, 14(1), 29–36. <https://doi.org/10.1108/eb053651>
- Zulfiqar, G. (2017a). Does microfinance enhance gender equity in access to finance? Evidence from Pakistan. *Feminist Economics*, 23(1), 160–185.
- Zulfiqar, G. (2017b). Financializing the poor: 'Dead capital', women's gold and microfinance in Pakistan. *Economy and Society*, 46(3–4), 476–498.