

## Solving Poverty through Management: Experience in Pakistan

Irfan Hussain Khan<sup>1\*</sup>, Sadia Bibi<sup>2</sup>, Amber Javaid<sup>3</sup>

<sup>1</sup>Government College University Faisalabad; <sup>2</sup>Department of Management of Sciences, COMSAT Institute of Information Technology Vehari Campus; <sup>3</sup>Hajvery University Lahore

\*Email: [irfansial007@hotmail.com](mailto:irfansial007@hotmail.com)

Received for publication: 29 July 2017.

Accepted for publication: 30 September 2017.

### Abstract

There has been a consensus in the development literature that the poor have received insufficient credit from the formal financial sector. This is because the department rated the poor as a dangerous borrower because of the lack of appropriate collateral. This provides, therefore, the rationale for promoting the policy position of the microfinance sector to strengthen access to credit for the poor. Microcredit is expected to reduce poverty by increasing household income.

The purpose of this paper is to contribute to this debate. It is achieved by investigating the impact of microcredit on poverty in Pakistan. This paper uses the 1985-2015 time series data to assess the relationship between the human development index as a representative of poverty and its socioeconomic characteristics and microfinance visits. The error correction model is used to estimate the relationship between microcredit and household demographic variables and family poverty. Data analysis shows that there is a positive correlation between the human development index and small business credit, which is conducive to all previous expectations

.Thus, this evidence provides support for the "positive impact" of the debate and provides some guidance on how policy reform should focus on strengthening the performance of the Pakistani microfinance sector. In addition, the evidence for this study provides some guidance on policy reforms to improve Pakistan's microfinance performance.

**Keywords:** microfinance, poverty, HDI, WDI

### Introduction

As poverty level continued stagnant or increased in spite of economic growth, it became comprehensible that growth by itself does not decrease poverty and macroeconomic convalescence does not certainly interpret into substantial social development. Governments and multilateral lending institutions to generate or support program for alleviating poverty.

Problem of poverty alleviation truly starts with the proper identifications of the poor. The issue of poverty has been assumed a global statusboth in dimension and efforts to decrease its ratio over the years. According to The World Bank (2010) the figure of people living below the poverty line (\$1.25 a day) declined from 1.94 billion (52% of the population of the developing world) in 1981 to 1.29 billion (22%) in 2008.

In a report on Poverty on Human Development in Asia, released by the UNDP (2014) Pakistan, which was ranked at 146 out of a total 187 countries on the index, scored 0.537 points on HDI. In a similar development, it has been determined in a report on poverty by World Bank ,that poverty in rural societies are interrelated with poor facilities, food insecurity, antediluvian agricultural facilities, poor nutrient values, slight access to savings and credit and general inability to meet basic needs. The assuagement of poverty is being considered one of the most contested issues amongst the academicians and policy makers. Since 1950s to 1980s the poverty reduction program

has been designed as to increase the participation ratio of poor into the economy by improved macroeconomic performance. It has been analyzed by the researchers that the poor portion of population commonly engaged in informal sector but has not yet been considered as the part of economic models, government plans and policy (Robinson, 2001).

World Bank was established in 1944 since Poverty reduction has been institutionalized. The structural-adjustment programs by World Bank worked through governments and institutions by giving loans to developing countries. These programs were completely failed as they had created much dependence on aid with slight help to poor part of societies (Murdoch, 1999 and Diop et al., 2007).

This failure due to disbelief in formal organizations gives the start of a change in development celebration that becomes reason to the emersion of microfinance. It is emphasized in supporting of the informal sector by supplying credit to assistance people to bring them above the poverty line. Microfinance supports these informal micro-enterprises by micro-credit. The micro-credit approach to poverty alleviation is “the providing of small loans to individuals, generally within groups, as capital investment to enable income creation through self-employment” (Weber, 2006).

As the organization gets more and more through commercial acquisitions through private placement and initial public offerings, the market structure is changing. Some markets are overheated and have produced substantial criticism, taking the crisis in Andhra Pradesh, India as an example. The recent impact assessment of microcredit in different countries such as Bosnia, Mexico and Morocco is raising a similar question of what microfinance can actually be achieved and how best to meet the needs of the poor. In terms of products and services, basic products are being reconsidered, focusing on micro-games, micro-insurance and mobile banking (Sabin, N. 2016)

Nigeria's microfinance institutions (MFIs) are considered to be major players in the country's microfinance industry. These institutions have been recognized as an important role in the microfinance industry as a research area, and the MFIs seem to have such a side cannot attract a lot of research focus. A review of past studies shows both theory and experience Contributions in this area are still limited, especially in Nigeria. Trying to identify the problem and providing some advice on further research by the Nigerian microfinance institution (Zuru at al 2016)

The informal businesses of poor are being considered as a type of unfulfilled demand for credit. Poverty is now being regarded as the consequence of market disaster. The market disaster could be corrected through Microfinance, providing easy credit access to the poor. Credit would create economic power that would generate into social power, lifting the poor out of poverty (Yunus, 1999).

### **Concept and condition of Microfinance in Pakistan**

The microcredit conception was firstly familiarized in Bangladesh, after that have been adopted by several countries to address the matters of financial exclusion and poverty. In Pakistan, from 1990s microfinance activities with NOGs to enable deprived segments of the society earn their livings; provide them financial aid through microfinance credit. Access of credit to underprivileged part of the population has been focused over the years to alleviate poverty. Though, more serious efforts for financial inclusion were made in early 2000s. For the advancement and growth of the microfinance sector many rules and regulations have been made by the government and State Bank of Pakistan. Microfinance Bank Ordinance was approved in 2001, which not only regulated but also helped the private sector to contribute to elate the living standards of poor by eliminating their financial restraints. (Mahmood at.al 2016)

Currently, with the total assets of more than Rs. 70 billion, ten micro-financial organizations (MFIs) are working in the country. From all over the country, there are almost 1.2million borrowers of these financial intuitions (as on December 2014). Khushhali Bank (KBL) one of the biggest of these MFIs in terms of asset base and clientele) was established in 2000. With the sustenance of Asian Develop Bank (ADB) Khushhali bank is developed and it is the most important partner of Government of Pakistan's Poverty Strategy and Microfinance Sector Development Program (MSDP). The sharing of microcredit is constantly dominated by the trading and agriculture sectors, together accounting for more than 50 percent of the borrowers. In which share of livestock is 16 percent, and manufacturing with a portion of 9 percent (Mahmood et. al (2016)

There are no of microfinance institutions are working in Pakistan, a list has been given here like Akhuwat Asasah (Registered under The Companies Ordinance, 1984 ( Non-Profit Company; Section 42), Kashf Foundation (Registered under The Societies Registration Act, 1860) Examples of Other MFI, Taraqee Foundation (Registered under SECP Comp Ord. 1984), Helping Hand for Relief and Development (HHRD) (Registered under Trust Act 1982), Jinnah Welfare Society (Registered under The Voluntary Social Welfare Agencies Ordinance, 1961), The Pakistan Microfinance Network (PMN), Orangi Pilot Project, Sindh Agricultural and Forestry Workers Coordinating Organization, National Rural Support Program, Punjab Rural Support Program, Sarhad Rural Support Program , Orix Leasing Pakistan Ltd (NGO report 2017)

The aims of study are to improve the microfinance system identify their gaps, deficiency, and suggest suitable policies for their improvements for Pakistan.

### **Study Area**

This study is carried out in Pakistan's experience about microfinance condition. The present study examines microfinance role in alleviation of poverty in Pakistan.

Pakistan , officially the Islamic Republic of Pakistan, is a federal parliamentary republic in South Asia on the crossroads of Central and Western Asia. It is the sixth-most populous country with a population exceeding 201 million people. In terms of area, it is the 33rd-largest country spanning 881,913 square kilometers (340,509 square miles). Pakistan has a 1,046-kilometre (650-mile) coastline along the Arabian Sea and its Gulf of Oman in the south and is bordered by India to the east, Afghanistan to the west, Iran to the southwest, and China in the far northeast, respectively.

### **Objective**

To analyze the long term and short run relationship present between Credit to small scale Enterprises and poverty in Pakistan.

### **Hypothesis**

Ho: No long term and short run relationship between Poverty and Credit to small scale enterprises

H1: There is long term and short relationship between Poverty and Credit to small scale enterprises

### **Review of Literature**

The impact of microfinance structure on poverty alleviation among low-income workers in Nigeria was analyzed by Agba et.al (2014). To achieve this objective, the study instigated data through organized questionnaire from 540 purposively selected respondents. From nine local government areas in Akwa Ibom State the contributors were selected, three from each Senatorial District of the state. Results of the study showed that microfinance credit scheme had positive

influence on poverty alleviation among low-income workers. It promoted low-income workers access to credit facilities, encouraged savings and motivated their economic effectualness.

Taofeek et.al (2015) deliberated that it was a cleared element that if Expanded Finance Institutions like microfinance institutions were accessible to the poor, they would enhance their productivity and capability to attain resources and essential conveniences that encouraged dynamic investment. Several strategies and programs of poverty reduction in Nigeria with respect to the impact of microfinance were studied by authors. Related literature was reviewed by exploratory method to examine the magnitude of the influences of these programs on the besieged poor masses. The authors ascertained that to see the influence of microfinance on poverty reduction impartial in Nigeria, the Government would have to deliver basic infrastructural and social facilities that could motivate the microfinance institutions to launch branches in the rural zones and operates affectively.

Lawanson at.al (2016) clarified the correlation amongst micro-discrimination in Nigeria and poverty reduction through samples collected by the Nigerian Central Bank Statistical Bulletin and the Human Development Index from 1980 to 2014. The error correction model (ECM) a multi-time series model, which had been used to examine the best results of this analysis. As it is cleared without any suspicion that microfinance had a positive effect on world warfare, though, the consequences of this study are demonstrated by the situation in Nigeria. Data analysis demonstrations that there is a negative correlation between the human development index and small business credit. Because of its relevance and many unexpected variables, it is tough to determine the efficiency of microfinance and the absolute cause of the above is on the country's poverty line.

### Data Source

Using secondary data from 1985-2015 through different sources like Pakistan economics survey, Human Development Index (HDI) and World Development Index (WDI). HDI will be use as proxy for poverty reduction.

### Model

Taking inference from the empirical findings and theories, which have been derived from the theoretical exposition of poverty alleviation and microfinance, then making HDI central to the equation, the model to estimate the impact of the microfinance on poverty alleviation has been considered in the following form:

$$\text{HDI} = f(\text{UNEMP}, \text{INF}, \text{CRDT}, \text{ER}, \text{IR})$$

$$\text{HDI} = \alpha_0 + \alpha_1 \ln \text{CRDT} + \alpha_2 \ln \text{UNEMP} + \alpha_3 \text{INF} + \alpha_4 \text{ER} + \alpha_5 \text{IR} + \mu$$

HDI = Human Development Index proxy for Poverty, UNEMP = Unemployment Rate, INF = Inflation rate, CRDT = Credit to small scale Enterprises, ER = Exchange rate, IR = Interest rate

$\alpha_0$  = the constant term or the Intercept,  $\alpha_1$  = coefficient of credit to small scale enterprises,

$\alpha_2$  = coefficient of unemployment rate,  $\alpha_3$  = coefficient of inflation rate

$\alpha_4$  = coefficient of exchange rate,  $\alpha_5$  = coefficient of interest rate

$\mu$  = Error term

HDI is a proxy for poverty alleviation. The choice of these variables is supported by development literature. The a priori expectations are: Unemployment Rate, Inflation rate, Exchange rate and Interest rate have negative relationship with poverty alleviation while Credit to small scale Enterprises is positive. Therefore, it is expected that credit to the poor through microfinance will reduce poverty in the country.

Rewriting the model above as an error correction model, we obtain:

$$\Delta HDI_t = a + \sum_{i=1}^p b \Delta HDI_{t-i} + \sum_{i=1}^p c \Delta UNEMP_{t-i} + \sum_{i=1}^p d \Delta INF_{t-i} + \sum_{i=1}^p e \Delta CRDT_{t-i} + \sum_{i=1}^p f \Delta ER_{t-i} + \sum_{i=1}^p g \Delta IR_{t-i} + e ECM_{t-1} + \varepsilon_t$$

This study empirically investigates the linear relationship between poverty alleviation and micro credit to small scale enterprises in Pakistan for the period 1985 - 2015, using co-integration and error correction techniques. An error correction model (ECM), a multiple time series model, directly estimates the speed of adjustment of a dependent variable to equilibrium subsequent to a change in the explanatory variable. The ECM is appropriate for this study because it is capable of estimating both short and long run effects of one time series on another. Moreover, ECM, as a dynamic process, has the advantage that the deviation of the current state from its long run connection can be fed into its short-run dynamics (Engle and Granger, 1987).

## Material and Methods

### Unit Root Tests

It is necessary to examine the unit root properties of time series data before estimation so as to preclude the problem of spurious regression. Ordinary least squares (OLS) estimation of regressions in the presence of non-stationary variables gives rise to spurious regressions if the variables are not co-integrated (Granger and Newbold, 1974). The results of the ADF unit root tests are presented in Table 1. The results in the Table show that all the variables are stationary in their first differences.

**Table-1. Unit Root Tests**

Variable	ADF Test Statistical Value	Critical Value at 1%	Critical Value at 5%	Critical Value at 10%	Order of Integration	Probability value
CRDT	-3.811012	-3.679322	-2.967767	-2.622989	1(1)	0.0073
EXCH	-0.900678	-3.752946	-2.998064	-2.62752	1(1)	0.0394
HDI	-11.86135	-3.679322	-2.967767	-2.622989	1(1)	0.0000
INF	-7.943635	-3.679322	-2.967767	-2.622989	1(1)	0.0000
IR	-4.204141	3.679322	-2.967767	-2.622989	1(1)	0.0023
UNEMP	-5.098723	-3.679322	-2.967767	-2.622989	1(1)	0.0002

### Co-Integration Test

This study uses the reduced rank procedure developed by Johansen (1988) and Johansen and Juselius (1990) two tests to determine the number of co-integration vectors: the Maximum Eigenvalue test and the Trace test. The Maximum Eigenvalue statistic tests the null hypothesis of  $r$  co-integrating relations against the alternative of  $r+1$  co-integrating relations for  $r = 0, 1, 2 \dots n-1$ . Whenever the results of Trace and Maximum Eigenvalue statistics are different results, the result of trace test is always preferred.

The co-integration test results are reported in Table 2 below.

**Table-2: Johansen Co-integration Test Unrestricted Co-integration Rank Test (Trace)**

Hypothesized	-----	Trace	0.05	
No. of CE(s)	Eigenvalue	Statistic	Critical Value	Prob.**
None *	0.756170	106.2528	95.75366	0.0078
At most 1	0.577718	65.32552	69.81889	0.1083
At most 2	0.463134	40.32517	47.85613	0.2111
At most 3	0.321686	22.28695	29.79707	0.2829
At most 4	0.289333	11.03075	15.49471	0.2096
At most 5	0.038075	1.125759	3.841466	0.2887

### *Error Correction Model*

Since the variables are found to be co-integrated, we can go ahead to estimate the error correction model. The result of parsimonious error correction model is reported in Table 3. The main variable of interest, the Credit to small scale Enterprises, has negative and significant effect on HDI in Pakistan. An increase in Credit to small scale Enterprises can reduce poverty in Pakistan, sign is according to theory. The coefficients of Unemployment Rate, Exchange rate and Interest rate have negative and statistically significant effect on HDI. Inflation has positive sign which is according to theory and statistically significant on HDI. The coefficient of the error-correction term is correctly negatively signed and statistically significant. Thus, the ECM is able to correct any deviations in the relationship between HDI and the explanatory variables.

The adjusted  $R^2$  is 72 percent, showing that over 72 per cent of the variations in HDI can be explained by the explanatory variables. The remaining 28 per cent variation is attributable to other variables not captured by our model. The Durbin-Watson statistics of 2.006046 rules out auto-correlation. The F-statistics of 18.80452 showed that the explanatory variables are important determinants of HDI in Pakistan. These results explain the role of microfinance in poverty alleviation in Pakistan and corroborate the findings of Hulme and Paul (1996) which indicated that the use of microfinance to fight poverty (i.e. well-designed microfinance schemes) can improve the lots of the poor and can lift them out of poverty. Now, there is clear evidence that the provision of credit to the very poor households and businesses raises their standard of living.

**Table-3: ECM Model Results**

Dependent variable D(HDI)	Coefficients	Std. Error	t-Statistic
D(CRDT(-1))	-0.635259	0.25882	-1.68168
D(UNEMP(-1))	-0.021803	0.45830	-0.04757
D(INF(-1))	0.018780	0.16920	0.11099
D(ER(-1))	-0.357499	0.14155	-2.52561
D(IR(-1))	-0.176021	0.50106	-0.3513
D(HDI(-1))	-30.48256	117.502	-0.25942
ECM(-1)	-0.695259	0.25882	-1.68168
C	1.316612	1.10808	1.18820
Adjusted R-squared	0.729770		
Durbin-Watson stat	1.92		
F-statistic	18.806773		
Prob(F-statistic)			



Table 3 represents Vector Error Correction Model (VECM): It contains short run effects of different variables on HDI. If VECM term is negative, then it means that there exists short run disequilibrium in the model which reverts back to equilibrium level in the model. The “VECM” term is negative in case of HDI in the model. It shows that if there is any short run disequilibrium in the model, 69 percent restores back to equilibrium in the current year.

### **Conclusion**

Microfinance has become an increasingly popular tool for poverty alleviation in developing countries for the past two decades, this is not surprising because it is a well known fact that micro-finance holds enormous potential for national economic growth and development by supporting the economic activities of the poor who are essentially the majority.

Micro-Financing has had positive impacts on the World War over, however, the findings of this study suggests also same as for the Pakistani case. The data analysis shows that there exists a positive correlation between the Human Development Index and the Credit to Small Scale Enterprises which goes in favour in all a priori expectations.

These results explain the role of microcredit in poverty alleviation in Pakistan and confirm the findings of Hulme and Paul (1996), which suggests that the use of microcredit and poverty (ie, well-designed microcredit schemes) can improve many The poor, out of poverty. There is now clear evidence that providing credit to poor households and businesses has increased their standard of living.

Due to numerous unexpected variables and because of their relevance, it is extremely difficult to pinpoint the exact cause of the in-efficiencies and excesses of micro-financing on the poverty level of the country. It is most probably a combination of two or more of the different variables listed below:

- i. Mismanagement of micro-finance Banks.
- iii. Attracting Clients but not retaining them.
- iv. Improper funding and investment from Commercial Banks.
- v. Less developed countries like Pakistani are characterized by dualistic economies which favor Large Scale Enterprises to the neglect of the Small Scale Enterprises.

### **Policy Implications**

The following recommendations are made with regards to the study:

- MFIs should be situated more in the rural areas because they are most in need of their services.
- There is immediate need for the Pakistani government to launch intensive awareness for the creation and the existence of poverty alleviation schemes via village meetings, village/town criers, radio and television jingles (especially, in local dialect).
- Policy makers should de-emphasize the issues of top-down flow of information: it has the worrisome demerit of dipping interaction between the rural dwellers and policy makers as well as involvement. Community driven development approach should rather be embraced as it provides the rural people the opportunity to be actively involved in the entire process of conception, identification, and execution of any poverty alleviation program that will benefit them.
- Government needs to adopt price-support policies to keep the prices of commodities down to a minimal level. Such policies will increase the real incomes of the rural producers.

- Institutions that engage in giving out of credit to the poor should also endeavor to invest in training them and provide useful information to such customers as to how to improve the efficiency of their businesses.
- Seeing that being employed doesn't necessarily mean that a person is living above the poverty line calls for a general savings culture in the lifestyle of Pakistan as a whole. The Pakistani Government could achieve this by increasing Money supply to boost aggregate demand in the economy which will lead to increased productivity and hence reduce unemployment and increase income which in the long-run would increase savings and reduce consumption.
- MFIs should be properly checked and regulated by the proper authorities to safeguard against corruption and mismanagement. Beneficiaries of credits should be provided with adequate facilities to express their satisfaction or otherwise of the performance of the respective MFIs which they patronize.

### References

- Agba, A. M., Ocheni, S., & Nkpoen, F. (2014). Microfinance Credit Scheme and Poverty Reduction among Low-Income Workers in Nigeria Agba, AM Ogaboh<sup>1</sup>; Stephen Ocheni<sup>2</sup>; Festus Nkpoen<sup>3</sup>. *Journal of Good Governance and Sustainable Development in Africa*, 2(1).
- Ahmad, S. N. (2008). *Microfinance in Pakistan: policies and practice* (Master's thesis, University of Twente).
- Aigbokhan, B. E., & Asemota, A. E. (2011). AN ASSESSMENT OF MICROFINANCE AS A TOOL FOR POVERTY REDUCTION AND SOCIAL CAPITAL FORMATION: EVIDENCE ON NIGERIA<sup>1</sup>. *Global Journal of Finance and Banking Issues*, 5(5), 38.
- Ayuub, S. (2013). Impact of microfinance on poverty alleviation: A case study of NRSP in Bahawalpur of Pakistan. *International Journal of Academic Research in Accounting, Finance and Management Sciences*, 3(1), 119-135.
- Buera, F. J., Kaboski, J. P., & Shin, Y. (2012). *The macroeconomics of microfinance* (No. w17905). National Bureau of Economic Research.
- Bui, L. T. V. (2014). Microfinance and Poverty Alleviation: Does Credit Access Contribute to Reduce Household Poverty in Vietnam?
- Imoisi, A. (2014). Microfinance and its Impact in Poverty Alleviation in Nigeria: A Case Study of some Microfinance Banks in Edo State. *American Journal of Humanities and Social Sciences*, 2(1), 27-42.
- Imtiaz, A., Mehmood, H. Z., Akram, W., Irfan, M., & Code, P. P. (2014) Impact of Microfinance on Poverty Reduction: A Case Study of District Faisalabad.
- Javid, A. Y., & Abrar, A. (2015). Microfinance institutions and poverty reduction: a cross regional analysis. *Pakistan Development Review*, 54(4), 371.
- Kasali, T. A., Ahmad, S. A., & Ean, L. H. (2015). DOES MICROFINANCE OPERATION HAVE EFFECT ON POVERTY ALLEVIATION IN NIGERIA?. *European Journal of Contemporary Economics and Management*, 54.
- Lawanson, O. I. (2016). Alleviating Poverty through Micro Finance: Nigerias Experience. *Asian Journal of Economic Modelling*, 4(3), 153-161
- Mahmood, T., Hussain, M. F. A. 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
- Naeem, A., Khan, S., Ali, M., & Hassan, F. S. The Impact of Microfinance on Women Micro-Enterprises "A Case Study of District Quetta, Pakistan".



- Rais, N., Mangan, T., Kumbhar, M. I., Hussain, A., & Murtaza Sahito, J. G. (2016). IMPACT OF MICROFINANCE ON INCOME OF SMALL FARMERS IN DISTRICT DADU, SINDH. *Science International*, 28(3).
- Sabin, N. (2016). Microfinance: A Field in Flux.
- Zuru, N. L., Hashim, M. K., & Arshad, D. (2016). Microfinance Institutions in Nigeria: Issues and Research Areas. *Mediterranean Journal of Social Sciences*, 7(2 S1), 455.