

EXAMINING THE IMPACT OF ISLAMIC MICROFINANCE ON MICRO-ENTREPRENEURSHIP: EVIDENCE FROM PAKISTAN'S FINANCIAL LANDSCAPE

Dr Sabeen Khurram Khan¹, Sadia Saeed², Humaira Kousar³, *Dr Muhammad Umer Quddoos⁴, Muhammad Adeel⁵

¹ Assistant Professor, Department of Management Sciences, COMSATS University Islamabad, Pakistan.

² Lecturer, Department of Management Sciences, National University of Modern Languages, Islamabad, Pakistan.

³ Lecturer, Department of Management Sciences, COMSATS University Islamabad, Pakistan.

⁴ Assistant Professor, Department of Commerce, Bahauddin Zakariya University, Multan, Punjab, Pakistan.

⁵ MS Scholar, Department of Commerce and Finance, Government College University, Lahore, Punjab, Pakistan.



ARTICLE INFO

Article History:

Received: February 22, 2024

Revised: March 26, 2024

Accepted: March 28, 2024

Available Online: March 31, 2024

Keywords:

Islamic Microfinance

Multinomial Logistic Regression

Micro-Entrepreneurship

Income Smoothing

Enterprise Resource Base

Funding:

This research received no specific grant from any funding agency in the public, commercial, or not-for-profit sectors.

Copyrights:

Copyright Muslim Intellectuals

Research Center. All Rights Reserved ©

2021. This work is licensed under a

[Creative Commons Attribution 4.0](https://creativecommons.org/licenses/by/4.0/)

[International License](https://creativecommons.org/licenses/by/4.0/)



ABSTRACT

The primary objective of the study is to explain the influence of Islamic microfinance in the progress of entrepreneurship development in Pakistan. Islamic microfinancing having unique characteristics of risk-sharing contracts and the distribution of wealth across the society through specific financial instruments has been gaining popularity in entrepreneurship and opening new avenues for future research. Self-administered questionnaires were used to collect the data from the users of Sharia-compliant products.

The results of multinomial logistic regression reveal that Islamic microfinance has a significant impact on micro-entrepreneurship development. The policymakers, who promote the development of new ventures using Islamic microfinance, should ensure broadened access of the micro-entrepreneur to microfinance products. Moreover, Islamic microfinance institutions can contribute a lot to improving the living standards of entrepreneurs by becoming a link between government and people in policy implementation.

*Corresponding Author's Email: umerattari@bzu.edu.pk

INTRODUCTION

Newman et al., (2017) refer to microfinance as the means to provide small-scale loans to poor people to come out of the crisis and fulfill their basic needs. According to the information of the World Bank, microfinance plays a pivotal role in addressing income variation and poverty. The scope of microfinance has been broadened with the passage of time and a small loan amount/finance is given to a person to start the business or expand it to become self-employed and improve living standards (Mondal, 2015). Before the emergence of Islamic microfinance, the poor had no collateral and unverified credit histories and faced difficulty in accessing commercial financial institutions for loans. therefore, Islamic microfinance is a platform for entrepreneurs and needy persons in alleviating poverty and enhancing business activities globally (Suzuki et al., 2016).

Islam claims “access to finance for all” in the true sense. Its two distinct features, namely risk-sharing and redistribution of wealth enable the entrepreneurs to earn their livelihood using affordable financial resources and build new ventures. This makes the Islamic microfinance system different from the interest system of conventional finance. Islamic microfinance refers to meeting the financial needs of the poor and innovative persons to mitigate poverty and to make the people economically independent. Moreover, financial instruments offered in Islamic microfinance for the progress of the needy are Sharia-compliant and embedded in four Islamic principles (Weill 2019). These Islamic principles are Interest is prohibited, Risk exists, and return is given to lenders through profit sharing, Activities like gambling, and alcohol are not allowed and there is no uncertainty in the contract because *Gharar* is prohibited in Islam.

Previous studies focused on microfinance as the major instrument of poverty reduction, development of economies, and empowerment of poor people but the role of microfinance in micro-entrepreneurship has not been investigated before (Mondal, 2015). The current study fills that gap and attempts to discuss the impact of microfinance on micro-entrepreneurship activities. Microfinance, a small loan amount/finance is given to start or expand the business Hence the business starts or expands with that is also micro or small known as micro-enterprise. “A microentrepreneur takes risks to start a new income-generating activity (new enterprise) or invest in an already established income-generating activity (established enterprise)”.

It is believed that unemployed, poor, or jobless people can't get finance from formal financial institutions because they have no collateral and are not able to pay the interest along with the original amount of the loan (El-Gamal 2006; Obaidullah 2008; Akhter 2009; Moisseron and Teulon 2015). Therefore, these people are reluctant to use conventional microfinance products and sometimes exclude themselves from the traditional financial system. The people with innovative ideas for a business find no access to financial resources their ideas will go in vain. In the absence of an inclusive financial system, poor individuals and small ventures depend on their internal resources of finance and personal wealth to become entrepreneurs and to take advantage of existing growth opportunities. Market imperfections including transaction cost and asymmetric information limit their opportunities and lead to slow economic growth and persistent inequality among individuals. Islamic microfinance is a contrivance for an entrepreneur who has no money but possesses an intellectual mind that contains an innovative idea. If that idea is practically implemented, they can be self-employed, progress, and survive in the economy.

According to Kenny and Rossiter (2018), entrepreneurship is a transition phase between unemployment and self-employment. The entrepreneur needs microfinance for entrepreneurial activities including financial performance, income smoothing, and enterprise development. The current study is designed to address the role of Islamic microfinance in enhancing micro-entrepreneurship activities. The study answers the following questions Is Islamic microfinance, an entirely different system from conventional finance able to increase the financial performance of micro-entrepreneurs? Is the Islamic finance system contributed to earning sufficient income for the repayment of loans easily? Is business expansion possible using Islamic microfinance products? Data has been collected from Islamic institutions in Pakistan through a questionnaire administered through literature. Regression has been applied using Stata software to know the impact of micro-financial products on entrepreneurial activities. Assessing the impact of Islamic microfinance on entrepreneurial development is

a recent phenomenon and no empirical research has been conducted before. It is, therefore, imperative to study this area that has a distinguished contribution to the literature of Islamic financial institutions and business. Moreover, the findings of the study are beneficial for entrepreneurs to understand the role of Islamic microcredit in starting a business at the micro level.

LITERATURE REVIEW

Islamic microfinance is an emerging concept with all of its benefits to the distressed segment of society. The micro-financing in the context of Islamic mode is the new domain of finance, working just about half a century ago. Literature, in this context, is insufficient to give a strong literature review, especially the empirical one. Under the existing circumstances, an effort has been made to research the given literature available. In Pakistan, it's a relatively new phenomenon and no empirical study has been conducted to explore the relationship between Islamic microfinance products/services and micro-entrepreneurial activities.

The poor who can't get finance from formal financial institutions may cater to their needs through Islamic finance. According to different studies, Islamic microfinance helps with poverty mitigation (Naveed, 2014; Alaro& Alalubosa, 2017; Mansori et al 2020). Komi and Croson (2011) study that over one-third of the world's poor are Muslims (Economist, 2008), and they avoid investing in microfinance interest-based products. Their religious beliefs refrain needy persons from taking conventional products of microfinance, so they exclude themselves voluntarily from becoming members of the financial system. Riwajanti (2013) finds Islamic micro-financing as a tool to alleviate poverty through financial access to people in need. The findings of the study support that social justice for all in the Islamic mode of financing would strengthen the economic development of the country by building human capability.

Masyita and Ahmad (2013) examine the perceptions and preferences of the clients of microfinance institutions about Islamic and conventional finance. The empirical results of the study identify economic and non-economic factors that suit the clients to prefer IMFIs. Interest-free loans, size of loans, and no collateral are the economic factors, and easy access to finance, availability of quality services, and easy repayment methods are included in non-economic factors. Moreover, these characteristics have ranked the IMFIs competitive as compared to conventional rural banks and Islamic rural banks in different regions of countries.

In another important study Ahmad et al., (2020) discussed conventional microfinance institutions and Islamic microfinance institutions in the context of outreach and financial sustainability. The findings of the study empirically provide evidence that the market of Islamic institutions is growing in every region of the world. In contrast, the study of Berguiga et al (2020) demonstrates that conventional microfinance institutions have higher financial and social performance as compared to Islamic microfinance institutions. Ahmad et al., (2016) empirically examine the role of loans without interest in raising the living conditions of the extremely poor people in Pakistan. The study was conducted in Punjab and empirically supported that Islamic microfinance riba-free products improve the living standards of the people more than their consumption level.

In Pakistan, the Islamic mode of financing is becoming popular in reducing the unequal distribution of wealth. Besides this, the new financing method is gaining success in improving income, living standards, profitability, awareness level, and ethical values of the needy (Muhammad Naveed 2014). Khan (2014) examined the comparative socio-financial performance of two IMFIs and two conventional MFIs in Pakistan. Mix Market

database rated these four banks with four stars. The financial and social indicators including profitability, productivity, portfolio quality, and financial structure of these banks are comparatively analyzed during the period of six years (2005-2010). They found that Islamic MFIs were more cost-effective, based on “Cost Per Borrower” and “Operating Expenses to Assets.” Akhuwat has the most efficient employees, followed by a conventional MFI. Conventional MFI's Financial Revenue to assets is higher indicating better financial efficiency as compared to IMFIs. The results of the study are mixed in the context of financial performance. Moreover, profitability indicators are not promising as well. One of the conventional MFIs Asasah, has a positive return on equity across all four MFIs

Terano et al (2015) analyze the impact of microfinance in facilitating the business environment. It provides an opportunity for the development of domestic entrepreneurship. Unemployed people can take microfinance loans and establish their businesses. Newman et al (2017) conducted a study to determine the impact of Islamic microfinance in improving the livelihood of people through entrepreneurial activities. The findings of the study support the contribution of microfinance instruments in enhancing the development and performance of ventures. Similarly, Shahriar et al., (2016) discuss the role of microfinance in the creation of new ventures and their establishments. The literature on microfinance and entrepreneurship is limited. The current study is the extension of previous studies and focuses on the role of Islamic microfinance in entrepreneurial activities including income smoothing, financial performance, and business expansion in Pakistan.

Financial performance refers to *growth in* revenue and improving conditions of profitability including business expansion, an increase in the number of workers, and new products (Mehmood and Rosli 2013). Growth is the superior indicator of financial performance as compared to accounting measures. However, Meressa (2020) proposed an alternative view of financial performance. Financial performance is multidimensional and various features of financial performance should be considered to measure it. Nelson (2000) measured financial performance in five dimensions including expanded size, fixed location, cost and profit effectiveness, and exploiting new opportunities in the study. Income smoothing is the term used to know that entrepreneurs using Islamic microfinance can operate the enterprise successfully. If the entrepreneur can repay the loan without any default the enterprise will earn a handsome amount of income (Crepon et al 2020). Income smoothing is proof of sufficient income for a new venture and repayment of the loan (Nelson 2000)

El-Komi & Croson (2013) mention enterprise resource base is an indicator of whether the resources of an enterprise are sufficient for the successful running of the business in the future or not. Investment should be done according to the nature of the business venture. The resource base of the enterprise has been based on one item investment (Nelson 2000).

Hypotheses

From the literature discussed above the current study has developed the following hypotheses.

Ha₁= Islamic microfinance has a significant impact on the financial performance of micro-entrepreneurs.

Ha₂= Islamic microfinance has a significant impact on the income smoothing of micro-entrepreneurs.

Ha₃= Islamic microfinance impacts the enterprise resource base.

Conceptual framework

The conceptual framework of the current study is presented hereunder:

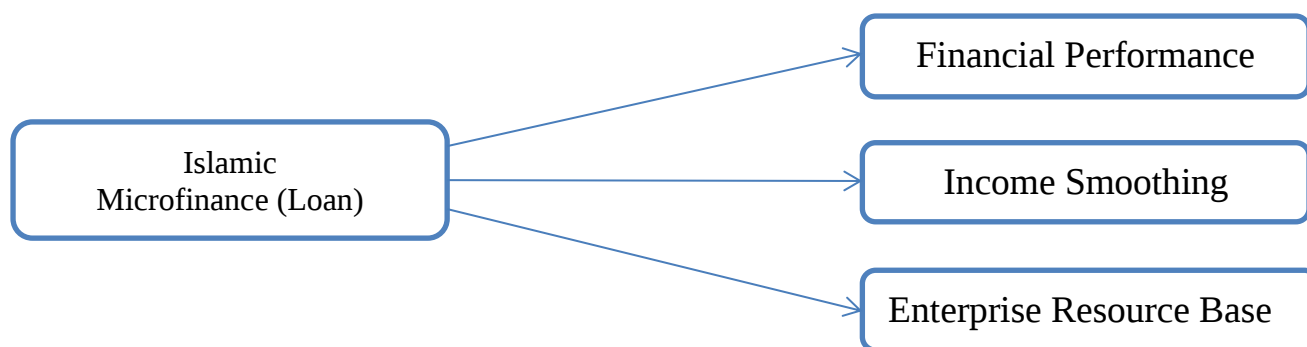


Figure 1 Study's Conceptual Framework

Econometric Model

The econometric model designed for the empirical testing in the current study is as follows:

$$Y_1 = \alpha_0 + \beta_1 \text{gender} + \beta_2 \text{age} + \beta_3 \text{education} + \beta_4 \text{no of dependents} + \beta_5 \text{experience} + \beta_6 \text{mode of finance} + \beta_7 \text{type of area} + \beta_8 \text{MC} + \varepsilon_1 \dots (1)$$

$$Y_2 = \alpha_0 + \beta_1 \text{gender} + \beta_2 \text{age} + \beta_3 \text{education} + \beta_4 \text{no of dependents} + \beta_5 \text{experience} + \beta_6 \text{mode of finance} + \beta_7 \text{type of area} + \beta_8 \text{MC} + \varepsilon_1 \dots (2)$$

$$Y_3 = \alpha_0 + \beta_1 \text{gender} + \beta_2 \text{age} + \beta_3 \text{education} + \beta_4 \text{no of dependents} + \beta_5 \text{experience} + \beta_6 \text{mode of finance} + \beta_7 \text{type of area} + \beta_8 \text{MC} + \varepsilon_1 \dots (3)$$

Where,

Y_1 = Financial Performance

Y_2 = Income Smoothing

Y_3 = Enterprise Resource Base

Microcredit (MC) = if the loan is taken for more than 1 year (established clients) Microcredit is assigned 1. If a loan is obtained for less than 1 year (New clients) Microcredit is assigned 0.

RESEARCH DESIGN OF THE STUDY

The self-administered questionnaire has been used to get data from micro-entrepreneurs (borrowers). At present 10 Islamic Microfinance Institutions are operating in Pakistan. To take borrowers' responses four main Islamic microfinance institutions: Akhuwat, Wasil, Helping Hands, and Rehabilitation Development (HHRD) were selected. For this purpose, the adapted questionnaire used was designed by SEEP (Small Enterprise Education and Promotion) and AIMS (Amanah Ikhtiar Malaysia) to collect data. The study collected 696 useable from micro-entrepreneurs (borrowers) who invested in Islamic microfinance *Shari'ah* compliance products/services offered in four IMFIs in Pakistan, to start or expand their micro enterprises (MEs). To check the reliability of measurement Cronbach's Alpha is used and found 0.75. It is above 0.7 thus it is reliable. In this study, data have been taken from the natural environment without any interference to sustain validity.

The comparative study used two approaches: the mature client approach and the Incoming or Non-clin-client approach. Both groups have the same type of people. The study used membership of clients having less than one year as a proxy for non-clients. The membership of clients for more than one year is used as a proxy for mature or established clients. The model of the study contained nine demographic variables including age, gender, previous experience, previous knowledge, type of area, mode of finance, no of dependents, and education. Established clients (for more than a year) are 58.4 percent of members and new clients (less than a year) are 41.5 percent of members. The study attempts to examine whether there is a significant difference between established clients and new clients in the context of financial performance, income smoothening, and

enterprise resource base or not using the IMF program. The comparative study is cross-sectional and analyzes the impact of microfinance on the entrepreneurial activities between established (mature) clients and new (incoming) clients.

Multinomial logistic regression is employed to investigate the effect of financing on entrepreneurial activities of micro-entrepreneurs. To handle the categorical variables of the study Logit/Probit regression an alternative log-linear approach is used. In the regression model, the assumption of linearity is not practical and allows dependent variables to take values between less than 1 and greater than zero. The extension of the linear regression model is logistic regression. Simple linear regression narrated in the form of an equation as:

$$Y_i = \alpha_0 + \beta_1 X_1 + \varepsilon_i \quad (1)$$

The logistic regression is the “prediction of the probability of Y occurring given known values of X’s” (Field, 2009). The logistic model equation with P(Y) the probability of Y occurring, e the base of natural logarithms, β_n the regression coefficient of a variable X_n is:

$$P(Y) = \frac{1}{1 + e^{-(\alpha_0 + \beta_1 X_{1i} + \beta_2 X_{2i} + \dots + \beta_n X_{ni})}}$$

The categorical variables of the study are income smoothing, enterprise resource base, and financial performance. The current study has given a score of 1 for an increase in income smoothing, enterprise resource base, and financial performance, a score of 2 for no impact of categorical variables, and a score of 3 for having no knowledge about the increase or decrease of enterprise development after getting microfinance. Therefore Y in multinomial regression is narrated in the current study as

$$Y = \begin{cases} 1 & \text{if } Y > 0 \\ 2 & \text{if } Y \leq 0 \end{cases} \quad (3)$$

The independent variable of the study is the category of the client using micro credit. Moreover, age, gender, type of area, mode of financing, previous experience, and previous knowledge of the client are the control variables of the study. k-1 model is estimated in Multinomial regression that indicates the levels of the outcome variable. In this study, group No. 2 is a referent/base group, and therefore estimated of the multinomial logit is that for a 1 % change in predictor variable, the logit of outcome m variable relative to referent group is supposed to vary by its respective parameter taking the other variables held constant. If the value of the logistic coefficient is closer to zero, the logit is less influenced by the predictor.

STATA and SPSS statistical software packages are used to empirically analyze the influence of Islamic microfinance on micro-entrepreneurship development by examining entrepreneurial activities. Entrepreneurial activities include financial performance, income smoothening, increase in enterprise resource base.

Profile of Micro Entrepreneur

Table 3.1 reports the statistical summary of the sample. Results revealed that 96% of respondents took microfinance. 30% out of this 96% took microfinance for the startup of the new venture while the remaining 66.68% used Islamic finance for the expansion of existing businesses Most of the respondents have started their businesses including tailoring, food corner, general stores, and beauty parlor.

The majority of the respondents who participated in the study are married, under the age of 40, illiterate, or with primary education but all religiously active Muslims. Their family size is large comprised of 5 or more

than 5 persons. They have no awareness of modes of Islamic financing. They rely upon their businesses for income and their financing performance is good because they repay their debts regularly. Furthermore, they use Mudarabah and Qard-e-Hasana for borrowing and repaying the debt through monthly installments. They take microfinance from 10,000 to 75,000 from Islamic institutions.

Table 3.1 Descriptive Statistics of Micro Entrepreneurs

Variables	Description	Frequency	Valid %	Mean	Mode	S.D
The time period of membership	New client	289	41.5			
	Established client	407	58.4			
Type of Area	Urban	419	60.2			
	Rural	277	39.8			
Mode of Financing	Qard e Hassana					
	Murabahah					
	Mushraka					
	Mudarbah					
	Salam					
Gender	Male	525	75.4	1.25	1	.431
	Female	171	24.6			
	Total	696	100			
Age Group	18-25	69	9.9	2.55	2	.901
	25-35	288	41.4			
	35-45	244	35.1			
	45-55	79	11.4			
	Above 55	16	2.3			
	Total	696	100			
Marital Status	Single	99	14.2	1.88	2	.407
	Married	590	84.8			
	Widowed	2	.3			
	Divorced	5	.7			
	Total	696	100			
Qualification	Primary	346	49.7	2.03	1	1.310
	Secondary	129	18.5			
	Matric	145	20.8			
	Intermediate	41	5.9			
	Diploma	3	.4			
	Any other	32	4.6			
	Total	696	100.0			
Number of Dependents	None	17	2.4	4.22	5	1.048
	1	39	5.6			
	2	103	14.8			

Examining The Impact of Islamic Microfinance on Micro-Entrepreneurship: Evidence from Pakistan's Financial Landscape

		3	153	22.0			
		4 or more	384	55.2			
		Total	696	100.0			
Major	Income	Wage	149	21.4	3.33	4	1.291
Source		Pension	16	2.3			
		Social Assistance	15	2.2			
		Income from Business	498	71.6			
		Income from Agriculture	12	1.7			
		Income from Rent	3	.4			
		Any other specify	3	.4			
Purpose	of	For agriculture	2	.3	2.77	3	1.59
Borrowing		For business start-up	209	30			
		For business expansion	465	66.8			
		For house construction	8	1.1			
		Trade Loan	2	.3			
		For Education	3	.4			
		Repayment Loan	1	.1			
		Any other purpose	6	.9			
Previous		Yes	574	82.5	1.18	1	.394
Experience		No	121	17.4			
		Have no Idea	4	.1			
		Total	696	100.0			
Previous		Yes	364	52.3	1.49	1	.534
knowledge	about	No	320	46.0			
Modes		Have no Idea	12	1.7			
		Total	696	100.0			

REGRESSION ANALYSIS AND DISCUSSION OF THE STUDY

Table 4.1 reveals the results of all the dimensions including exploiting new opportunities, expanded size, fixed location, profits, and cost-effectiveness. Exploiting new opportunities includes financial expansion and increased income. The second dimension is comprised of the new product, increased workers, and increased demand. Cost-effectiveness, the third dimension consists of purchasing in bulk, efficiency in administration, and improved quality. Profit includes business money, maintaining records, and wages. A fixed location is composed of a location for production and a location for storage. There is a significant difference between established and new clients in the context of expansion of business due to the participation in the program but the variation in income between established and new clients is not statistically significantly different. Entrepreneur takes finance for the startup of business or expand the current setup. One of the aims of an entrepreneur is to create or increase the demand for the product to generate revenue. One of the possible ways to increase revenue is to purchase the stock in bulk which leads to reducing the marginal cost per unit. Results

of the study show that increased demand for the product is significant at a 1 percent level of significance in dimensions of financial performance.

In response to the increase in the demand for products, entrepreneurs put a lot of effort into the development of new products. Therefore, development of new products is statistically positively significant in the financial performance of both sample groups of the study. The source of income of entrepreneurs is one and it is the earnings of the business. Therefore, they can't segregate the money from household activities.

A lion's share of their earnings is utilized in running their homes as compared to improvement in enterprise operations. In addition to that entrepreneurs are reluctant to add new products because the business setup is too small to hire new workers. It is a common observation that the entrepreneur himself organizes the operations of the business therefore, hiring new workers does not contribute significantly to the financial performance of the enterprise. Similarly, entrepreneurs do not manage a separate place for storing inventory. They may store products usually at home and sometimes the wastage or damage of products happens in the absence of storage facilities. If storing facilities are available to entrepreneurs they may contribute to increasing their revenue. Therefore, storing inventory is statistically significant for the financial performance of entrepreneurs.

To reduce the default rate, entrepreneurs are being advised by banks to maintain a record of profit and cost. The strict monitoring mechanism of banks positively contributes to the financial performance of enterprises and the survival of entrepreneurs. Moreover, other variables including gender, type of area, previous experience, number of dependents, and modes of financing are also significant in various dimensions of financial performance. Similarly, a significant difference between established and new clients has been observed in Islamic modes of microfinancing.

The financial performance in the context of the addition of new products, profit and cost analysis, and efficient administration are not significant. One of the possible causes is entrepreneurs are not trained. They have no guidance about the management of money earned through enterprise. Their decisions regarding the reinvestment of money in some cases are not appropriate (Berguiga et al 2020). On the other hand, rest of the dimensions of financial performance including financial expansion, improved quality, new products, and purchases in bulk are statistically significant and support the hypothesis that microfinance contributes significantly to increasing the financial performance of entrepreneurs. (Meressa 2020).

Table 4.2 reports that the monitoring and follow-up mechanism of all microfinance institutions is appropriate for the recovery of borrowings. The recovery rate of financial institutions is more than 90 percent. Maximum participation of clients in the repayment of loans is evidence that the venture's earnings are high. A clear significant difference between established and non-established clients has been seen in the context of repayment. In addition to those variables including mode of financing, previous experience, number of dependents, type of area, and gender are significantly different between established and new clients. Money for operating an enterprise is significantly indifferent between established clients and new clients.

Examining The Impact of Islamic Microfinance on Micro-Entrepreneurship: Evidence from Pakistan's Financial Landscape

Table 4.1

Impact on Financial Performance															
		gender	Age	Educ	Depends	Exp	Knowledge	Area	Mode	Client	Constant	likelihood	Chi-sq	Sig	R ²
Financial Expansion	Coeff	.222	-.218	.037	.1696	-.8607	-.8147	-1.110	.1034	0.8381	3.314	-418.66	119.23	0.00	0.124
	SE	.2656	.1160	.082	.1003	.2762	.2061	.2286	.2174	0.1846	.9593				
	Sig.	0.403	0.059	0.64	0.091	0.002	0.000	0.000	0.634	0.000***	0.001				
Increased Income	Coeff	0.6909	-0.381	0.16	0.128	-1.407	-.6046	1.017	-0.138	0.507	3.248	234.375	75.02	0.00	0.138
	SE	0.552	0.204	0.17	0.184	0.436	0.379	0.556	0.416	0.352	1.793				
	Sig.	0.211	0.062	0.34	0.489	0.001	0.111	0.068	0.741	0.150	0.070				
New Product	Coeff	0.525	-0.169	0.00	0.356	-0.127	0.0185	0.595	0.690	0.386	-3.267	-436.07	103.22	0.00	0.106
	SE	0.237	0.097	0.07	0.084	0.255	0.171	0.197	0.181	0.151	0.826				
	Sig.	0.027	0.080	0.99	0.000	0.618	0.913	0.003	0.000	0.011***	0.000				
Increased workers	Coeff	0.678	0.032	-0.06	0.167	-1.068	-0.482	-1.086	-0.135	0.214	0.446	-373.18	84.00	0.000	0.101
	SE	0.244	0.109	0.07	0.101	0.349	0.193	0.229	0.202	0.159	0.925				
	Sig.	0.005	0.765	0.42	0.099	0.002	0.013	0.000	0.506	0.180	0.630				
*Indicates a 10% level of significance, ** indicates a 5% level of significance, and *** indicates a 1% level of significance.															
Improved Quality	Coeff	1.379	-0.080	0.20	0.236	-0.903	-0.249	-0.698	-0.135	0.686	0.586	-511.78	131.25	0.0000	0.114
	SE	0.404	0.148	0.11	0.119	0.351	0.261	0.297	0.279	0.236	1.196				
	Sig.	0.001	0.586	0.07	0.048	0.010	0.339	0.019	0.630	0.004***	0.624				
Increased Demand	Coeff	-0.139	-0.206	0.09	0.148	-1.414	-0.002	0.583	0.675	-0.009	0.933	-642.28	127.61	0.000	0.090
	SE	0.286	0.127	0.09	0.108	0.306	0.227	0.294	0.243	0.203	1.032				
	Sig.	0.626	0.105	0.33	0.171	0.000	0.994	0.047	0.006	0.964	0.366				
Purchased Bulk	Coeff	-0.457	-0.309	-0.20	0.145	-1.175	0.218	0.702	-0.818	0.415	3.119	-515.09	149.21	0.000	0.126
	SE	0.255	0.112	0.07	0.098	0.277	0.204	0.239	0.219	0.174	0.923				
	Sig.	0.073	0.006	0.00	0.141	0.000	0.285	0.003	0.000	0.017***	0.001				
Efficiency in Administration	Coeff	-0.300	-0.147	0.05	0.234	-0.988	-0.052	0.575	-0.102	0.235	2.064	-404.44	100.16	0.000	0.110
	SE	0.322	0.144	0.10	0.119	0.324	0.256	0.320	0.277	0.228	1.153				
	Sig.	0.351	0.308	0.61	0.050	0.002	0.841	0.073	0.713	0.303	0.073				

Business money separate	Coeff	0.570	-.226	-	0.075	-0.714	-0.6746	-1.215	-0.227	0.239	2.641	-505.69	198.44	0.000	0.164
				.054											
	SE	0.219	0.096	0.06	0.083	0.269	0.170	0.194	0.178	0.1399	0.790				
	Sig.	0.009	0.019	0.41	0.369	0.008	0.000	0.000	0.201	0.087*	0.001				

*indicates a 10% level of significance, ** indicates a 5% level of significance, and *** indicates a 1% level of significance

Maintain Record	Coeff	0.795	-0.339	-0.09	0.063	-0.422	-0.565	-1.95	-0.785	-0.149	5.179	-505.69	198.44	0.0000	0.1640
	SE	0.239	0.999	0.06	0.089	0.266	0.178	0.206	0.186	0.148	0.846				
	Sig.	0.001	0.001	0.77	0.470	0.113	0.001	0.000	0.000	0.312	0.000				
You get wage	Coeff	0.542	-0.352	-0.07	0.357	-0.681	-1.048	-2.353	-0.464	-0.572	5.546	-493.14	234.18	0.000	0.191
	SE	0.247	0.107	0.07	0.099	0.293	0.198	0.238	0.195	0.167	0.943				
	Sig.	0.028	0.001	0.30	0.000	0.020	0.000	0.000	0.017	0.001***	0.000				
Location for production	Coeff	-2.501	0.175	-.090	.0469	-1.030	0.263	0.455	0.709	0.355	2.420	-387.87	238.72	0.0000	0.2353
	SE	0.244	0.123	0.07	0.101	0.260	0.214	0.245	0.222	0.196	0.936				
	Sig.	0.000	0.156	0.24	0.642	0.000	0.220	0.064	0.001	0.071**	0.010				
Location for storing	Coeff	-0.978	0.042	0.10	0.056	-0.886	-0.460	-0.837	0.026	-0.298	3.909	-516.55	137.27	0.0000	0.1173
	SE	0.222	0.095	0.06	0.083	0.271	0.165	0.181	0.176	0.136	0.795				
	Sig.	0.000	0.653	0.09	0.498	0.001	0.005	0.000	0.880	0.028***	0.000				

*indicates a 10% level of significance, ** indicates a 5% level of significance, and *** indicates a 1% level of significance

Table 4.2 Impact of Micro Credit on Income Smoothing

Impact on Income Smoothening									
The problem in operating enterprise			Duration			Problem in repayment			
	Coeff	SE	Sig	Coeff	SE	Sig	Coeff	SE	Sig
Sex	.1473	.2321	0.526	.2916	.4108	0.478	-.1199	.3264	0.713
Age	.1968	.1038	0.058	-.043	.1737	0.802	.0709	.1395	0.611
Education	.0165	.0715	0.817	-.031	.1195	0.793	-.0148	.0987	0.880
Dependents	-.3593	.0847	0.000***	.2336	.1636	0.153	-.2295	.1166	0.049**
Prev Exp	.4953	.2427	0.041**	-.145	.5052	0.774	.6997	.3200	0.029**
Prev Know	.0109	.1794	0.951	.7664	.3114	0.014**	.3850	.2410	0.110
Area	-.6285	.2084	0.003***	-.134	.3780	0.723	-.2635	.2804	0.347
Mode	-.6492	.1940	0.001***	-.724	.3382	0.032**	-.4596	.2636	0.081*
Client	.4600	.1509	0.002***	.3399	.2692	0.207	.0587	.2100	0.780
Constant	.4162	.80044	0.605	-1.27	1.5042	0.395	-1.425	1.106	0.198
Goodness of fit									
Log Likelihood	-558.492			-468.8			-445.38		
Chi-Square	137.41			76.25			92.12		
Sig	0.000***			0.000			0.0000		
Pseudo R²	0.1095			0.0752			0.0937		

*indicates a 10% level of significance, ** indicates a 5% level of significance, and *** indicates a 1% level of significance

Table 4.3 reports that religious people actively participate in *Shari'ah*-compliant microfinance products thereby reducing the percentage of persons who voluntarily exclude themselves from the financial system. A deprived segment of society gets microfinance easily for activities designed to generate income and get economically dependent. They can develop their micro-enterprises or expand the existing enterprises. A significant difference at a 5% level has been observed between established and new clients. So, the rest of the variables including age, gender, previous experience, and number of dependents significantly contribute to the enterprise resource base. The variable enterprise resource base for major investments contributed significantly. The reason may be borrowers have to disclose for what purpose they are getting finance. Due to strict monitoring and follow up borrowers spend finance on the activities they have mentioned. Ultimately, Islamic microcredit has a positive impact on the enterprise resource base. The enterprise resource base depicts mixed findings in the context of minor investment.

On the other hand, the enterprise resource base does not significantly contribute to minor investment. Established clients and new clients are not substantially different from one another at a 5 percent level. One possible reason is that micro-entrepreneurs are not able to get sufficient finance for the start of new businesses or the expansion of existing ones. Another possible reason is that a series of priorities, including type of area, previous experience, age, gender, and number of dependents, are involved in spending micro credit.

Table 4.3 Impact of Micro Credit on Enterprise Resource Base

Impact on Enterprise Resource Base						
	Major Investment			Minor Investment		
	Coeff	SE	Sig	Coeff	SE	Sig
Sex	-1.913	0.279	0.000***	-1.579	0.2487	0.000***
Age	0.413	0.15545	0.008***	0.4042	0.1133	0.000***
Education	-0.1683	0.08609	0.051**	-0.0725	0.073	0.321
Dependents	0.4963	0.1137	0.000***	0.4427	0.0964	0.000***
Prev Exp	-1.2232	0.2899	0.000***	-1.519	0.2911	0.000***
Prev Know	-0.2355	0.2554	0.357	0.0775	0.1927	0.688
Area	-0.3972	0.2745	0.148	1.4705	0.242	0.000***
Mode	-0.2048	0.2729	0.453	0.5597	0.2022	0.006***
Client	-0.6129	0.2101	0.004***	0.2407	0.1702	0.157
Constant	5.3638	1.0869	0	-1.707	0.8768	0.051**
Log Likelihood	-355.593			-487.1		
Chi-Square	213.76			249.48		
Sig	0			0		
Pseudo R²	0.2311			0.2038		

*, **, and *** indicate a 10%, 5%, and 1% level of significance, respectively.

The current study shows mixed results just like the studies of microfinance conducted in Bangladesh, India, Malaysia, Indonesia, Sri Lanka, and northeastern Thailand (Ahmad et al 2020). The negative effect of microfinance has not been observed in Pakistan.

The findings of the study reveal that micro-entrepreneurship development is possible in Pakistan through Islamic microfinance. However, Santoso et al., (2020) focus on positive experiences with rural households using microfinance in Indonesia. In Bolivia, investment in projects using microcredit fails to generate sufficient income to increase household earnings (Maldonado 2005). But still, Muslims particularly people of other religions also want products without interest, and they have a firm belief that if *Shari'ah*-compliant products are offered with true spirit and the right way then undoubtedly, they will improve the economic well-being of entrepreneurs.

CONCLUSION

Islamic microfinance is a new but adequate approach for the marginalized segments of society, predominantly for these poor micro-entrepreneurs. The main institution of Islamic microfinance is Akhuwat, serving for more than 15 years and now has 300 plus branches all over Pakistan. Shariah-compliant products are also offered by a few NGOs including HHRD, Wasil, Naymet, Muslim Aid, and Al Huda. The sample data is collected from the borrowers of Islamic microfinance institutions through 696 self-administered questionnaires for the analyses of the study. The findings of this research suggest that IMFIs have played a positive role in promoting micro-entrepreneurship in Pakistan.

The findings of the study reveal that microfinance significantly improves annual sales, net income, major investment, repayment, and enterprise resource base. Many respondents of the study agreed that growth in entrepreneurial activities is possible after financing from IMFIs. Islamic microfinancing contributes a lot to the survival and economic independence of entrepreneurs. This study revealed that these livelihood enterprises are contributing a lion's share of their family income. Although rest of the activities including training, entrepreneurial skills, and increased demand are not being influenced by Islamic microfinance. The reason can be that micro loans demand for a product cannot be increased remarkably and no institution is giving guidance and training to improve entrepreneurial skills at a wider scale.

Practically, the contribution of Islamic microfinance is to provide a platform for financially excluded people to get finance through *Shari'ah*-compliant products and services. The clients who participated in micro-credit have a direct and close relationship with Islamic microfinance institutions. Islamic financial institutions are community-based organizations and face a lot of challenges in making modes of Islamic finance operational. Moreover, factors including lack of *Shari'ah*-compliant funds, limited Meso-Level support legal constraints, and lack of awareness about Islamic microfinance are the main obstacles that hamper the growth of Islamic microfinance. However, today Islamic financial institutions are facing core challenges including high operational costs, difficulty in introducing new Shariah-compliant products, and lack of awareness about Islamic microfinance. A study about challenges faced by microfinance institutions in offering Shariah-compliant products may be conducted in the future. Islamic microfinance institutions significantly contribute to achieving the ultimate goal of poverty alleviation and improvement of the living standards of the general public by becoming a link between governments and people in policy implementation.

REFERENCES

- Ahmad, S., Lensink, R., & Mueller, A. (2020). The double bottom line of microfinance: A global comparison between conventional and Islamic microfinance. *World Development*, 136, 105130.
- Ahmad, S., Tahar, R. M., Muhammad-Sukki, F., Munir, A. B., & Rahim, R. A. (2016). Application of system dynamics approach in electricity sector modelling: A review. *Renewable and Sustainable Energy Reviews*, 56, 29-37.
- Akhter, Jaffri. (2009). Islamic Micro-Finance and Poverty Alleviation: A Case of Pakistan. *Proceedings 2nd CBRC, Lahore, Pakistan*. M. Sadeq (1989), Factor Pricing and Income Distribution from An Islamic Perspective, *Journal of Islamic Economics*,
- Alaro, A. A. M., & Alalubosa, A. H. (2019). The potential of Sharī'ah compliant microfinance in alleviating poverty in Nigeria. *International Journal of Islamic and Middle Eastern Finance and Management*.
- Berguiga, I., Said, Y. B., & Adair, P. (2020). Islamic and Conventional Micro-Financing in the MENA Region: A Performance Analysis. In *Handbook of Research on Theory and Practice of Global Islamic Finance* (pp. 216-239). IGI Global.
- Crépon, Bruno, Florencia Devoto, Esther Duflo, and William Parienté. "Estimating the impact of microcredit on those who take it up: Evidence from a randomized experiment in Morocco." *American Economic Journal: Applied Economics* 7, no. 1 (2015): 123-50.
- El-Gamal, M. A., (2006). *Islamic Finance: Law, Economics and Practice*. Cambridge: Cambridge University Press
- El-Komi, M., & Croson, R. (2013). Experiments in Islamic microfinance. *Journal of Economic Behavior & Organization*, 95, 252-269.
- Field, A. (2009). Logistic regression. *Discovering statistics using SPSS*, 264- 315.
- Jalil, M. F., Ali, A., & Ahmed, Z. (2022). Microfinance services and MSE growth in Pakistan: The mediating perspective of social and psychological capital.
- Kenny, B., & Rossiter, I. (2018). Transitioning from unemployment to self-employment for over 50s. *International Journal of Entrepreneurial Behavior & Research*.
- Khan, M. F. Z. (2014). The Social and Financial Performance of Conventional and Islamic Microfinance Institutions in Pakistan. *Al-Idah*, 28(1), 17-34.
- Komi and Croson(2011) 'Efficiency of Islamic Finance Contracts: Microfinance Experiments', 8th International Conference on Islamic Economics and Finance.
- Mahmood, R., & Rosli, M. M. (2013). Microcredit position in micro and small enterprise performance: the Malaysian case. *Management research review*.
- Maldonado, J. H., González-Vega, C., & Romero, V. (2005). The influence of microfinance on the education decisions of rural households: Evidence from Bolivia. *Universidad de los Andes*
- Mansori, S., Safari, M., & Ismail, Z. M. M. (2020). An analysis of the religious, social factors and income's influence on the decision making in Islamic microfinance schemes. *Journal of Islamic Accounting and Business Research*.

- Masyita, D., Ahmed, H. (2013). Why is the Growth of Islamic Microfinance Lower than its Conventional Counterparts in Indonesia? *Islamic Economic Studies*, 21(1), 35-62.
- Meressa, H. A. (2020). Growth of micro and small scale enterprises and its driving factors: empirical evidence from entrepreneurs in emerging region of Ethiopia. *Journal of Innovation and Entrepreneurship*, 9(1), 1-22.
- Moisseron, J. Y., Moschetto, B. L., & Teulon, F. (2015). Islamic finance: a review of the literature. *International Business & Economics Research Journal (IBER)*, 14(5), 745-762.
- Mondal, W. I. (2015), "Microcredit and Micro entrepreneurship: An Extension of Schupeter's Five-Factor Model", University of Redlands,.1-7
- Naveed Aslam, M. (2014). Role of Islamic microfinance in poverty alleviation in Pakistan: An empirical approach. *International Journal of Academic Research in Accounting, Finance and Management Sciences*, 4(4).
- Nelson, C., Garber, C., MkNelly, B., Lippold, K., Edgcomb, E., Horn, N., & Beard, B. (2000). Learning from Clients. *Assessment Tools for Microfinance*.
- Nelson, C., MkNelly, B., Edgcomb, E., Gaile, G., Garber, C., Horn, N., & Lippold, K. (2000). Learning from clients: *Assessment Tools for Microfinance Practitioners–Draft Manual*. January. AIMS Project and SEEP. Washington, DC: Management Systems International.
- Newman, A., Schwarz, S., & Ahlstrom, D. (2017). Microfinance and entrepreneurship: An introduction. *International Small Business Journal*, 35(7), 787-792.
- Obaidullah, M., (2008). *Introduction to Islamic Microfinance*. New Delhi: International Institute of Islamic Business ad Finance.
- Riwajanti, N. I. (2013). Islamic Microfinance as an Alternative for Poverty Alleviation: A Survey. *Afro Eurasian Studies*, 2(1-2), 255-271.
- Santoso, D. B., Gan, C., Revindo, M. D., & Massie, N. W. G. (2020). The impact of microfinance on Indonesian rural households' welfare. *Agricultural Finance Review*.
- Shahriar, A. Z. M., Schwarz, S., & Newman, A. (2016). Profit orientation of microfinance institutions and provision of financial capital to business start-ups. *International Small Business Journal*, 34(4), 532-552.
- Suzuki, Y., Pramono, S., & Rufidah, R. (2016). Islamic Microfinance and Poverty Alleviation Program: Preliminary Research Findings from Indonesia. *Share: Jurnal Ekonomi dan Keuangan Islam*, 5(1).
- Terano, R., Mohamed, Z., & Jusri, J. H. H. (2015). Effectiveness of microcredit program and determinants of income among small business entrepreneurs in Malaysia. *Journal of Global Entrepreneurship Research*, 5(1), 22.
- Weill, L. (2019). Islamic microfinance. In *A Research Agenda for Financial Inclusion and Microfinance*. Edward Elgar Publishing.
- Akhmadjonov, O., Valijonov, M., Usmonov, I., & Qurbonov, A. (2022). Islamic banking and finance. *Science and Education*, 3(1), 1092-1098.