Pakistan Economic and Social Review
Volume 54, No. 1 (Summer 2016), pp. 73-80

IMPACT OF MICROFINANCE ON INCOME GENERATION AND LIVING STANDARDS
A Case Study of Dera Ghazi Khan Division

TAHIR MAHMOOD, MUHAMMAD FAROOQ ARBY
TAUQIR HUSSAIN AND ABDUL SATTAR*

Abstract. This paper analyzes the role of microfinance in poverty alleviation and improving the living standard of poor households. A survey of 400 active clients of the Khushhali Bank (a Microfinance Bank) in Dera Ghazi Khan and Layyah districts of the Punjab (Pakistan) has been undertaken for this purpose. Statistical and econometric techniques are used to explore the impact of the microfinance. It is found that microfinance credit positively affects income generation and consumption level of poor; and the impact on productive activities is higher than the consumption.

Keywords: Microfinance, Living standard, Khushhali Bank

JEL classification: G21, O16

I. INTRODUCTION

Positive impact of microcredit on poverty reduction and equitable economic growth is well documented by a number of studies, some of which have been reviewed in the next section. The small loans provided by micro financial

*The authors are, respectively, Associate Professor of Economics at the University of Veterinary and Animal Sciences, Lahore; Additional Director at the Research Department, State Bank of Pakistan, Karachi; Lecturer in Economics at National University of Modern Languages, Multan Campus, Multan; and Assistant Professor of Economics at the Bahria University, Islamabad (Pakistan).
Corresponding author e-mail: tahir.chaudary@gmail.com

institutions not only improve social conditions of poor people through better standard of living with greater access to education and health facilities, but also empower them to participate in decision making activities in the society.

The concept of microcredit was first introduced in Bangladesh, which have been followed by many countries to address the issues of financial exclusion and poverty. In Pakistan, microfinance activities date back to 1990s with NOGs providing financial assistance to underprivileged segments of the society to make them earn their livings. However, more rigorous efforts for financial inclusion started in early 2000s. The government and State Bank of Pakistan have made many rules and regulations for the promotion and growth of the microfinance sector. Microfinance Bank Ordinance was passed in 2001, which not only regulated but also helped the private sector to contribute to uplift the living standards of poor by removing their financial constraints.

At present, ten micro-financial institutions (MFIs) are working in the country with the total assets of more than Rs. 70 billion. There are about 1.2 million borrowers of these financial intuitions (as on December 2014), who are spread across the country. Khushhali Bank (KBL), established in 2000, is the largest of these MFIs in terms of asset base and clientele. It is an important partner of Government of Pakistan's Poverty Strategy and Microfinance Sector Development Programme (MSDP), which is developed with the support of Asian Develop Bank (ADB).

The trading and agriculture sectors continue to dominate the distribution of microcredit, together accounting for more than 50 percent of the borrowers. These are followed by livestock with a share of 16 percent, and manufacturing with a share of 9 percent.

This study focuses on the districts of D. G. Khan and Layyah, which have very low level of development, compared with other districts of the Punjab (The Human Development Index (HDI) ranking of these districts is 0.63 and 0.68). The microfinance is expected to be very helpful for raising the income level and living standards of people living in these districts. The remaining part of the study consists of a literature review in section II, methodology and results in section III, and concluding remarks in the last section.

II. LITERATURE REVIEW

A number of studies have attempted to examine the role of microfinance on poverty alleviation and income generation by using different methodologies. Hulme and Mosley (1996) examine the subject in case of Bangladesh, India

and Indonesia, and find a positive relationship between microfinance and income of the borrowers. More specifically, they find that borrowers' income increases by 10 to 12 percent after availing microfinance in Indonesia and by around 30 percent in Bangladesh and India.

Chavan and Kumar (2002) examine the role of microcredit in reducing poverty in a number of developing economies, and compare their status with poverty reducing schemes in India. The study shows that microfinance schemes marginally improve the income of the borrowers. Gurses (2009) conducts a study in Turkey and finds the microfinance as a powerful tool to reduce poverty. The author points out that one fifth of the population of Turkey is at risk due to the poverty; this risk is being addressed through microfinance, particularly by two NGOs, *i.e.* KEDV and Turkish Foundation for Waste Reduction.

For Pakistan, Ahmad *et al.* (2004) investigate the role of microfinance for poverty reduction in district Rahim Yar Khan. They undertake a correlation analysis to determine the relationship of microfinance with income, crop production, asset formation, farm expenses and saving, and find their positive relationship with the microfinance. Similarly, Ahmed (2008) concludes that microfinance is instrumental in fighting against poverty, but its role is limited in certain areas of Pakistan. In these areas microfinance only helps in reduction of poverty for a short time period. In the long-run, it is not an effective tool for poverty alleviation. Small loan size is the major drawback of the microfinance because such loan size is often insufficient to meet the requirement of the borrowers. The second drawback is the utilization of the loan on consumption rather than income generation. Another issue is that most of the people are illiterate and living in the villages, thus, having less awareness about the microfinance schemes.

Siddiqi (2008), on the other hand, finds an ambiguous net impact of microfinance on poverty reduction, as there are positive as well as negative factors affecting its role. He argues that the interest rate charged by microfinance institutions is one of the hurdles as majority of people belonging to poor segments of the society consider it prohibited by Islam. Other issue is related to gender as women availing microcredit are usually abused by their male relatives. This study concludes that Islamic microfinance is much better than the conventional microfinance.

Shirazi and Khan (2009) explain that there are two types of poor people in the country, categorized as poor and extreme poor. The authors evaluate the role of microfinance on poverty alleviation. They conclude that microfinance has decreased the level of poverty by 3.1%, which shows its

important role in reducing poverty. However, the income of extreme poor people increased only marginally by 0.6%, showing little effect on their living conditions. They argue that the extreme poor people borrow loans in protective motives, not for further income or self-employment.

Ali and Alam (2010) conclude that microfinance is an important tool in order to increase the provision of loans, other basic facilities, and services. Microfinance affects positively people's life, increases living standard such as health, education, food, and other social benefits; and alleviates the poverty. Their study also shows that high interest rates on microcredit are one of the problems faced by the microfinance sectors. But people still like microcredit because they have no access to the collateralized commercial loans. These poor people are very hardworking and very enthusiastic about business; that's why they take the microcredit loans; and often repay their loans because of the success in business.

III. METHODOLOGY

This study is based on a comprehensive questionnaire and face-to-face interviews of 400 active clients of Khushhali Bank in D. G. Khan and Layyah districts, which were selected through a stratified sampling technique. We have divided the respondents into three groups in terms of their income level: Better off, poor and very poor. The respondent, with monthly per capita income above Rs. 6,600, are taken as better off; below Rs. 6,600 and above Rs. 3,300 as poor; and less than Rs. 3,300 as very poor.

After presenting a descriptive analysis of the data collected, we estimate a quantitative model to measure the impact of microcredit on income and living standards.

In our sample, all the respondents are male (except for one female), who are predominantly engaged in agricultural activities. A good percentage of the respondents is also entrepreneurs. Of the total 400 people, 75.5 percent belong to district D. G. Khan and the rest to district Layyah. Majority of these respondents is poor (35.8%) or very poor (27%).

A statistical analysis shows that there are significant differences in the ability to earn income and living standards of the respondents before and after the use of microfinance credit. The average household income before taking microcredit is Rs. 6,087, which increases to Rs. 15,552 after using the microcredit. The difference between the two income levels is found statistically significant on the basis of paired t-test (Table 1). Although all categories of the respondents benefitted from the microcredit, the major

beneficiaries are very poor households, whose income increased about 4 times after microfinance.

TABLE 1

Impact of Microcredit on Income and Living Standard
(Rupees per month)

	Very Poor	Poor	Better off	All
	Per capita Income			
Before credit	3,518.5	5,524.5	8,489.9	6,087.5
After credit	13,629.6	15,188.8	17,295.3	15,552.5
t-test Paired	51.7*	64.5*	59.4*	97.7*
	Per capita Expenditure (living standard)			
Before credit	2,444.4	4,042.0	6,429.5	4,500.0
After credit	9,805.6	11,902.1	13,838.9	12,057.5
t-test Paired	46.4*	50.0*	52.2*	85.2*

*Significant at 1% level.

Similarly, the microfinance has also found to have a significant impact on the living standard of the households, which is evident from their per capita expenditure. The average expenditure before taking microcredit of all households is Rs. 4,500, which increases sharply to Rs. 12,057. The paired t-test shows that this difference is statistically significant.

TABLE 2

Impact of Microcredit on Respective Districts'
Per Capita Income (Rupees per month)

	Very Poor	Poor	Better off
District D. G. Khan			
Before credit	3,458.3	5,488.9	8,793.1
After credit	13,375.0	14,500.0	17,215.5
t-test Paired	47.51*	52.61*	53.68*
District Layyah			
Before credit	4,000.0	5,584.9	7,424.2
After credit	15,666.7	16,358.5	17,575.8
t-test Paired	37.66*	52.22*	36.82*

*Significant at 1% level.

A separate analysis for the two districts shows, the impact of the microcredit was more pronounced in the district Layyah, which was probably due to the fact that the most of the very poor people (key beneficiaries), belonged to this district (Table 2).

In order to understand the behavioural response of household income (as a proxy for poverty reduction) and expenditure (as proxy for living standards), we have estimated two linear regression models, as given below:

Model 1: $I = \beta_0 + \beta_1 MF + u$

Model 2: $E = \beta_0 + \beta_1 MF + u$

Where I is household income, E is monthly expenditure, and MF is the microfinance credit availed by it. We have estimated these models on combined data set of the two districts, as well as on their separate data sets.

The results of the two models on the combined data set are as under (figures in parentheses show t-statistics):

$I = 5214.5 + 1.2\ MF$ $\quad R^2 = 0.69$; F-ratio = 839.7
(14.3) (29.0)

$E = 3949.3 + 0.97\ MF$ $\quad R^2 = 0.43$; F-ratio = 304.1
(8.3) (17.4)

The results of the first model show that the microcredit positively and significantly affects income generation. It is found that one rupee increase in microcredit will lead to more than a rupee (*i.e.* Rs. 1.2) increase in income, on average. On the other hand, the regression results of the second model show that there exists a positive and significant relationship between microcredit and the living standards of households. The coefficient value is statistically significant on the basis of t-test. Interestingly, one rupee increase in microcredit leads to the increase in the monthly expenditure, *i.e.* the living standard, by an amount slightly lower than a rupee.

The regression results of separate districts show that microfinance has a positive significant impact on living standards of both the districts. These results are also consistent with the findings of previous studies, as reviewed above.

D. G. Khan: $E = 4747.6 + 1.3\ MF$ $\quad R^2 = 0.69$; F-ratio = 668.4
(11.5) (25.9)

Layyah: $E = 8796.0 + 0.9\ MF$ $\quad R^2 = 0.51$; F-ratio = 99.1
(11.5) (25.9)

IV. CONCLUSION

Microfinance plays an important role in reducing poverty and improving the living standard of developing countries, like Pakistan. This paper examines the experience of microfinance in two less developed districts of Punjab, *viz.*, D. G. Khan and Layyah, with respect to its impact on poverty alleviation. It is found that microfinance has significantly increased the income of poor households and raised their living standards.

Interestingly, contrary to general perception and some evidence by other studies, our study shows the funds borrowed from microfinance institutions contribute more towards income earning activities than just consumption. This behaviour has very important implications that the productive activities can be increased in the economy by providing small loans to underprivileged segments of the society.

REFERENCES

Ahmad, S., M. S. Naveed and A. Ghafoor (2004), Role of micro finance in alleviating rural poverty: A case study of Khushhali Bank programme in Rahim Yar Khan, Pakistan. *International Journal of Agriculture and Biology* (*Pakistan*), Volume 6(2), pp. 426-428.

Ali, A. and M. A. Alam (2010), Role and performance of microcredit in Pakistan. Master's thesis in International Business, Department of Economics and Informatics, University West, pp. 1-43.

Chavan, P. and R. Ramakumar (2002), Microcredit and rural poverty: An analysis of empirical evidence. *Economic and Political Weekly*, Volume 37(10), March 9-15, pp. 955-965. http://www.jstor.org/stable/4411845

Gurses, D. (2009), Microfinance and poverty reduction in Turkey. *Perspectives on Global Development and Technology*, Volume 8(1), pp. 90-110. http://dx.doi.org/10.1163/156914909X403207

Hulme, D. and P. Mosley (eds.) (1996), *Finance Against Poverty*, Volume 1 and 2. London: Routledge.

Kaleem, Ahmad (2008), Challenges and opportunities in microfinance. In *Challenges and Opportunities in Microfinance*. Institute of Bankers Pakistan, Molvi Tamizuddin Road, Karachi, Pakistan, pp. 66-76.

Shirazi, N. S. and A. U. Khan (2009), Role of Pakistan Poverty Alleviation Fund's micro credit in poverty alleviation: A case of Pakistan. *Pakistan Economic and Social Review*, Volume 47(2), pp. 215-228. http://www.jstor.org/stable/25825353

Siddiqi, K. (2008), Potential of Islamic microfinance in Pakistan. Master's dissertation in MA Islamic Banking, Finance and Management, Loughborough University, pp. 1-95.