Advance Journal of Econometrics and Finance
Vol-3, Issue-1, 2025

Advance Journal of Econometrics and Finance

Online ISSN
2959-8990
Print ISSN
2959-8982
https://ajeaf.com/index.php/Journal/About

Name of Publisher: SCHOLAR CRAFT EDUCATION & RESEARCH HUB

Review Type: Double Blind Peer Review

Journal Frequency: Quarterly Research Journal (4- Issue)

MODERATING EFFECT OF FINANCIAL LITERACY AND GOVERNMENT POLICIES ON THE RELATIONSHIP BETWEEN MICROFINANCE AND SOCIOECONOMIC CONDITIONS

Aamir Ullah, Dr. Mohammad Ayaz, Aysha Sami Latif

Aamir Ullah
Assistant Professor, Department of Management Sciences, Qurtuba University
Dr. Mohammad Ayaz
Associate Professor, Hasan Murad School of Management, University of Management and Technology, Lahore
Email.mohammad.ayaz@umt.edu.pk
Aysha Sami Latif
Assistant Professor University of Peshawar
Email.ayshasami@uop.edu.pk

Corresponding Author*:

Keywords: Microfinance, Financial Literacy, Socioeconomic Conditions, & Government Policies

Abstract

The main aim of the study was to know the moderating effect of financial literacy and government on the relationship between microfinance and socioeconomic conditions of merged areas of Khyber Pakhtunkhwa. The research conducted aligned with the positivist philosophical viewpoint. The population of the study was unknown for which G*Power was used. The sample calculated was 350. The data was collected from the individuals who had taken microcredit from Akhwat Islamic Microfinance (AIM), Sarhad Rural Support Program (SRSP), and National Rural Support Program (NRSP) via questionnaires. After highlighting descriptive statistics, the frequency distribution of the respondents' demographic was discussed. For the scale's reliability, Cronbach's alpha was used, the most common method to confirm or test the scale's reliability. The next step was to check the scale's validity for which KMO and Bartlett's tests were used. It assesses the instrument's capacity to measure the intended attribute accurately. Moreover, each question's component matrix or factor loading surpassed the acceptable range, indicating a solid factor loading. After completing these tests, regression analysis was carried out. The model summary of the predictor and predicted variables and values of R2 were calculated. ANOVA statistics and regression coefficients were also summarized. For moderation, the Hayes Model was used. While doing analysis, the R, R2, and F values were found satisfactory. In the other step, the values of Coefficients, the most important of which was the p value of interaction term (int_1), were found significant. Hence, it was concluded that microfinance has an impact on basic needs, living standards, and microfinance usage. Moreover, this study adds to the current body of literature by filling a gap in research as,to the best of the researcher knowledge, this study hasn't been conducted within the merged areas of Khyber Pakhtunkhwa. It also distinguishes itself by incorporating two moderating variables—financial literacy and government policies—which have not been explored in previous studies.

Introduction:

Microcredit loans in many regions have put people out of poverty by increasing their income (Mustapa et al., 2018; Agbola et al., 2017). Those who actively participate in microfinance programs have come to know its benefits. This participation has reduced the inequality among poor and rich people (Lacalle-Calderon et al., 2019; Hermes, 2014). Financial inclusion via microfinance has also reduced economic poverty (Puteri et al., 2019). Micro Financial Institutions have been providing micro-loans to the borrowers for many years. These borrowers are financially weak and ignored by commercial banks. To forward loans to these needy people without any collateral, the Irish Loan Fund System was initiated by Jonathan Swift in the early 1700s. In order to enhance production in the agriculture sector, the donors and government started extending micro-loans to financially weak farmers. In South Asia, the movement was initiated in Bangladesh in the 1970s. After its success, this microfinance program was initiated in India and other countries. Grameen Bank of Bangladesh was the first to forward microfinance (Najmi et al., 2015).

Microfinance was established to cover the gap for financially deprived people. It has changed the way conventional banks treat them. It helps the needy people of society to raise income, get a better education and become self-empowered. Among other strategies, microfinance has proved essential to overcome and eliminate poverty worldwide (Chughtai et al., 2015). Furthermore, Wang (2021), however, revealed that the reduction in the level of poverty relies on the cooperation among local firms, financial institutions and human capital development. With this cooperation enhancement of both the sustainable development of a society and the abilities of the overall national organization, even the benefit can reach a minor level.The estimated value of the multidimensional vulnerability index, based on Pakistan Social and Living Standards Measurement 2014-15, revealed that fifty-six percent of the population has already become open to multidimensional poverty after the outburst of the COVID-19 pandemic. Multidimensional poverty in Pakistan is thirty-eight percent, but on the other side, its intensity is much higher, i.e., 51.7 % (Poverty, O., & Human Development Initiative, 2019).

Problem Statement

Merged areas of Khyber Pakhtunkhwa (Ex FATA) are deprived areas of Pakistan with limited financial and economic resources. It remained the main center of militant for many decades. After the breakout of the militants, military operations to counter the insurgency were carried out. As per some statistics, millions of people were displaced. This displacement put massive pressure on the socioeconomic conditions of the people of the area. This disturbance has resulted Socioeconomic activities came to a standstill for a more extended period, resulting in massive unemployment (Khalid, 2020). After merger, most of people of the area have been trying hard to come to a normal life. Moreover, most of the studies conducted so far have focused on urban areas of Pakistan. Urban areas have more employment opportunities, good governance, substantial marketplaces etc. This study has focused on investigating the impact of microfinance in uplifting the socioeconomic conditions of the regressed and undeveloped areas of Khyber Pakhtunkhwa with the moderating role of financial literacy and government policies.

Research Objectives:

1. To examine the impact of microfinance on the basic needs of individuals taken microloans in merged areas of Khyber Pakhtunkhwa.
2. To investigate the impact of microfinance on the living standards of individuals taken microloans in merged areas of Khyber Pakhtunkhwa
3. To evaluate the impact of microfinance on microfinance usage in merged areas of Khyber Pakhtunkhwa.
4. To examine the moderating effect of financial literacy in relationship between microfinance and basic needs in merged areas of Khyber Pakhtunkhwa.

5. To analyze the moderating effect of financial literacy in relationship between microfinance and living standards in merged areas of Khyber Pakhtunkhwa.
6. To evaluate the moderating effect of financial literacy in relationship between microfinance and microfinance usage in merged areas of Khyber Pakhtunkhwa.
7. To analyze the moderating effect of government policies in relationship between microfinance and basic needs in merged areas of Khyber Pakhtunkhwa.
8. To examine the moderating effect of government policies in relationship between microfinance and living standards in merged areas of Khyber Pakhtunkhwa.
9. To evaluate the moderating effect of government policies in relationship between microfinance and microfinance usage in merged areas of Khyber Pakhtunkhwa.

Literature Review:

Microloans are a vital part and sub-component of microfinance. Under the normal circumstances of the microfinance program, the financially deprived and marginalized people are pointed out to enable them to reach financial services to improve their living standards and get them out of poverty. It is clear that income level plays a vital role in measuring poverty, but it is ineffective in capturing poverty (Ullah et al. i., 2020). On the other hand, the MPI calculates the improvement in SDGs-2030 by comparing the severe or critical multidimensional poverty across ten indicators of well-being, which are education, health, and standard of living by complementing international $1.90 per day rate for more than one hundred countries and over five billion people (Poverty, O., & Human Development Initiative. 2019).

Li (2018) investigated the relationship between microfinance and those who have low income. The study's conclusion revealed that families with less influence are motivated and inspired by their wealthier neighbors' success to consume microcredit for investment and get further education to lower poverty. Furthermore, foreign direct investment (FDI) may also play a role. Musibau et al. (2019) undertook an empirical investigation and revealed that the potential for human capital development could motivate and encourage foreign investment and consequently reduce poverty. Rashid et al. (2019) conducted extensive research and concluded that most people requiring microcredit apply for it. However, the purpose is to meet their immediate needs rather than set up a new business or develop and sustain the existing one. This resultantly did not lead to an increase in the level of employment or reeducation in poverty. Thus, microfinance may not lead to or guarantee better income levels, economic development, employment opportunities, and poverty alleviation.

In his study, Ahmad et al. (2021) revealed the impact of microfinance on the ultra-poor in outcomes, including health, income, and schooling of children, food security, women empowerment, and housing. The researcher came up with the findings that microfinance positively impacted children's income, health, and education. On the other hand, there was no impact on the empowerment, housing of borrowers, or job creation. Furthermore, the significant factors hindering access to micro-loans are sometimes high interest rates, the attitude of officials, and lack of collateral.

Advance Journal of Econometrics and Finance
Vol-3, Issue-1, 2025

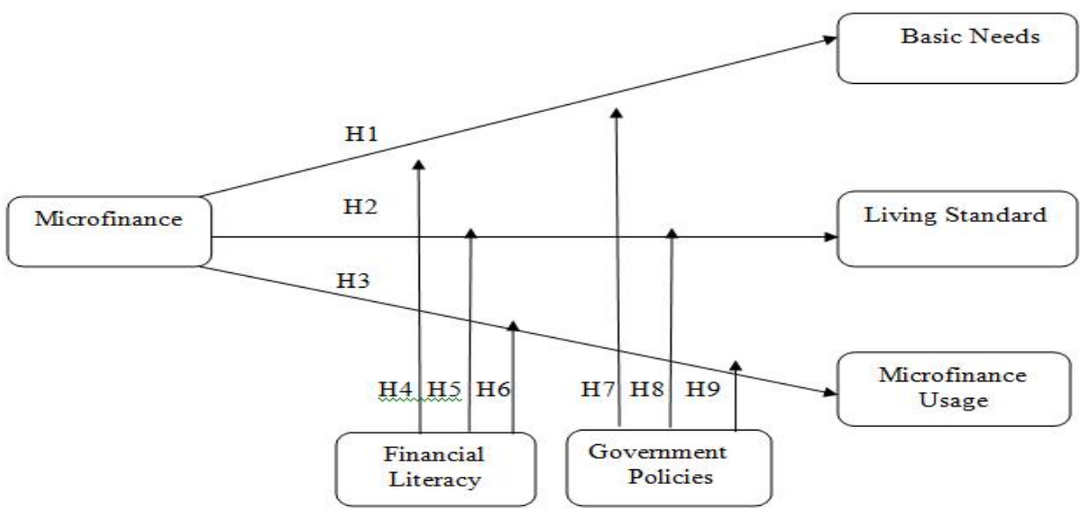


Fig. 1

H1: There is a significant impact of microfinance on basic needs in merged areas of Khyber Pakhtunkhwa.

H2: There is a significant impact of microfinance on living standards in merged areas of Khyber Pakhtunkhwa.

H3: There is a significant impact of microfinance on usage of microfinance in merged areas of Khyber Pakhtunkhwa.

H4: Financial Literacy significantly moderates the impact of microfinance on basic needs in merged areas of Khyber Pakhtunkhwa.

H5: Financial Literacy significantly moderates the impact of microfinance on living Standards in merged areas of Khyber Pakhtunkhwa.

H6: Financial Literacy significantly moderates the impact of microfinance on microfinance usage in merged areas of Khyber Pakhtunkhwa.

H7: Government Policies significantly moderates the impact of microfinance on basic needs in merged areas of Khyber Pakhtunkhwa.

H8: Government Policies significantly moderates the impact of microfinance on living Standards in merged areas of Khyber Pakhtunkhwa.

H9: Government Policies significantly moderates the impact of microfinance on microfinance usage in merged areas of Khyber Pakhtunkhwa.

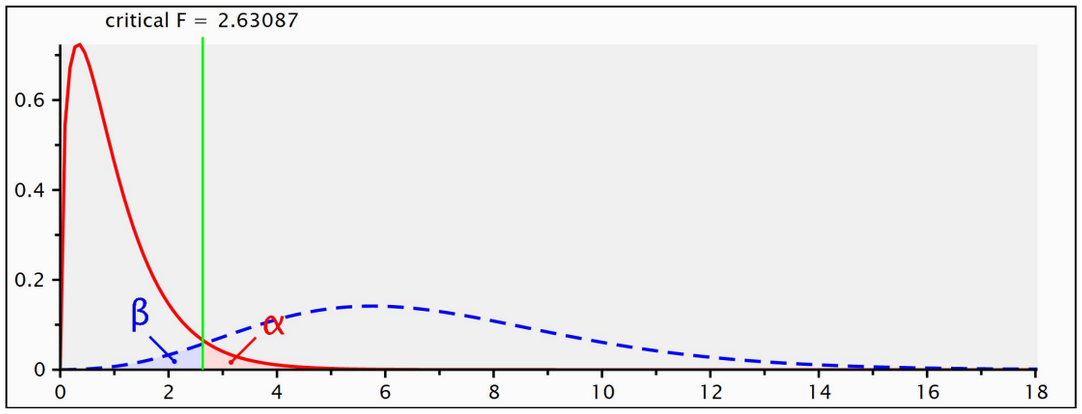
Research Methodology:

The research study being discussed aligns with the positivist philosophical viewpoint. In line with this perspective, as articulated by Clark (1998), the positivist approach involves the formulation of quantitative hypotheses and the subsequent testing of these hypotheses using appropriate statistical measures with predefined probabilities. Based on the statistical outcomes, the researcher makes determinations regarding the acceptance or rejection of both null and alternative hypotheses. Additionally, this study follows a deductive approach, as described by Reyes (2004), where hypotheses are developed and subsequently tested using quantitative data. These hypotheses have been formulated based on an existing theory.

Quantitative methods encompass the collection and examination of data using numerical tools and techniques. This approach is particularly useful for efficiently and accurately measuring information from a large number of respondents. Quantitative research relies on quantifiable data to derive insights. Quantitative data collection methods are more structured in comparison to qualitative data collection surveys. Such surveys involve various structured approaches, including questionnaires, face-to-face interviews, and telephone interviews etc.

G*Power serves as a dependable and suitable tool for sample size determination, as it doesn't demand knowledge of the entire population. Instead, it calculates sample size based on the variables within the research model, ensuring robust and accurate results. Consequently, by using G *Power, the sample size calculated was 350.

Advance Journal of Econometrics and Finance
Vol-3, Issue-1, 2025



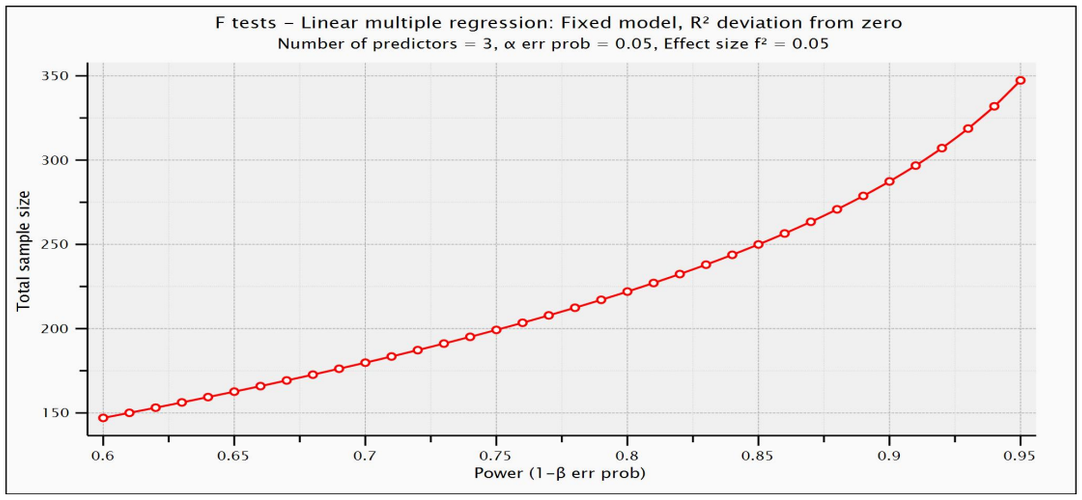


Figure 3 Calculation of Sample Size by G*Power

For the current study the data was collected from the individuals who have taken micro loans from Akhuwat Islamic Microfinance (AIM), Sarhad Rural Support Program (SRSP) and National Rural Support Program (NRSP).

1.1 The Structure of the Econometric Model:

Within the framework of the objectives and hypotheses of the present study, the model below illustrates the relationship between dependent and independent variables, along with the moderation effect.

$$SEC = f(MF, FL, GP) \ldots\ldots\ldots\ldots\ldots\ldots (1)$$

Where,

SEC = Socioeconomic conditions

MF = Micro finance

FL = Financial literacy

GP = Government policies

The dependent variable socioeconomic conditions (SEC) have three dimensions. Therefore, with two moderators and three dependent variables, equation 1 was subdivided into the following six equations. Moderation indicated that the microfinance-socioeconomic conditions ((MF-SEC) relationship varied depending on the level of financial literacy (FL) and government policies (GP). These included microfinance (MF), financial

literacy (FL) and microfinance (MF), government policies (GP), and interaction terms between microfinance-financial literacy (MF-FL) and microfinance-government policies (MF-GP). Microfinance and financial literacy, and microfinance and government policies as predictors of socioeconomic conditions. In the following group of equations socioeconomic conditions were classified into basic needs (BN), living standard (LS) and microfinance usage (MFU) respectively.

$$BN = \alpha_1 + \alpha_2 MF + \alpha_3 FL + \alpha_4 MF^* FL + \varepsilon \ldots\ldots\ldots\ldots (2)$$

$$BN = \beta_1 + \beta_2 MF + \beta_3 GP + \beta_4 MF^* GP + \varepsilon \ldots\ldots\ldots\ldots (3)$$

$$LS = \gamma_1 + \gamma_2 MF + \gamma_3 FL + \gamma_4 MF^* FL + \varepsilon \ldots\ldots\ldots\ldots (4)$$

$$LS = \delta_1 + \delta_2 MF + \delta_3 GP + \delta_4 MF^* GP + \varepsilon \ldots\ldots\ldots\ldots (5)$$

$$MFU = \theta_1 + \theta_2 MF + \theta_3 FL + \theta_4 MF^* FL + \varepsilon \ldots\ldots\ldots\ldots (6)$$

$$MFU = \varphi_1 + \varphi_2 MF + \varphi_3 GP + \varphi_4 MF^* GP + \varepsilon \ldots\ldots\ldots\ldots (7)$$

Descriptive Statistics

	N	Min.	Max.	Mean	Std. Dev.	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
MF	304	3	5	4.30	.710	-.787	.140	-.507	.279
BN	304	2	5	4.33	.699	-1.021	.140	.207	.279
LS	304	3	5	4.24	.696	-.774	.140	-.594	.279
MFU	304	2	5	4.32	.737	-.888	.140	-.228	.279
FL	304	2	5	4.24	.715	-.907	.140	-.191	.279
GP	304	3	5	4.26	.689	-.736	.140	-.688	.279
Valid N	304								

Reliability Analysis of Microfinance

Reliability Statistics

Cronbach's Alpha	N of Items
.931	5

Reliability Analysis of Basic Needs

Reliability Statistics

Cronbach's Alpha	N of Items
.853	5

Reliability analysis of Living Standards

Reliability Statistics

Cronbach's Alpha	N of Items
.910	5

Reliability Analysis of Microfinance Usage scale

Reliability Statistics

Cronbach's Alpha	N of Items
.866	5

Reliability analysis of Government Policies scale

Reliability Statistics

Cronbach's Alpha	N of Items
.839	6

Reliability analysis of Financial Literacy Scale

Reliability Statistics

Cronbach's Alpha	N of Items
.929	6

1.1.1 Regression output of Microfinance and Basic Needs

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.545[a]	.297	.295	.581

a. Predictors: (Constant), MF

Advance Journal of Econometrics and Finance
Vol-3, Issue-1, 2025

The table above illustrates the model summary for the predictor variable "Microfinance" and the predicted variable "Basic Needs." The R^2 value, standing at 0.297, indicates that the independent variable "Microfinance" accounts for approximately 29.7% of the variance in the dependent variable "Basic Needs."

Table 29: ***ANOVA***

ANOVA[a]

Model		Sum Squares	ofdf	Mean Square	F	Sig.
1	Regression	42.989	1	42.989	127.519	.000[b]
	Residual	101.810	302	.337		
	Total	144.799	303			

a. Dependent Variable: BN

b. Predictors: (Constant), MF

The above table displays ANOVA statistics of MF and BN. The crucial parameter in this table is the F-statistic, with a value of 127.519. This value is deemed significant at a confidence level of 0.000. The F-statistic value reflects the overall fitness of the model. The significance of the p-value ($p < 0.05$) indicates that the R^2 value discussed in Table 4.5.1.1 is genuine and not a result of sampling error.

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.763	.227		7.762	.000
	MF	.589	.052	.545	11.292	.000

a. Dependent Variable: BN

The table above presents the regression coefficients for Microfinance and Basic Needs. As indicated in the table, the t-value is 11.292, demonstrating statistical significance at a 95% confidence interval or a significance level of 0.05. The MF coefficient stands at 0.589, indicating that a one-unit shift in the independent variable MF is linked to a 0.589 alteration in the dependent variable BN. A closer look at the table reveals a noteworthy positive association between MF and BN ($\beta 0 = 0.589$, $p < 0.05$). As a result, the confirmation of the first hypothesis (H1) in our study suggests a significant and positive association between MF and BN.

1.1.2 Regression output of Microfinance and Living Standards

Model Summary

Advance Journal of Econometrics and Finance
Vol-3, Issue-1, 2025

Model	R	R Square	Adjusted RSquare	Std. Error of the Estimate
1	.486[a]	.237	.234	.593

a. Predictors: (Constant), MF

The above table represents model summary of the predictor variable Microfinance and predicted variable Living Standards. The value of R^2 is 0.237, which shows that independent variable Microfinance explains around 23.7% variance in the dependent variable which is Basic Needs.

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	32.907	1	32.907	93.566	.000[b]
	Residual	106.213	302	.352		
	Total	139.120	303			

a. Dependent Variable: LS

b. Predictors: (Constant), MF

The ANOVA statistics for MF and LS are presented in the table above. The crucial metric in this table is the F-statistic, with a notable value of 93.566. This value is significant at a confidence level of 0.000. The F-statistic is indicative of the overall fitness of the model. The significance of the p-value ($p < 0.05$) suggests that the R2 value, as discussed in Table 4.5.2.1, is indeed accurate and not a result of sampling error. The regression mean square is 32.907, and the residual mean square is 0.352, contributing to the calculated F-value of 93.566.

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.005	.232		8.641	.000
	MF	.516	.053	.486	9.673	.000

a. Dependent Variable: LS

The regression coefficients for Microfinance and Living Standards are depicted in the table mentioned above. As indicated in the table, the t-value registers at 9.673, achieving statistical significance at a 95% confidence interval or a 0.05 level of significance. The coefficient for MF is 0.516, signifying that a one-unit change in the independent variable MF corresponds to a 0.516 change in the dependent variable LS. Examination of the table

reveals a positive and significant association between MF and LS ($\beta 0 = 0.516$, $p < 0.05$). Consequently, our study accepts the second hypothesis (H2), confirming a significant relationship between MF and LS.

1.1.3 Regression output of Microfinance and Microfinance Usage

Model Summary

Model	R	R Square	Adjusted RSquare	Std. Error of the Estimate
1	.555[a]	.308	.305	.614

a. Predictors: (Constant), MF

The above table signifies model summary of the predictor variable Microfinance and predicted variable Microfinance Usage. The value of R^2 is 0.305, which shows that independent variable Microfinance explains about 30.5% variance in the dependent variable which is Microfinance Usage.

ANOVA[a]

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	50.611	1	50.611	134.220	.000[b]
	Residual	113.877	302	.377		
	Total	164.488	303			

a. Dependent Variable: MFU

b. Predictors: (Constant), MF

The table above illustrates the ANOVA statistics for MF and MFU. The critical value in this table is the F-statistic, which stands at 134.220 and is significant at a confidence level of 0.000. The F-statistic value serves as an indicator of the overall fitness of the model. The significance of the p-value ($p < 0.05$) validates that the R2 value presented in Table 35 accurately reflects the model and is not a product of sampling error. The regression mean square stands at 50.611, while the residual mean square is 0.377, yielding an F-value of 134.220.

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.569	.240		6.528	.000
	MF	.640	.055	.555	11.585	.000

a. Dependent Variable: MFU

In table 36, the regression coefficients for Microfinance and Microfinance Usage are present. The t-value is 11.585, which is significant at 95% confidence interval or at 0.05 level of significance. The coefficient of MF is .640. This value means that a unit change in independent variable MF will bring .516 change in dependent variable MFU. As evident in the table, there is a positive and statistically significant association between MF and LS. Consequently, our study accepts the third hypothesis (H3), affirming that MF is significantly correlated with LS.

1.1.4 Relationship between MF and BN with Moderator FL

Model Summary:

R	R^2	MSE	F	Df1	Df2	p
.70	.49	.24	97.86	3	300	.000

Table number 37, mentioned above, represents the value of R, R^2, F, and p values. The R^2 value is 0.49, which tells us that independent variable explains 90 percent variance in dependent variable. Moreover, F value, as discussed earlier, tells about model fitness. In this case the higher F value guide us that the model is fit. Adding to that, If p value is less than 0.05, we say that our model is fit. In this case the p value is 0.00 confirming the model fitness.

Coefficients

	Coeff.	se	t	p	LLCI	ULCI
Constant	-3.96	.97	-4.06	.000	-5.88	-2.04
MF	1.34	.24	5.57	.000	.86	1.81
FL	1.99	.26	7.64	.000	1.48	2.50
Int_1	-.32	.06	-5.40	.000	-.44	-.20

Table number 38 mentioned above, tells us about the affiliation between MF and BN with moderating variable FL. Moreover, last row of the table shows the interaction effect of moderating variable. The key point to be ponder over here is the p value of interaction term. If the p value of interaction term (int_1) is significant than we say that the moderator moderates the relationship between independent variable and dependent variable. As specified in the table above, the p-value for the interaction term is statistically significant at a 95 percent confidence interval. This implies that Financial Literacy moderates the relationship between MF and BN. Subsequently, the seventh hypothesis (H4) is confirmed.

Relationship between MF and LS with Moderator FL

R	R^2	MSE	F	Df1	Df2	p
.75	.57	.20	131.56	3	300	.000

Table illustrated above represents the value of R, R^2, F, and p values. As shown from the table, the R^2 value is 0.57, which shows that independent variable explains 90 percent variance in our dependent variable. The higher F value indicates that the model is fit. Furthermore, if p value is less than 0.05, we say that our model is fit. In this case the p value is 0.00, so we say that our model is fit.

Coefficients

	Coeff.	se	t	p	LLCI	ULCI
Constant	-3.94	.88	-4.46	.000	-5.68	-2.20
MF	1.10	.22	5.04	.000	.67	1.52
FL	2.21	.24	9.38	.000	1.75	2.68
Int_1	-.32	.05	-5.98	.000	-.43	-.22

The table reveals the association between MF and LS, with moderating variable FL. The last row i.e.Int_1 of the table tells the interaction result of moderating variable. As discussed earlier shown from the above table, the p value of interaction term is significant at 0.00. Hence, Financial Literacy moderates the relationship between MF and LS. As per the statistics revealed we can say that the eighth hypothesis (H_5) is accepted.

Relationship between MF and MFU with Moderator FL

R	R^2	MSE	F	Df1	Df2	p
.78	.60	.22	151.96	3	300	.000

The table shown above embodies the value of R, R^2, F, and p values. As shown from the table, the R^2 value is 0.60, which displays that independent variable explains 90 percent variance in our dependent variable. Previously discussed that the F value in the above statistics tells about the overall fitness of model. Usually the value of F greater than 10 shows that the model is fit. Moreover, larger value of F represents the good case. We also confirm it from p value. If p value is less than 0.05, we say that our model is fit. In this case the p value is 0.00, so we can confidently say that the model used in this study is fit.

Coefficients

	Coeff.	se	t	p	LLCI	ULCI
Constant	-4.21	.92	-4.58	.000	-6.02	-2.40
MF	1.15	.23	5.07	.000	.70	1.60
FL	2.19	.25	8.92	.000	1.71	2.68
Int_1	-.31	.06	-5.52	.000	-.42	-.20

The above table i.e. table number forty-two shows the impact of MF on MFU with moderating variable FL. In the above statistics row mentioned in the last of the table shows the interaction effect of moderating variable. The key point to be understood is the p value of interaction term. If the p value of interaction term (int_1) is significant than we say that the moderator moderates the impact of independent variable on dependent variable. As shown

from the above table, the p value of interaction term is significant at 0.00. Thus, Financial Literacy moderates the impact of MF on MFU. Accordingly, ninth hypothesis (H_6) of this study is accepted.

Relationship between MF and BN with Moderator GP

R	R^2	MSE	F	Df1	Df2	p
.80	.64	.17	181.52	3	300	.000

As shown in the table number 43 i.e. the values of R, R^2, F, and p value, and its clear that the value of the R^2 is 0.64, which shows that independent variable explains 90 percent variance in our dependent variable. On the other hand, Normally, the value of F greater than 10 shows that the model is fit but there is no such clear cut line regarding the standard value of F. However, it may be assumed that greater value of F embodies the good-fit. In this case the higher F value indicates that the model is fit. It is also established from the statistics of p value. If p value is less than 0.05, we say that the model is fit. In this case the p value is 0.000.

Coefficients

	Coeff.	se	t	p	LLCI	ULCI
Constant	-2.84	.81	-3.50	.000	-4.44	-1.24
MF	.91	.19	4.65	.000	.52	1.29
GP	1.78	.22	8.11	.000	1.35	2.21
Int_1	-.23	.05	-4.64	.000	-.33	-.13

The above statistics revealed in the table number 44 depicts the impact of MF on BN with with moderating variable GP. The values mentioned in the last row displays the interaction effect of moderating variable. The key point, here, to be noted is the p value of interaction term. If it was found that the p value of interaction term (int_1) is significant than its confirmed that moderator moderates the impact of MF on BN. As its displayed, the p value of interaction term is significant with 95 percent confidence interval. Thus, Government Policies moderate the impact relationship between MF and BN. Thus, the fifth hypothesis (H_7) is accepted.

Relationship between MF and LS with Moderator GP

R	R^2	MSE	F	Df1	Df2	p
.85	.73	.13	266.88	3	300	.000

The table mentioned above represents the value of R, R^2, F, and p values. As shown from the table, the R^2 value is 0.73, which shows that independent variable explains 90 percent variance in our dependent variable. The F value tells about model fitness. Normally the value of F greater than 10 shows that the model is fit but there is no such agreement regarding the standard value of F. However, greater the value of F represents the good case. In this

case the higher F value indicates that the model is fit. It is also confirmed from p value. If p value is less than 0.05, we say that the model is fit. In this case the p value is 0.000, so its confirmed that the model used in this study is fit.

Coefficients

	Coeff.	se	t	p	LLCI	ULCI
Constant	-2.80	.70	-4.01	.000	-4.17	-1.42
MF	.74	.17	4.44	.000	.41	1.07
GP	1.93	.19	10.23	.000	1.55	2.30
Int_1	-.23	.04	-5.45	.000	-.32	-.15

The above table shows the relationship between MF and LS with moderating variable GP. The last row of the table shows the interaction effect of moderating variable. The most important point to be noted here is the p value of interaction term. If the p value of interaction term (int_1) is significant than we say that the moderator moderate the relationship between independent variable and dependent variable. As shown from the above table, the p value of interaction term is significant with 95 percent confidence interval. Thus,Government Policies moderate the relationship between MF and LS. Thus, the fifth hypothesis (H_8) is accepted.

Relationship between MF and MFU with Moderator GP

R	R^2	MSE	F	Df1	Df2	p
.89	.79	.12	371.77	3	300	.000

The table mentioned above represents the value of R, R^2, F, and p values. As shown from the table, the R^2 value is 0.79, which shows that independent variable explains 90 percent variance in our dependent variable. As discussed earlier, F value tells about model fitness. Normally the value of F greater than 10 shows that the model is fit but there is no such agreement regarding the standard value of F. However, greater the value of F represents the good case. In this case the higher F value indicates that the model is fit. We also confirm it from p value. If p value is less than 0.05, we say that our model is fit. In this case the p value is 0.00, so we say that our model is fit.

Coefficients

	Coeff.	se	t	p	LLCI	ULCI
Constant	-3.09	.67	-4.62	.000	-4.40	-1.77
MF	.76	.16	4.72	.000	.44	1.07

GP	1.94	.18	10.74	.000	1.58	2.29
Int_1	-.22	.04	-5.33	.000	-.30	-.14

The above table shows the relationship between MF and MFU with moderating variable GP. The last row of the table shows the interaction effect of moderating variable. The most important point to be noted here is the p value of interaction term. If the p value of interaction term (int_1) is significant than we say that the moderator moderates the relationship between independent variable and dependent variable. As shown from the above table, the p value of interaction term is significant with 95 percent confidence interval. Thus, Government Policies moderate the relationship between MF and MFU. Accordingly, the sixth hypothesis (H_9) is accepted.

Conclusion

Microfinance initially gained attention to empower impoverished individuals relying on self-employment (Hulme & Mosley, 1996). The fundamental concept was clear-cut: By offering capital, microfinance aimed to enhance the business ventures of clients, leading to heightened earnings and, in the long run, poverty eradication (Yunus, 2016). Microfinance has been celebrated for revolutionizing credit agreements, primarily by introducing group lending and installment-lending innovations (Ghatak & Guinnane, 1999; Armendáriz & Morduch, 2000). On a broader scale, microfinance showcases a novel approach to development intervention, shifting away from governments as primary actors and instead leveraging market mechanisms to provide services. This transformation is facilitated through various institutions that amalgamate social and financial objectives (Conning & Morduch, 2011). The prevailing viewpoint regards microfinance as a valuable financial service (Mossman, 2015). Conversely, some sceptics, disillusioned by higher anticipations, label microfinance as an unsuccessful trend, an ideological creation of neoliberalism that captivated donors but ultimately fell short of delivering genuinely beneficial services to impoverished communities (Bateman & Chang, 2012).

Recommendations

Implement programs and initiatives to enhance financial literacy among the target population. Collaborate with microfinance institutions, NGOs, and educational institutions to design and deliver financial education programs.

There is a need to collaborate with microfinance institutions to design tailored financial products that align with the financial literacy levels of the population in the merged areas. Ensure that these products are easy to understand and use.

The government is needed to develop policies that promote financial inclusion, provide incentives for microfinance institutions, and create an enabling environment for growth.

There is a need to invest in capacity building for local microfinance institutions to improve their outreach and effectiveness. Provide training and resources to enhance their ability to deliver microfinance services in the merged areas effectively.

References:

Abay, K. A., Tiberti, L., Woldemichael, A., Mezgebo, T. G., & Endale, M. (2023). Can Urbanisation Improve Household Welfare? Evidence From Ethiopia. *Journal of African Economies*, *32*(1), 81-109.

Abera, N., & Asfaw, M. (2019). Impact of Microfinance on Rural Household Poverty in Ethiopia: A Review. *Journal of Ecology & Natural Resources*, *3*(5), 2578-4994.

Adhikari, S. (2015). *Women Participation and Empowerment through Micro-finance Program: A Case Study of Daunnedevi VDC, Nawalparasi District, Nepal* (Doctoral dissertation, Central Department of Rural Development Tribhuwan University, Kathmandu).

Ahmad, P. S., & Choudhary, U. (2021). Microfinance and Socio-Economic Development of Poor Families in Rural India: An Empirical Investigation. *International Journal of Management (IJM)*, *12*(1).

Ali, I. (2018). Mainstreaming Pakistan's federally administered tribal areas. *Special Report United States Institute of Peace, url: www. usip. org/sites/default/files/2018-03/sr-421 mainstreaming/pakistan-federally administered-tribal-areas. pdf*.

Al-shami, S. A., Al Mamun, A., Rashid, N., & Al-shami, M. (2021). Microcredit impact on socio-economic development and women empowerment in low-income countries: Evidence from yemen. *Sustainability*, *13*(16), 9326.

Al-shami, S. A., Al Mamun, A., Rashid, N., & Al-shami, M. (2021). Microcredit impact on socio-economic development and women empowerment in low-income countries: Evidence from yemen. *Sustainability*, *13*(16), 9326.

Al-Shami, S. S. A., Razali, R. M., & Rashid, N. (2018). The effect of microcredit on women empowerment in welfare and decisions making in Malaysia. *Social Indicators Research*, *137*, 1073-1090.

Anjum, M. N., & Rehman, A. (2020). Impact of microfinance on socioeconomic status of farmers in District Dera Ismail Khan. *Sarhad Journal of Agriculture*, *36*(3), 851-860.

Banna, H., Mia, M. A., Nourani, M., & Yarovaya, L. (2022). Fintech-based financial inclusion and risk-taking of microfinance institutions (MFIs): Evidence from Sub-Saharan Africa. *Finance Research Letters*, *45*, 102149.

Bar, M., & Leukhina, O. (2010). Demographic transition and industrial revolution: A macroeconomic investigation. *Review of Economic Dynamics*, *13*(2), 424-451.

Barman, E. (2015). Of principle and principal: Value plurality in the market of impact investing. *Valuation Studies*, *3*(1), 9-44.

Basu, S., Roy, A., & Karmokar, S. (2020). Effectiveness of microfinance on household income generation strategy in the southwest region of Bangladesh. *Asian Journal of Social Sciences and Legal Studies*, *2*(3), 56-62.

Bondinuba, F. K., Stephens, M., Jones, C., & Buckley, R. (2020). The motivations of microfinance institutions to enter the housing market in a developing country. *International Journal of Housing Policy*, *20*(4), 534-554.

Bongomin, G. O. C., Woldie, A., & Wakibi, A. (2020). Microfinance accessibility, social cohesion and survival of women MSMEs in post-war communities in sub-Saharan Africa: Lessons from Northern Uganda. *Journal of Small Business and Enterprise Development*, *27*(5), 749-774.

Bongomin, G. O. C., Woldie, A., & Wakibi, A. (2020). Microfinance accessibility, social cohesion and survival of women MSMEs in post-war communities in sub-Saharan Africa: Lessons from Northern Uganda. *Journal of Small Business and Enterprise Development*, *27*(5), 749-774.

Buragohain, T., & Borkakoty, A. (2022). Microfinance and Healthcare Access in India: A Cross-Sectional Study on Microfinance Institution Beneficiaries. *SEDME (Small Enterprises Development, Management & Extension Journal)*, *49*(4), 349-367.

Cagatay, N. (1998). *Gender and poverty*. New York: UNDP, Social Development and Poverty Elimination Division.

Chemin, M. (2008). The benefits and costs of microfinance: evidence from Bangladesh. *The journal of development studies*, *44*(4), 463-484.

Chikwira, C., Vengesai, E., & Mandude, P. (2022). The impact of microfinance institutions on poverty alleviation. *Journal of Risk and Financial Management*, *15*(9), 393.

Chilimba, M. T., Dunga, H., & Mafini, C. (2020). The impact of microfinance programme participation on household food security in Malawi. *International Journal of Economics and Finance Studies*, *12*(1), 204-222.

Chowdhury, A. (2009). Microfinance as a poverty reduction tool: a critical assessment.

Demirgüç-Kunt, A., & Singer, D. (2017). Financial inclusion and inclusive growth: A review of recent empirical evidence. *World Bank Policy Research Working Paper*, (8040).

Drori, I., Manos, R., Santacreu-Vasut, E., Shenkar, O., & Shoham, A. (2018). Language and market inclusivity for women entrepreneurship: The case of microfinance. *Journal of Business Venturing*, *33*(4), 395-415.

Dutta, A., & Banerjee, S. (2018). Does microfinance impede sustainable entrepreneurial initiatives among women borrowers? Evidence from rural Bangladesh. *Journal of rural studies*, *60*, 70-81.

Escobar, L., & Grubbauer, M. (2021). Housing microfinance, saving and credit cooperatives, and community development in low-income settings in Mexico. *Community Development Journal*, *56*(1), 141-160.

Fayaz, S., Gul, S., & Khattak, A. K. (2021). Constitutional Status of FATA: Pre & Post Merger Comparison of.

Fikse, E., & Aalbers, M. B. (2021). The really big contradiction: Homeownership discourses in times of financialization. *Housing Studies*, *36*(10), 1600-1617.

Flick, U. (2017). Mantras and myths: The disenchantment of mixed-methods research and revisiting triangulation as a perspective. *Qualitative inquiry*, *23*(1), 46-57.

Fritz, S., See, L., Carlson, T., Haklay, M., Oliver, J. L., Fraisl, D., ... & West, S. (2019). Citizen science and the United Nations sustainable development goals. *Nature Sustainability*, *2*(10), 922-930.

Ghalib, A. K., Malki, I., & Imai, K. S. (2011). The impact of microfinance and its role in easing poverty of rural households: Estimations from Pakistan. *Kobe University*, *9*(1), 1-37.

Ghazzawi, I., Urban, A., Horne, R., & Beswick, C. (2020). Standard bank: exploring opportunities to make Côte d'Ivoire 'home'. *Emerald Emerging Markets Case Studies*, *10*(3), 1-37.

Ghosh, S., & Vinod, D. (2017). What constrains financial inclusion for women? Evidence from Indian micro data. *World development*, *92*, 60-81.

Grubbauer, M., & Mader, P. (2021). Housing microfinance and housing financialisation in a global perspective. *International Journal of Housing Policy*, *21*(4), 465-483.

Gyimah, P., & Boachie, W. K. (2018). Effect of microfinance products on small business growth: Emerging economy perspective. *Journal of Entrepreneurship and business Innovation*, *5*(1), 59-71.

Hameed, W. U., Basheer, M. F., Iqbal, J., Nisar, Q. A., Meo, M. S., & Razzaq, S. (2021). Women Entrepreneurs and Microfinance Institutions: A Way to Create New Ventures. In *Handbook of Research on Nascent Entrepreneurship and Creating New Ventures* (pp. 211-227). IGI Global.

Hasan, M. M., & Malek, M. A. (2017). Microfinance market in Bangladesh. *Microfinance in Asia*, 271-306.

Hassan, A., & Saleem, S. (2017). An Islamic microfinance business model in Bangladesh: Its role in alleviation of poverty and socio-economic well-being of women. *Humanomics*, *33*(1), 15-37.

Janoschka, M., Alexandri, G., Ramos, H. O., & Vives-Miró, S. (2020). Tracing the socio-spatial logics of transnational landlords' real estate investment: Blackstone in Madrid. *European urban and regional studies*, *27*(2), 125-141.

Kim, D. W., Yu, J. S., & Hassan, M. K. (2018). Financial inclusion and economic growth in OIC countries. *Research in International Business and Finance*, *43*, 1-14.

Lacalle-Calderon, M., Larrú, J. M., Garrido, S. R., & Perez-Trujillo, M. (2019). Microfinance and income inequality: New macrolevel evidence. *Revi Development Economics*, *23*(2), 860-876.

Mader, P., Mertens, D., & Van Der Zwan, N. (2020). Financialization: an introduction. *The Routledge international handbook of financialization*, 1-16.

Mahmood, S., Hussain, J., & Z. Matlay, H. (2014). Optimal microfinance loan size and poverty reduction amongst female entrepreneurs in Pakistan. *Journal of Small Business and Enterprise Development*, *21*(2), 231-249.

Maîtrot, M., & Niño-Zarazúa, M. (2017). Poverty and wellbeing impacts of microfinance: What do we know?.

Majukwa, D. (2019). *Sustainability strategies for small and medium-sized enterprises in zimbabwe* (Doctoral dissertation, Walden University).

Majumdar, S., Guha, S., & Marakkath, N. (2015). *Technology and innovation for social change*. Springer.

Malik, K., Meki, M., Morduch, J., Ogden, T., Quinn, S., & Said, F. (2020). COVID-19 and the Future of Microfinance: Evidence and Insights from Pakistan. *Oxford Review of Economic Policy*, *36*(Supplement_1), S138-S168.

Mathews, A. S., & Nair, G. (2019). ROLE OF MICROFINANCE IN SUSTAINABLE MICRO ENTREPRENEURSHIP-A CASE STUDY. *Advance and Innovative Research*, 106.

Mazumder, M. S. U., & Lu, W. (2015). What impact does microfinance have on rural livelihood? A comparison of governmental and non-governmental microfinance programs in Bangladesh. *World development*, *68*, 336-354.

Mazumder, M. S. U., & Lu, W. (2015). What impact does microfinance have on rural livelihood? A comparison of governmental and non-governmental microfinance programs in Bangladesh. *World development*, *68*, 336-354.

Meador, J., & Fritz, A. (2017). Food security in rural Uganda: Assessing latent effects of microfinance on pre-participation. *Development in practice*, *27*(3), 340-353.

Mehrotra, A. N., & Yetman, J. (2015). Financial inclusion-issues for central banks. *BIS Quarterly Review March*.

Mia, M. A. (2017). What causes multiple borrowing in microfinance? A developing country experience. *Strategic Change*, *26*(2), 83-99.

Mia, M. A., Rangel, G. J., Nourani, M., & Kumar, R. (2022). Institutional factors and efficiency performance in the global microfinance industry. *Benchmarking: An International Journal*, *30*(2), 433-459.