

## Is Microfinance Truly Driving Entrepreneurship? Evaluating the Financial Impact of MFIs in Pakistan

Sheeraz Akhtar Katper <sup>a</sup> Sirajul Haq Kandhro <sup>b</sup> Imamuddin Khoso <sup>c</sup>

**Abstract:** Microfinance has become an essential instrument for fostering financial inclusion and supporting entrepreneurial activity in developing economies, particularly where traditional banking services remain inaccessible to the majority. In Pakistan, microfinance institutions (MFIs) have increasingly provided enterprise loans aimed at improving livelihoods, encouraging self-employment, and stimulating small-scale business growth. While existing literature affirms the general benefits of microfinance, there remains a need to evaluate its financial impact on entrepreneurship development within the local context. This study focuses on Microfinance as the independent variable, examining its effect on three dependent variables: Asset Increase, Household Income, and Enterprise Performance. Data were collected from 381 borrowers of enterprise loans from three leading MFIs in Pakistan—Khushhali Microfinance Bank Ltd, HBL Microfinance Bank Ltd, and Advans Pakistan Microfinance Bank Ltd. A quantitative research approach was adopted, and a structured questionnaire was administered, and the data were analyzed using SmartPLS 4 software through Partial Least Squares Structural Equation Modelling (PLS-SEM), which enables robust analysis of complex relationships between latent variables. The results indicate that microfinance has a statistically significant and positive impact on all three variables, suggesting that access to enterprise loans enhances the financial performance of micro-entrepreneurs. Each hypothesis tested was supported, reinforcing the role of microfinance as a catalyst for sustainable entrepreneurship development. These findings carry important implications for MFIs, policymakers, and development practitioners, offering a more nuanced understanding of how microfinance can be strategically leveraged to promote inclusive entrepreneurship development in Pakistan.

**Keywords:** Microfinance, Entrepreneurship Development, Financial Impact, Household Income, Asset Increase, Enterprise Performance

### Introduction

Microfinance has been considered an important instrument for the alleviation of poverty, economic development and empowerment of the women especially in developing nations. The main focus of microfinance programs is the provision of micro credit, savings, and some other financial services to poor, unbanked and entrepreneurs. Microfinance is regarded as one of the most essential and effective mechanisms for entrepreneurial development, economic growth, and sustainability. Numerous studies have determined that microfinance has markedly enhanced living conditions, empowerment, and societal position by augmenting options for self-employment and micro-entrepreneurship. In recent decades, microfinance programs have been implemented in several developing economies, including Bangladesh, India, Nigeria, Bolivia, Kenya, Nepal, China, Indonesia, Thailand, and Pakistan. The significance of microfinance for entrepreneurial growth has prompted several developing nations to embrace it as a primary source of financing; nonetheless, access to money remains a substantial obstacle to entrepreneurial advancement. Microfinance is regarded as a proactive strategy to generate employment opportunities, alleviate poverty, and stimulate economic activity, while fostering entrepreneurial skills among the youth, thereby significantly enhancing economic growth and development.

Many studies have been done around the world on SMEs and how they are influenced by microfinance services, but a few studies have focused on the evaluation of microfinance programs in relation to

<sup>a</sup> PhD Scholar, Department of Public Administration, University of Sindh, Jamshoro, Sindh Pakistan.

<sup>b</sup> Professor, Department of Public Administration, University of Sindh, Jamshoro, Sindh, Pakistan.

<sup>c</sup> Professor, Institute of Business Administration, University of Sindh Jamshoro, Sindh Pakistan.

sustainability and financial impact for fostering entrepreneurship in the society. Policymakers usually look at the effects of programs to figure out how to best use limited funds. As Jagged et al. (2011) found in their study on how microfinance helps reduce poverty in Nigeria. They suggested that the microfinance could be even more effective if programs expanded in depth and outreach. Similarly, Khandker (2014) found that access to microcredit in Bangladesh positively influenced self-employment and small business expansion. However, research on the economic effectiveness of microfinance remains mixed. Banerjee et al. (2015), through randomized control trials in India, observed that while microfinance facilitated an increase in business activity, it did not lead to substantial improvements in long-term income or economic upliftment. In Pakistan, the evolution of microfinance has been notably swift over the past ten years. From 2015 to 2023, the count of active borrowers experienced a remarkable increase, rising from 3.6 million to 9.3 million, effectively more than doubling within that timeframe. A significant proportion of active borrowers, nearly fifty percent, are women, with 53% of them living in rural regions. The sector has exhibited impressively low default rates, with write-offs constituting less than 1% of the gross loan portfolio (Abro, P. et.al. 2021).

**Table 1**  
*Microfinance Outlook*

|                                      | 2023 | 2021       | 2020       | 2019      | 2018      | 2017      | 2016      | 2015    |
|--------------------------------------|------|------------|------------|-----------|-----------|-----------|-----------|---------|
| Active Borrowers in (Millions)       | 9.2  | 8.0        | 7.0        | 7.4       | 6.7       | 5.5       | 4.2       | 3.6     |
| Gross Loan Portfolio (PKR Billions)  | 510  | 118        | 319        | 302       | 256       | 196       | 132       | 90      |
| Active Women Borrowers in (Millions) | 4.1  | 3.5        | 3.4        | 3.8       | 3.5       | 2.7       | 2.3       | 2       |
| Deposits (PKR Billions)              | 488  | 401        | 373        | 266       | 239       | 186       | 118       | 60      |
| Loans Write offs                     | NA   | 15,182,321 | 14,285,825 | 8,671,416 | 1,091,556 | 1,581,598 | 1,147,319 | 917,855 |
| Loans at Risk                        | NA   | 7,375,133  | 6,979,244  | 7,957,233 | 1,972,010 | 1,085,263 | 1,073,562 | 781,212 |

The timeline of the microfinance industry is presented in Table 1. It can be seen that there have been significant shifts and an increase in the number of borrowers and loan portfolios throughout the course of the time period (Source: PMN 2023).

Despite having a well-organized microfinance system, Pakistan nonetheless has a low rate of entrepreneurship. The current structure of the economy urgently needs to alter. The goal of microfinance is to encourage both economic and social empowerment. In Pakistan, a sizable section of the populace is still not able to access formal financial services, microfinance institutions (MFIs) aim to bridge this gap by offering small loans, savings mechanisms, and non-financial services to underserved communities (Pakistan Microfinance Network, 2022). Despite increasing presence of microfinance programs and their widespread acceptance as tools for economic empowerment, their actual impact on entrepreneurship development remains inadequately measured. Most evaluation frameworks are either financially focused—assessing loan repayment rates, profitability, or income changes—or socially oriented—examining empowerment, skill development, or social mobility (Duvendack et al., 2011). These findings highlight the importance of context-specific studies. Pakistan's socio-cultural, economic, and regulatory environment differs significantly from other developing countries, warranting targeted research that examines the unique pathways through which microfinance may support entrepreneurship development. Therefore, a comprehensive approach that extensively studies empirical approach of the financial dimensions is still lacking in much of the literature, particularly within the Pakistani context. This gap suggests a need for a more nuanced understanding of how microfinance influences the financial outcomes of the borrowers' acquiring loans for their businesses.

The research presents insights hooked on how microfinance influences the financial stability of borrowers, offering a comprehensive evaluation of the effectiveness of these programs in fostering

entrepreneurship. The target population of the study was drawn from clients of the three main Microfinance Institutions including Khushhali Microfinance Bank Ltd., the HBL Microfinance bank Ltd., and Advans Microfinance Ltd. particularly from Hyderabad and Larkana districts.

### Research Objectives

The present study makes a significant academic contribution formulating the following objectives:

1. To explore the impact of microfinance programs on Household Income
2. To examine the impact of microfinance programs on Enterprise Performance
3. To investigate the impact of microfinance programs on Asset Increase of Enterprise

### Literature Review

The current literature is categorized into three primary domains: (i) poverty alleviation; (ii) women's empowerment; and (iii) effects on various topics such as rural financial inclusion, education, nutrition, health, consumption levels, and asset accumulation (Tedeschi 2010, Garikipati et al. 2017).

Numerous former researchers have demonstrated through empirical studies that microcredit positively influences the socio-economic situations of clients, their households, and their microenterprises (Abed, 2010). George (2008) discovered that microfinance programs significantly affected women entrepreneurs, with the majority of participants in the study expanding their enterprises and augmenting their household income. Banerjee et al. (2015) shows that the microcredit model considerably influences firm performance regarding profitability, revenue, operational input, and workforce size. Ngeheve and Nembo (2010) similarly discovered that microfinance positively influences the development of members' enterprises. AIM's microcredit initiative has demonstrated an enhancement in the microenterprise income of its clients in Peninsular Malaysia (Al Mamun et al., 2014).

Littlefield et al. (2005) assert that microfinance services, including microcredit, enhance living standards, augment income, generate employment via entrepreneurship, and stabilize seasonal consumption in diverse societies within the developing world. Attanasio (2015) utilized findings from a randomized field trial in rural Mongolia to examine the influence of microfinance on entrepreneurship, identifying a beneficial effect of group loans on food consumption and entrepreneurial activities. In 2015, Firdousi examined and elucidated the determinants of enterprise and microfinance in regard to Bangladesh. Basic statistical methods and econometric models were employed to analyze the data. The result showed the demand for microenterprise loan products in Bangladesh is increasing swiftly.

Microfinance has significantly impacted entrepreneurship development in Pakistan by providing financial services to underserved populations, particularly micro-entrepreneurs who lack access to formal banking. Touseef et.al, in 2020 empirically tested the microfinance facility for rural women entrepreneurs of Pakistan. The research used quasi-Experimental, Difference indifference method, survey conducted in 2017, using microfinance as independent variable and income and consumption of MFIs and non-MFIs borrowers as dependent variables. Likewise, Ahmed et.al, (2017) empirically tests the efficiency of microfinance providers in Pakistan in context to the business. The main idea of study revolves around analysis of efficiency of micro finance providers in Pakistan in terms of loan profiles and outreach to entrepreneurs. Also, Ameer, B. et al, (2013) in their research analyzed the effectiveness of the microfinance loans in Pakistan, wherein study used microfinance as the independent variable and three dependent variables have been identified to examine the effectiveness of the loans that are procedure, loan consumption and income. Many other studies like Samia (2011), Ahmad, R. (2017), Xavier (2014), Malik (2020), Saad (2016), discussed the positive impacts of microfinance on the entrepreneurship in context to Pakistan. The researchers utilized experimental, survey and exploratory methods to identify the relationship into variable (microfinance) like loan amount, loan size, loan characteristics and the utilization of microfinance loan and income and consumption, MFIs and non-MFIs borrowers.

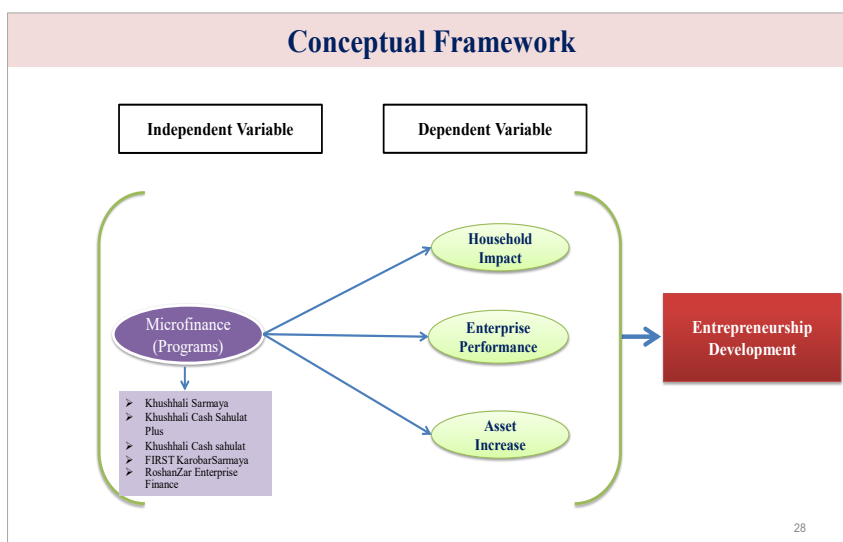
The findings support the assertion that microfinance is an effective instrument for enhancing the income of borrowers in underdeveloped nations. It appears to possess the capacity to assist poor individuals directly, as it facilitates their participation in self-employment and allows them to actively

contribute to the economy. Microfinance primarily addresses the needs of the impoverished and economically marginalized, offering them financial opportunity to launch or sustainable income-generating activities, so enhancing their income and well-being, and effectively mitigating income inequality and supporting business generation. Like, Mahmood, Arby, Hussain, and Sattar (2016): Microfinance credit improves income generation and consumption level of poor; the impact on productive activities is higher than the consumption and results in poverty reduction, according to a poll of 400 active clients of the Microfinance Bank Khushhali in Dera Ghazi Khan and Layyah districts of the Punjab (Pakistan). Mohamed Ali (2023) discusses the impact of microfinance on enterprise performances of SMEs. Tetiana et, al. (2022), also explored the effect of micro-finance services by analyzing the net profit and performance of small and medium enterprises through correlation analysis, generalization analysis, comparison, correlation, and regression analysis to reveal a high level of dependence of citizens on loans for improvement. The goal of Ahamad, Shamsuddin et al. (2021) was to look at how the microfinance program affected the accumulation of assets by loan borrowers. To accomplish this, the study employed statistical and descriptive techniques. According to the results, most borrowers claimed that their assets, including their farms, land, and cattle, had not changed. Many scholars come to the conclusion that certain development indicators have a major positive impact, while others do not. According to McIntosh C. et al. (2011), several other works disagree and instead have a beneficial effect on various parameters. Microfinance may be losing credibility due to insufficient evidence of good impact. The study identifies the impact of micro finance programs on the entrepreneurship development of the country, keeping the key micro finance organizations as sample for the study and underpins the key areas to prove the proposed hypothesis and recommend policy outlines for the entrepreneurial development.

Although the various studies have been conducted on the microfinance in different regions. However, the lack of empirical evidence on the effectiveness of microfinance programs in promoting entrepreneurship development is lacking in Pakistan. In the context of Pakistan, although microfinance institutions have been studied for their outreach and impact (Fareed, F. 2020), there is limited empirical research that simultaneously evaluates the financial outcomes of microfinance programs specifically aimed at fostering entrepreneurship. This study aims to fill these gaps by providing empirical evidence on how microfinance programs affect entrepreneurship development in Pakistan, incorporating financial indicators. The findings are expected to offer critical insights for policymakers, microfinance providers, and development practitioners to know the effect of their programs on wider perspective of entrepreneurial development in the country.

The following conceptual model was built on the basis of the aforementioned literature. It is a diagrammatic depiction of the framework that demonstrates the recommended linkages and intermediating components in our research, which are depicted in Figure 1.

**Figure 1**  
Conceptual Framework



The primary objective of this study was to empirically examine the effects of microfinance services offered by MFIs on household income, enterprise performance, asset increase of enterprises, of borrowers through a survey-based approach. The information was gathered from three microfinance institutions (MFIs) in Sindh that offer microfinance services. The purpose of this study is to make a contribution to the existing body of literature by conducting an analysis of the impact that microfinance services offered by microfinance institutions (MFIs) in Sindh have on microenterprises and micro entrepreneurs. For the above study the microfinance was taken as independent variable, in relationship to the dependent variables including household income, enterprise performance and asset increase representing the entrepreneurship development.

### Research Hypotheses

In developing countries microfinance has surfaced as a powerful instrument used for poverty alleviation and entrepreneurial development. However, the impact of microfinance institutions on the business success and sustainability of entrepreneurs remains a subject of debate. This study aims to examine how microfinance support, provided by institutions such as Khushhali Microfinance Bank, HBL Microfinance Bank, and Advans Pakistan Microfinance Bank, influences the growth, revenue, and sustainability of small businesses owned by their borrowers. Based on the theoretical framework and review of the literature, the following hypotheses are proposed:

**H1:** Microfinance programs have significant impact on Household Income of borrowers of Khushhali Microfinance Bank Ltd, HBL Microfinance Bank Ltd, and Advans Pakistan Microfinance Bank Ltd.

**H2:** Microfinance programs have significant impact on Enterprise Performance of borrowers of Khushhali Microfinance Bank Ltd, HBL Microfinance Bank Ltd, and Advans Pakistan Microfinance Bank Ltd.

**H3:** Microfinance programs have significant impact on Assets Increase of borrowers of Khushhali Microfinance Bank Ltd, HBL Microfinance Bank Ltd, and Advans Pakistan Microfinance Bank Ltd.

### Methodology

This study employed a quantitative research design to investigate the financial impact of microfinance on entrepreneurial development in Pakistan. The approach was chosen to allow for objective measurement and statistical analysis of relationships between microcredit and selected financial indicators. Primary data were collected using a structured survey questionnaire, designed to capture borrower experiences and measurable outcomes related to microcredit utilization. The questionnaire consisted of close-ended questions aimed at quantifying the economic effects of microfinance on individual borrowers.

### Population and Sample:

The target population consisted of micro-entrepreneurs who had availed enterprise loans from three major microfinance institutions in Pakistan: Khushhali Microfinance Bank Ltd, HBL Microfinance Bank Ltd, and Advans Pakistan Microfinance Bank Ltd. Keeping the above range in view, we distributed 400 questionnaires out of which a sample size of 381 was collected. In this regard, questionnaires with relevant different sections have been designed for data collection and the same was distributed among the respondents – the borrowers of the selected MFIs – by hand as well as through branch offices' e-mail addresses.

### Data Analysis

The collected data were analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM) through SmartPLS 4 software. PLS-SEM was chosen due to its capacity to model complex relationships between latent constructs and its suitability for exploratory research with medium sample sizes. Additionally, Statistical Package for Social Science (SPSS) (version 27) was used for descriptive statistics. In this study, microcredit loan served as the independent variable, while the dependent variables included household income, enterprise performance, and asset increase. These financial indicators were used to evaluate the financial effects of microfinance programs on the entrepreneurial outcomes of the borrowers. The relationships among these variables were tested to determine the extent to which access to microcredit contributes to economic empowerment and business development.



Results

This section presents empirical results related to the economic dimensions of microfinance's impact, specifically on Household Income (HI), Enterprise Performance (EP), and Asset Increase (AI). These variables are treated as dependent outcomes, with Microfinance (MF) as the independent variable.

Demographics:

Table 2

Descriptive Analysis

| Demographics Items | Frequency | Percent | Valid Percent | Cumulative Percent |
|--------------------|-----------|---------|---------------|--------------------|
| Gender             |           |         |               |                    |
| Male               | 304       | 79.8    | 79.8          | 79.8               |
| Female             | 77        | 20.2    | 20.2          | 100.0              |
| Age                |           |         |               |                    |
| 18 to 25           | 35        | 9.2     | 9.2           | 9.2                |
| 26 to 35           | 133       | 34.9    | 34.9          | 44.1               |
| 36 to 45           | 167       | 43.8    | 43.8          | 87.9               |
| 46 to 55           | 44        | 11.5    | 11.5          | 99.5               |
| Above 55           | 2         | 0.5     | 0.5           | 100.0              |
| Education          |           |         |               |                    |
| High School        | 169       | 44.4    | 44.4          | 44.4               |
| Bachelors          | 147       | 38.6    | 38.6          | 82.9               |
| Masters            | 49        | 12.9    | 12.9          | 95.8               |
| M.Phil./PhD        | 2         | 0.5     | 0.5           | 96.3               |
| Others             | 14        | 3.7     | 3.7           | 100.0              |

The sample comprised 381 respondents who are active microfinance borrowers from three leading microfinance institutions in Pakistan: Khushhali Microfinance Bank, HBL Microfinance Bank, and Advans Microfinance Bank. In terms of gender distribution, the majority of participants were male (79.8%), while female respondents constituted 20.2%, reflecting the prevailing pattern of male dominance in enterprise loan uptake in the country. Regarding age, the largest segment of respondents (43.8%) fell within the 36 to 45 age brackets, followed by 34.9% in the 26 to 35 range. A smaller proportion of borrowers were aged 18 to 25 (9.2%) and 46 to 55 (11.5%), while only 0.5% were above 55 years, indicating that microfinance lending is primarily targeted at individuals in their economically active years. In terms of educational attainment, a significant number of respondents had completed high school (44.4%), while 38.6% held a bachelor’s degree, and 12.9% had completed master’s-level education. A small number (0.5%) reported M.Phil./Ph.D. qualifications, and 3.7% fell into the ‘Other’ educational categories, including vocational or informal education. This diverse educational background suggests that microfinance clients come from varied literacy levels, although most possess at least a basic to moderate level of formal education that may support their entrepreneurial activities.

Factor Analysis

Table 3

Factor Analysis

| Factor Analysis |       |     |       |     |       |
|-----------------|-------|-----|-------|-----|-------|
| MF1             | 0.850 | EP2 | 0.726 | HI5 | 0.712 |
| MF2             | 0.679 | EP3 | 0.746 | AI1 | 0.895 |
| MF3             | 0.761 | EP4 | 0.768 | AI2 | 0.805 |
| MF4             | 0.722 | HI1 | 0.842 | AI3 | 0.732 |
| MF5             | 0.741 | HI2 | 0.732 | AI4 | 0.687 |
| MF6             | 0.720 | HI3 | 0.773 |     |       |
| EP1             | 0.745 | HI4 | 0.690 |     |       |

The factor analysis results presented in Table 3 indicate that all measurement items have satisfactory factor loadings, demonstrating a strong relationship between each item and its corresponding latent

construct. All factor loadings exceed the minimum threshold of 0.60 recommended for indicator reliability (Hair et al., 2022). For the Microfinance (MF) construct, the loadings of items MF1 through MF6 range from 0.679 to 0.850, with MF1 exhibiting the highest loading (0.850), suggesting it is the most representative indicator of the microfinance construct. All MF items exceed the recommended threshold of 0.60, confirming acceptable item reliability. In the case of Enterprise Performance (EP), the factor loadings for EP1 to EP4 range from 0.726 to 0.768, indicating that each item effectively contributes to measuring the enterprise performance dimension. Similarly, the Household Income (HI) construct shows acceptable loadings between 0.690 and 0.842, with HI1 being the most strongly loaded indicator (0.842), emphasizing its relevance in capturing changes in income levels as a result of microfinance participation. The construct of Asset Increase (AI) also demonstrates strong item reliability, with loadings ranging from 0.687 to 0.895. The highest loading was observed for AI1 (0.895), indicating it is a key indicator of asset accumulation. Although AI4 has the lowest loading (0.687), it still meets the acceptable minimum threshold for factor loadings, supporting its retention in the model. Overall, the factor analysis supports the construct validity of the measurement model, as all indicators demonstrate strong convergent validity, with loadings above the generally accepted benchmark of 0.60, and most exceeding 0.70, reflecting a well-structured and reliable measurement instrument.

Reliability and Validity

Table 4

Construct Reliability and Validity

| Variables              | Cronbach's Alpha | rho_A | Composite Reliability | Average Variance Extracted (AVE) |
|------------------------|------------------|-------|-----------------------|----------------------------------|
| Enterprise Performance | 0.769            | 0.778 | 0.844                 | 0.521                            |
| Household Income       | 0.822            | 0.835 | 0.871                 | 0.532                            |
| Microfinance Program   | 0.840            | 0.844 | 0.883                 | 0.558                            |
| Asset Increase         | 0.805            | 0.815 | 0.855                 | 0.548                            |

In this research, the internal consistency was confirmed by using both Cronbach’s alpha and composite reliability (CR). Hair et al. (2022) and suggest that the cut-off criteria for Cronbach alpha ( $\alpha$ ) are 0.70. Following Hair, Hult, Ringle, and Sarstedt (2014) the minimum composite reliability value in the PLS-SEM analysis should exceed 0.70. In our study, the different variables are carrying the required and suitable values above the cut-off point i.e. 0.70 as it is indicated, that the Cronbach alpha and composite reliability (CR) are given as under: (Cronbach  $\alpha$ /CR) for Microfinance is (0.840/ 0.883), for Asset Increase (0.805/0.855), for Enterprise Performance (0.769/0.844), and Household Income (0.822/ 0.871) respectively. The measures of reliability well exceed the suggested thresholds of Cronbach’s alpha, composite reliability (CR), and Rho (A) which specify sufficient reliability.

Convergent validity was established using Average Variance Extracted (AVE) values, which were required to equal or exceed 0.50, according to Hair et al. (2022). It is observed that the results of AVE in our study are approximately 50%. This indicates that the items developed in the study questionnaire are well converted to construct the latent variables of our study.

Discriminant Validity

Table 5

Fornell-Larcker Criterion

|                        | Asset Increase | Enterprise Performance | Household Income | Micro Finance |
|------------------------|----------------|------------------------|------------------|---------------|
| Asset Increase         | 0.740          |                        |                  |               |
| Enterprise Performance | 0.157          | 0.722                  |                  |               |
| Household Income       | 0.148          | 0.599                  | 0.729            |               |
| Micro Finance          | 0.145          | 0.510                  | 0.563            | 0.747         |

The Fornell–Larcker criterion is used to assess discriminant validity in structural equation modeling by comparing the square root of the Average Variance Extracted (AVE) of each construct with its correlations with other constructs. Discriminant validity is established when the diagonal values (square roots of AVE) are greater than the off-diagonal correlations in the corresponding rows and columns.

As shown in Table 5, the square root of AVE for each construct—Asset Increase (0.740), Enterprise Performance (0.722), Household Income (0.729), and Microfinance (0.747)—is higher than the correlation values between that construct and all other constructs. For example, the correlation between Asset Increase and Enterprise Performance is 0.157, which is lower than the square root of AVE for both constructs (0.740 and 0.722 respectively). Similarly, Microfinance shows the highest correlation with Household Income (0.563), which is still lower than its AVE square root (0.747), confirming that the Microfinance construct is distinct from others. These results collectively demonstrate that discriminant validity is achieved, as each construct shares more variance with its indicators than with any other construct in the model, in accordance with the criteria recommended by Fornell and Larcker (1981) and further supported by Hair et al. (2022).

Path Estimation Regression Analysis

Table 6

Path Estimation

| Path Estimation Regression              | Coefficient (β) | Sample Mean (M) | Standard Deviation (STDEV) | T Statistics | P Values | Remarks     |
|---|-----------------|-----------------|----------------------------|--------------|----------|-------------|
| Micro Finance -> Enterprise Performance | 0.510           | 0.514           | 0.045                      | 11.369       | 0.002    | Significant |
| Micro Finance -> Household Income       | 0.563           | 0.565           | 0.039                      | 14.401       | 0.000    | Significant |
| Micro Finance -> Asset Increase         | 0.145           | 0.156           | 0.047                      | 3.107        | 0.002    | Significant |

The study examines the relationship of the path estimation regression, the findings of this study as shown in Table 6, revealed that Microfinance (MF) is positive and significant, therefore, it is directly related to the Household Income (HI) with path coefficient ( $\beta$  0.563) with P-value < (0.05) revealing the strong impact between the two variables proving the hypothesis (H1), posing that when Microfinance raises the Household Income also raises by 56%. Also, the microfinance is significantly and positively related to the Enterprise Performance (EP) by ( $\beta$  0.510) with P-value < (0.05), meaning that as the Microfinance to the borrowers of KBL, HBLMF, and APMBL banks increases the Enterprise Performance by 51%, which is the significant and positive, hence confirming the hypothesis (H2). Likewise, Microfinance when regressed on the Asset Increase (AI), revealed a significant and positive relationship between the two variables with a path coefficient ( $\beta$  = 0.145 with P-value <0.05. The result suggests that when Microfinance to the clients of KBL, HBLMF, and APMBL banks increases, the Assets also increases by 14% of the variation in the dependent variable. Therefore, the hypothesis (H3) is also proved.

Goodness of Fit (Model Fitness):

Table 7

Goodness of Fit

| Fitness of Model |       |                 |       |
|------------------|-------|-----------------|-------|
| R-Square         | 0.371 | Square Adjusted | 0.370 |

Moreover, the model of this study as shown in table 7, is fit for the research objectives to test the hypothesis and idea of the study as the R2 square of the study is 0.371 and the adjusted R2 square is 0.370 meaning that 37.1% and 37.0% respectively. R square shows how well a regression model fits the data. Due to the complexity of model, in social science, R<sup>2</sup> values between 0.10 and 0.50 are acceptable Ozili, P. K. (2023).



## Discussion

The findings of this study confirm that microfinance plays a significant and positive role in promoting economic well-being among entrepreneurs in Pakistan. This section interprets the key outcomes in relation to existing literature and theoretical expectations.

### Microfinance and Household Income

The analysis revealed a strong and significant positive relationship between microfinance and household income ( $\beta = 0.563$ ,  $p < 0.001$ ), supporting the hypothesis that access to microcredit improves the financial standing of borrowers. This aligns with the findings of Khandker (2014) and Jagged et al. (2011), who reported that microfinance enhances the income-generating capacity of low-income households by enabling entrepreneurial ventures and smoothing consumption. Increased household income is an important indicator of poverty alleviation and socio-economic upliftment, and in this study, it indicates that microfinance programs in Pakistan are effectively addressing financial exclusion.

### Microfinance and Enterprise Performance

A significant relationship was also found between microfinance and enterprise performance ( $\beta = 0.510$ ,  $p < 0.001$ ). This demonstrates that microfinance not only helps individuals start businesses but also contributes to their operational success and growth. This is in line with previous research (e.g., Khandker, et.al. 2014), which found that microfinance promotes self-employment and supports small business expansion. However, the results also diverge from Banerjee et al. (2015), who argued that microfinance does not necessarily lead to long-term business performance. The positive results in the Pakistani context may be attributed to targeted products, favorable loan structures, and supportive mechanisms offered by institutions like Khushhali Bank, HBL Microfinance Bank, and Advans Microfinance Bank.

### Microfinance and Asset Increase

The impact of microfinance on asset accumulation ( $\beta = 0.145$ ,  $p < 0.01$ ) was positive but relatively modest compared to the other variables. This suggests that while microfinance supports income generation and business performance in the short term, its role in capital or asset building may take longer to manifest. This outcome is consistent with the notion that asset accumulation is a gradual process that depends on sustained profitability and reinvestment. Nonetheless, the positive association validates that microfinance contributes to financial resilience and long-term economic security among entrepreneurs.

## Overall Implications

This study extracted different interesting practical implications. The implications arising from this study are useful for the Microfinance Banking sector. This study is also beneficial for the policymaking of the microfinance institutions in Pakistan. Therefore, the research would be equally attractive for the microfinance industry, MESEs, researchers and academia. The Microfinance directly affect the entrepreneurial development in the country proving the hypotheses of the study. The findings indicate that microfinance programs impact on the development of enterprises and their productivity for better outcome of the entrepreneurship.

## Conclusion

This study aimed to evaluate the economic impact of microfinance on entrepreneurship development in Pakistan by focusing on three key indicators: household income, enterprise performance, and asset increase. Based on data collected from 381 entrepreneurs who obtained loans from Khushhali Microfinance Bank, HBL Microfinance Bank, and Advans Microfinance Bank, the analysis reveals that microfinance has a significant and positive effect on all three variables.

The findings show that microfinance contributes substantially to improving household income, which in turn helps in reducing financial vulnerability and poverty. It also significantly enhances enterprise performance, enabling small business owners to expand operations, improve productivity, and sustain their ventures. While the impact on asset accumulation is relatively modest, it remains statistically significant, indicating that microfinance plays a supporting role in building long-term economic security.

Overall, the study confirms that microfinance is an effective development tool in the Pakistani context. By enabling access to capital, it empowers entrepreneurs, enhances economic stability and contributes to enterprise growth.

The study has certain limitations, such as the fact that it was based on a limited sample size and that it only reflects a small number of rural and semi-rural areas in the Sindh province of Pakistan. Due to the fact that it does not accurately portray the entire nation, additional research on a more extensive scale is necessary in order to validate and solidify the conclusions. Furthermore, future research can be conducted using a longitudinal approach to evaluate the long-term effects of microfinance on the generation of wealth and the sustainability of entrepreneurial endeavors. Additionally, the non-economic dimensions, such as social inclusion, financial independence, and women's empowerment, can be investigated.

## References

- Abed, H. F. (2000, November). Microfinance NGOs in Bangladesh: Growth, impact and challenges. In *Asian Regional Conference on The Potential and Limitations of Economic Initiatives in Grassroots Development—Current Issues and Asian Experiences*, 27th–30th November.
- Abro, P., Bhutto, A., & Pitafi, A. (2021). Is Credit Enough? Entrepreneurial training through MFIs in Pakistan: A case study. *International Research Journal of Management and Social Sciences*, 2(1), 1–16. <https://irjmss.com/index.php/irjmss/article/view/154>
- Ahamad, Shamsuddin. (2021). The Impact of Microfinance Programs on Borrowers' Asset Accumulation: An Empirical Study in Bangladesh. *Journal of Asian Finance Economics and Business*, 8. 1147–1154. <https://doi.org/10.13106/jafeb.2021.vol8.no5.1147>
- 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), 147–158. <https://doi.org/10.26710/reads.v3i2.173>
- Al-Mamun, A., Mazumder, M. N. H., & Malarvizhi, C. A. (2014). Measuring the effect of Amanah Ikhtiar Malaysia's microcredit programme on economic vulnerability among hardcore poor households. *Progress in Development Studies*, 14(1), 49–59. <https://doi.org/10.1177/1464993413504351>
- Ameer, B., & Jamil, M. (2013). Effectiveness of Microfinance Loans in Pakistan (A Borrower Perspective). *Global Journal of Management and Business Research*.
- Attanasio, O., Augsburg, B., De Haas, R., Fitzsimons, E., & Harmgart, H. (2015). The impacts of microfinance: Evidence from joint-liability lending in Mongolia. *American Economic Journal. Applied Economics*, 7(1), 90–122. <https://doi.org/10.1257/app.20130489>
- Banerjee, A., Duflo, E., Glennerster, R., & Kinnan, C. (2015). The miracle of microfinance? Evidence from a randomized evaluation. *American Economic Journal. Applied Economics*, 7(1), 22–53. <https://doi.org/10.1257/app.20130533>
- Duvendack, M., Palmer-Jones, R., Copestake, J. G., Hooper, L., Loke, Y., & Rao, N. (2011). *What is the evidence of the impact of microfinance on the well-being of poor people?* EPPI-Centre, Social Science Research Unit,
- Fareed, F. (2020). *Financial inclusion, entrepreneurship and gender: an empirical assessment using microeconomic data* (Doctoral dissertation, Université Paris-Est).
- Ferdousi, F. (2015). Impact of microfinance on sustainable entrepreneurship development. *Development Studies Research*, 2(1), 51–63. <https://doi.org/10.1080/21665095.2015.1058718>
- Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *JMR, Journal of Marketing Research*, 18(1), 39. <https://doi.org/10.2307/3151312>
- Garikipati, S., Johnson, S., Guérin, I., & Szafarz, A. (2017). Microfinance and gender: Issues, challenges and the road ahead. *The Journal of Development Studies*, 53(5), 641–648. <https://doi.org/10.1080/00220388.2016.1205736>
- George, O. K. (2008). *The Role of Micro Finance in Fostering Women Entrepreneurship in Kenya*. Kenya: Mazada Publications.
- Giné, X., & Mansuri, G. (2014). Money or ideas? A field experiment on constraints to entrepreneurship in rural Pakistan.
- Hair Junior, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2014). *A primer on partial least squares structural equation modeling (PLS-SEM)*. Los Angeles: SA.
- Hair, J., & Alamer, A. (2022). Partial Least Squares Structural Equation Modeling (PLS-SEM) in second language and education research: Guidelines using an applied example. *Research Methods in Applied Linguistics*, 1(3), 100027. <https://doi.org/10.1016/j.rmal.2022.100027>
- Jagged, A. C. (2011). Impact of microfinance on poverty alleviation in Nigeria: An empirical investigation. *European Journal of Humanities and Social Sciences*, 2(1), 109–121.
- Khan, Touseef & Khan, Fahem & Violinda, Qristin & Aasir, Ilyas & Jian, Sun. (2020). Microfinance Facility for Rural Women Entrepreneurs in Pakistan: An Empirical Analysis. *Agriculture*. 10. 54. <https://doi.org/10.3390/agriculture10030054>.
- Khandker, S. R., & Samad, H. A. (2014). Microfinance growth and poverty reduction in Bangladesh: What does the longitudinal data say? *The Bangladesh Development Studies*, 37, 127–157.

- Littlefield, E. (2005). Microfinance—Where we are now and where we are headed. In *Microfinance speech given at the International Year of Microcredit, Georgetown University Conference: Washington DC*.
- Mahmood, S. (2011). Microfinance and women entrepreneurs in Pakistan. *International Journal of Gender and Entrepreneurship*, 3(3), 265–274. <https://doi.org/10.1108/17566261111169340>
- Mahmood, T., Arby, M. F., Hussain, T., & Sattar, A. (2016). Impact Of Microfinance On Income Generation And Living Standards: A Case Study Of Dera Ghazi Khan Division. *Pakistan Economic and Social Review*, 54(1), 73–80.
- Malik, Kashif & Meki, Muhammad & Morduch, Jonathan & Ogden, Timothy & Quinn, Simon & Said, Farah. (2020). COVID-19 and the Future of Microfinance: Evidence and Insights from Pakistan. *Oxford Review of Economic Policy*, 36. <https://doi.org/10.1093/oxrep/graa014>.
- McIntosh, C., Villaran, G., & Wydick, B. (2011). Microfinance and home improvement: Using retrospective panel data to measure program effects on fundamental events. *World Development*, 39(6), 922–937. <https://doi.org/10.1016/j.worlddev.2011.03.001>
- Mohamed, Ali, Merroun., Mhamed, Hamiche. (2023). Access to microcredit and its impact on the performance of small and medium-sized enterprises: a literature review / acces au microcredit et a ses impact sur la performance des petites et entreprises de taille moyenne: une revue de la littérature. *European Journal of Economic and Financial Research*, 7(3) <https://doi.org/10.46827/ejefr.v7i3.1535>
- Ngehnevu, C. B., and Nembo, F. Z. (2010). The impact of Microfinance Institutions (MFIs) in the development of Small and Medium Size Businesses (SMEs) in Cameroon: A case study of Cam CCUL. <http://stud.epsilon.slu.se>
- Ozili, P. K. (2023). The acceptable R-square in empirical modelling for social science research. In *Social research methodology and publishing results: A guide to non-native English speakers* (pp. 134–143). IGI global.
- Saad, A., SAF Hasnu. (2016). Issues and constraints perceived by young entrepreneurs of Pakistan. *World Journal of Entrepreneurship Management and Sustainable Development*, 12(1), 50–65. <https://doi.org/10.1108/wjemsd-03-2015-0015>
- Tedeschi, G. (2010). Microfinance: Assessing Its Impact on Microenterprises. *Contemporary Microenterprise: Concepts and Cases*, 116.
- Tetiana, Kulinich., Nataliia, V., Dobizha., Oksana, Demchenko., Olena, Bodnar., Andrii, Zelenskyi. (2022). Microfinance: Methods, Models and its Impact on Economic Development. *Wseas Transactions on Environment And Development*, 18, 144–151. <https://doi.org/10.37394/232015.2022.18.16>