

---

## Performance of Microfinance Providers; Does Social Efficiency matters?

---

**Maenuddin<sup>-1</sup>, ShaariAbd Hamid<sup>-1</sup>, Annuar MD Nassir<sup>-1,2</sup>Ghayasuddin<sup>-3</sup>**

<sup>1-</sup> Putra Business School, Universiti Putra Malaysia, Malaysia

<sup>2-</sup> Xiamen University Malaysia

<sup>3-</sup>Shaheed Benazir Bhutto University, Dir, Pakistan

**Corresponding Author: Maenuddin**

Email: moin.karim7744@gmail.com

---

### **Abstract**

Microfinance sector showed a tremendous growth for the last decade and got a considerable attention throughout the entire world specifically in the developing countries, but on the other side the number of poor people has not been decreased. The focus of this study is to investigate the social efficiency of microfinance providers and to examine the different factors or problems that affecting the social efficiency of microfinance providers. Social efficiency means to how efficiently transfer the products and services of the MFPs to the society with minimum cost. Data Envelopment Analysis approach has been proposed for the measurement of social efficiency with the total assets, total number of staff, operational expenditure as input while Average loan balance/ borrower/GNIpc. Number of female borrowers and indicator of benefit to the poorest as output variables. Regression analysis is proposed to find out the impact of different factors on the social efficiency of microfinance providers. Factors affecting the social efficiency of microfinance providers includes the presence of aggressive marketing, focus on profit oriented programs, commercialization, high level of competition, entrepreneurial behaviors of the people, different cultural dimensions, high interest rates, political instability, growth addiction, focus on stability or short term profitability, focus on loan repayment, lack of follow-up programs, lack of awareness, miss use of loan, fear of defaults, lack of technical support etc. which have to be considered in future studies.

**Key words:** Efficiency, MFIs, MFPs, Social Efficiency, Poverty, Empowerment

---

### **1- Introduction**

In most developing countries, there is the perception that the financial system is not supporting the poor people of the society, especially in rural areas. The unavailability of credit for the rural communities and high prices are the main problems. The formal banks in rural areas experience

high cost and high default rates due to information asymmetry and weak institutional infrastructure. Due to which the screening of potential borrowers, enforcing credit contracts and monitoring of the borrowers' behavior are extremely costly. As a result, a large portion of society is living without access to credit. Some of the money lenders are trying to fill this gap of the non-availability for credit access of the poor people by providing them the loans. But these money lenders come with a very high rate of interest because of their monopolistic condition. Therefore the poor people have two options only, either to stay without a loan or to avail the loan from these local money lenders with a high rate of interest. This represents a very critical situation for the economies of the developing countries that one of the main sectors needs funds to finance their growth. As a result, poor society developed self-community based arrangements for their financial needs to be fulfilled. The governments of developing countries declared that one of the suitable schemes for rural communities is microcredit.

Microfinance can be defined as a world in which as many poor and near-poor households as possible have permanent access to an appropriate range of high-quality financial services, including not just credit but also savings, insurance, and fund transfer (Oxford Dictionary).

The main objective of microfinance is to increase the depth and breadth of the outreach by the provision of small loans and to get access to a maximum number of poor people (**Saad, Taib, & Bhuiyan, 2018**). The contribution of the MFIs is not only to unlock and polish the productive potential of deprived but also to contribute in social terms to pull out the poor people from the circle of poverty on a sustainable basis. According to Microfinance Barometer 2019, a total of 139.90 million borrowers have benefitted from microfinance institutions in the financial year 2018, 80% were women borrowers and 65% from rural areas. These figures pointed that how much importance was given to women empowerment and poverty alleviation in rural areas of the world. While on the other side, 80% of the world's population has no access to a loan (**Planet Finance Japan 2017**). In South Asia, 22.7% of children below five years old are experiencing intra-household inequality in deprivation and nutrition. While in Pakistan over a third of children under five years old are experiencing such intra-household inequality. 60% of the global microfinance lenders are in South Asia (**Medici 2017**). 80% of the loans are provided to women (**The Mix 2017**). 92% of the income earned by women is reallocated in household income while men reallocated only 42% of the total earned income case in India (**Women World Banking**). The repayment rate of microcredit is 95-100% (**World Bank**). Microfinance reaches up to 20% of the world's 3 billion poor people (**International Finance Corporation**). More than 10,000 microfinance institutions operating in the world and serving more than 70 million borrowers with a total loan portfolio of USD 40 billion (**World Bank**). World Bank created a credit support fund of USD 300 million to support microcredit (**World Bank**). The growth rate of the microfinance increased from 20-30% per annum from 2008-2017 (Microfinance Barometer 2018). This research study intends to analyze the social efficiency of the microfinance sector in Pakistan

### **Evolution of Microfinance Industry**

Informally microfinance provision started in the 15<sup>th</sup> century in Nigeria and the 16<sup>th</sup> century, it has been expanded to many countries in Europe. Until 1910, the number of people who became the customers of these cooperatives increased to 1.40 million (**J Morduch, 2000**). In Asia, the history of some of the microfinance institutions was as old as 2200 years, such as Paluwagan, Artisan (Indonesia), Chit funds (India), and Hui (China) (**Efendic & Hadziahmetovic, 2017**). In the Asian sub-continent, various financial intermediaries were found informally from the 13<sup>th</sup> to 18<sup>th</sup> centuries. Later on, these financial intermediaries were replaced by the Raiffeisen model in 1892. In 1950, in different Asian countries, the government bodies, as well as international donors started subsidizing loans to farmers (**Rogaly, 1996**). In 1974, A Bangladeshi Economist Professor Muhammad Younas provided a small amount of money (dollars) to a basket maker, to able him to run their own small business, which would help him get out of the circle of poverty. Thus formal campaign of microfinance started. According to Robinson, the year 1980 was the most important year for MFIs as most of the MFIs came into existence including Grammen Bank, a successful example. In 2007, Professor Muhammad Younas was awarded the noble prize. Microfinance is not only fighting against poverty but also trying to improve the institutional capacity of the financial system through cost-effectively lends money to poor households (**Jonathan Morduch & Graduate, 2002**).

### **Microfinance in Pakistan**

Formally the evaluation of microfinance institutions in Pakistan started in the 1980s, with the establishment of its first microfinance institutions “Agha Khan Rural Support Program” (AKRSP) by Agha Khan Foundation and started to work in the rural area of the northern areas and Chitral district of Pakistan. In the 1980s Orangi Pilot Project (OPP) established in the economic hub of Pakistan (Karachi) to provide microcredit to the poor people of the country (Javid & Abrar, 2015). In 1996, Kashf Foundation was established to eliminate poverty by providing microfinance to the people. In 1998 Pakistan Microfinance Network (PMN) was established as a controlling body for MFIs. In 2000, the first microfinance bank, Khushali bank was established by the Pakistani government with the support of the Asian Development Bank and also the government initiated first microfinance authoritative order (ordinance) with a different prudential regulation for microfinance activities in three shape models, 1- Microfinance banks (MFB), 2- Microfinance institutions MFIs) and 3- Rural support program (SRSP). In 2006, With the aid of the Asian Development Bank, PMN developed the first and largest microfinance network in terms of the gross loan portfolio, Pakistan Poverty Alleviation funds (PPAF). The basic aim behind the PPAF was to provide funds to MFIs and NGOs. By taking public and private initiatives, Pakistan shows tremendous progress in the microfinance sector to make the access to the credit easy for the poor people to the credit and to eliminate and minimize poverty and vulnerability (Javid & Abrar, 2015).

(Muhammad, 2010) identified challenges in MFIs in Pakistan i.e. improper regulation, growing competition, innovative and varied products, benefits, stability, narrow management capacity, etc. while the identified opportunities during the study are an increase in poverty, stimulating growth economy, women empowerment, increasing volume, accessibility and economies of scope, etc. Finally, women empowerment is also the basic issue in Pakistan society, by accessing microfinance loans it is hoped that women can have or increase their own earnings. The lack of active participation of women from rural areas of Pakistan is due to their immobility, income disparity, domestic pressure, etc.

## 2- Literature Review

The idea of empowering the low income and poor people of the society by generating income from their small business will enable them to reach all of the development requirements and pull them out from the circle of poverty. It will also minimize their unexpected events and vulnerability. It is the biggest rationale for the improvement of financial service (Davis et al., 2004). However different studies like (Ahlin and Jiang, 2008) suggested that if the poor and low-income people continue to be clients of MFIs, then these financial benefits will be successful. Which shows that MFIs will become powerful tools against the poverty only if MFIs focus on further enabling the average borrowers to enhance long-run development by graduating them the continual dependence (Hartarska, Caudill, & Gropper, 2011); (Kyereboah-Coleman and Osei, 2008); (Karlan and Goldberg, 2007); (Lafourcade et al., 2005); (Schreiner, 2000); (Ladgerwood, 1999); (Hulme and Mosely, 1996) defined microfinance as supplying microcredits, or providing small scale of financial service to the poor or low-income people with no access to the formal banking system.

### Efficiency of Microfinance Institutions

For the measurement of efficiency of microfinance institutions, various researchers, academicians, and scholars used different measurement tools. (Gong, Liu, & Zhu, 2019) identified the operational mechanism active in sustainable operations for the measuring efficiency. They concluded that the integration of the supply chain improves efficiency with a higher level of socio-economic integrations and environmental-economic integration. (Goodell, Goyal, & Hasan, 2019) concluded from their study that financial transparency is positively associated with the for-profit status of the microfinance institutions. (Alawattage, Graham, & Wickramasinghe, 2019) study shows that how micro-accountability enables the extension of the financial industry into the un-lapped sector of the global population. MFIs must operate at an optimal scale and derive economies of scope by changing the combination of input and output. As the productivity/efficiency of the performance of MFIs depends on the type of organization i.e. NGOs, Non-banks, Credit unions, Corporations (Kar & Rahman, 2018).

Female loan officers and corporate governance are the positive determinants of microfinance efficiency (Bibi, Balli, Matthews, & Tripe, 2018). The efficiency of MFIs is responsive

towards the selection of input and output variables and the choice of analysis technique was DEA (Khan, Mustafa, Khursheed, & Siddiqui, 2018). (Efendic & Hadziahmetovic, 2017) found that financial efficiency is significantly higher than social efficiency. Small size MFIs perform better than the large size firms in both social efficiency as well as financial efficiency. Bank loans increase investments while MFIs do not (Donou-Adonsou & Sylwester, 2017). (Mitra, 2017) noted that there is no trade-off between several borrowers per loan officer and assets quality of MFIs. MFIs have reaped the benefit economies of scale without compromising assets quality. (Mia & Ben Soltane, 2016) studied the productivity of microfinance institutions and their determinants in South Asia. They found that annual productivity increased due to changes in average technical efficiency. The productivity determinants were financial, economic, and institutional factors. (Wijesiri, 2016) noted that the banks and non-bank financial institutions that performed better just before the crises are the ones that affected more. Cooperatives and NGOs are less affected by the crises. The performance of shareholder's ownership was more affected than non-shareholding ownership by the 2008 global financial crisis. Conventional MFIs performed better than Islamic microfinance institutions (Widiarto & Emrouznejad, 2015).

### Social Efficiency

It is the system efficiency estimation from the customer/consumer's point of view. It is mainly connected with the institutions/organizations/enterprises providing service the society. Therefore it represents the social consequences of the operations for the populations, which are expressed through the changes in the quality of life or the changes in the lifestyle of the people. (Saravanan & Purohit, 2019) stated that there is no conflict between social performance efficiency and sustainability of microfinance institutions. They examined the social performance of microfinance institutions in the South Asia region.

(Iqbal, Tufail, Mohsin, & Sandhu, 2019) found that the increase in inputs increases efficiency, while age and size are the substantial determinants of the efficiency of MFIs of Pakistan. From the overall results, they concluded that there is a lack of efficiency in the MFIs of Pakistan. Higher intensity of social capital positively associated with the overall performance of microfinance suppliers (Chmelíková, Krauss, & Dvoutě, 2018). (Dorfleitner, Priberny, & Röhe, 2017) noted that fast-growing MFIs have positive correlations of social efficiency. While According to (Efendic & Hadziahmetovic, 2017) financial efficiency of the selected firms is higher than social efficiency significantly. Small size MFIs perform better than the large size firms in both social efficiency as well as financial efficiency.

Larger MFIs tend to have higher financial and social efficiency which related to the presence of higher –scale economies (Wijesiri, Yaron, & Meoli, 2017). (Kaur, 2016) argued that on average, financial efficiency is much higher than their social efficiency in MFIs in India. However, their study did not provide evidence for the presence of a trade-off between social efficiency and financial efficiency. While according to (Wijesiri, Viganò, & Meoli, 2015), the age and capital

to asset ratio are significant determinants of financial efficiency. The age of institution and Return on Assets (ROA) ratio are the important determinants of social efficiency. (Griffin & Husted, 2015) also examined the impact of social sanctions or social relations on repayment rates by using Structural Equation Modeling. (Dr. Muhammad Farooq, Zahoor Khan, 2014) studied the social and financial efficiency in Islamic and conventional MFIs in Pakistan.

The overall results show that Islamic MFIs are more cost-efficient than conventional MFIs based on cost per borrowers and operating expense to assets ratio. While conventional MFIs perform better in case of financial efficiency. The hypothesis of the independence of financial performance and social outreach was rejected by the study of (Louis, Seret, & Baesens, 2013). They investigated the relationship between social efficiency and financial performance and noted that the relationship cannot support the trade-off between financial efficiency and social efficiency. They found a significant positive association between social efficiency and financial performance of MFIs. NGOs are more efficient socially than microfinance institutions (Gutiérrez-Nieto, Serrano-Cinca, & Mar Molinero, 2009). They concluded that there is no relationship between profitability, disclosing of age, and social efficiency. A positive relationship between efficiency in supporting women and efficiency in fighting against poverty was recorded.

### 3- Discussion

Social efficiency represents the social consequences of the operations for the populations, which are expressed through the changes in the quality of life or the changes in the lifestyle of the people. It can be measured by productivity indices, as well as it can be measured by the non-parametric Data Envelopment Analysis. Input variables for the measurement of social efficiency will be assets, operating expenses & employees while output variables will be average loan balance/ borrowers/ GNIpc and quantity of female borrowers.

After a comprehensive study of the previous literature on banking sector and microfinance sector of Oral and Yolalann, 1990; Vassiloglou and Giokas (1999); and others, we finalized three inputs (Total Assets, No. of employee, operational expenditure) will be used for economic as well as social efficiency. Two outputs (number of women borrowers, indicator that measure the extent to which the activities of the MFIs can benefit the poorest) will be used for social efficiency and three outputs (number of borrowers, gross loan portfolio and operational self-sufficiency ratio) will be used for measuring economic efficiency. Various studies assessed the social performance of the MFIs by different researchers main with the gross loan portfolio and number of active borrowers, but the problem is how to measure the poverty, how to measure the effectiveness of the loan provided to the poor people. The assumption here is that MFIs providing loan to the poor to reduce poverty but not all of the borrowers needs to be poor. As per the study of Daley-Harris (2004) during the survey of 3000 MFIs, only 67 percent of the borrowers were poorest. According to Morduch (2000) 'by far, for comparison of outreach, loan size is a predominant matric, but it is a rough and an indirect measure. We will make it in relative term as we will divide it by the per capita Gross national income (pcGNI)

$$K = \frac{\text{Average loan balance per borrower}}{\text{pcGNI}} \quad (i)$$

The higher the value of 'K', the larger will be the loan in relative terms. After calculating the value of 'K' for each MFI, we will standardize its value to the 0, 1 range by removing the minimum value of K and dividing by the range of K. As a result we will have a value between 0 and 1. The MFI having a value near to '0' indicates that the MFI lends to the poorest, while a value near to 1, shows the achievement of the objective of reaching the poor. To this, we will calculate the value of 'p' by deducting the calculated value from one as!

$$p_i = 1 - \frac{K_i - \text{Min}(K)}{\text{Range}(K)} \quad (ii)$$

Where 'i' shows the number of MFIs. Min (k) shows ALPB (Per borrower minimum of Average Loan) (ALPB). Max (k) shows ALPB maximum. Range is equal to Max (K) - Min (k). Based on ALPB, Pi is an index of support of the poor which favors MFIs having smaller ALPB.

Pi can be obtained when its weight (w) is multiplied by number of borrowers

$$(B); wB = [(1 - (K_i - \text{Min}(k) / \text{Range of } K)) * B]$$

It is a combination of two outreach indicators; width of outreach (number of borrowers) and depth of outreach (ALPB). Women borrowers and poverty index, both, are used as social indicators of MFIs. The same procedure has been used by (Gutierrez-Nieto, 2006). Hence this study proposing the investigation of social efficiency with respect of the impact of different factors i.e. growth outreach, empowerment, organizational structure, competition, national culture, interest rate, net interest margin, optimal level of financial resources, growth rate, MFIs structure, default rate, usage of loan, repayment rate etc.

## REFERENCES

- Alawattage, C., Graham, C., & Wickramasinghe, D. (2019). Microaccountability and biopolitics: Microfinance in a Sri Lankan village. *Accounting, Organizations and Society*, 72, 38–60. <https://doi.org/10.1016/j.aos.2018.05.008>
- Berger, A. N., & Humphrey, D. B. (1997). Efficiency of Financial Institutions: International Survey and Directions for Future Research \* Board of Governors of the Federal Reserve System. Efficiency of Financial Institutions: International Survey and Directions for Future Research I 1. introduction. *Journal of Operational Research*. Retrieved from <https://www.federalreserve.gov/pubs/feds/1997/199711/199711pap.pdf>
- Bibi, U., Balli, H. O., Matthews, C. D., & Tripe, D. W. L. (2018). Impact of gender and governance on microfinance efficiency. *Journal of International Financial Markets, Institutions and Money*, 53, 307–319. <https://doi.org/10.1016/j.intfin.2017.12.008>
- Chmelíková, G., Krauss, A., & Dvouletý, O. (2018). Performance of microfinance institutions in

Europe—Does social capital matter? *Socio-Economic Planning Sciences*.

<https://doi.org/10.1016/j.seps.2018.11.007>

Donou-Adonsou, F., & Sylwester, K. (2017). Growth effect of banks and microfinance:

Evidence from developing countries. *Quarterly Review of Economics and Finance*, 64, 44–56. <https://doi.org/10.1016/j.qref.2016.11.001>

Dorfleitner, G., Priberny, C., & Röhe, M. (2017). Why do microfinance institutions fail socially?

A global empirical examination. *Finance Research Letters*, 22, 81–89.

<https://doi.org/10.1016/j.frl.2016.12.027>

Dr. Muhammad Farooq, Zahoor Khan. (2014). The Social and Financial Performance of

Conventional and Islamic Microfinance Institutions in Pakistan. *The Social and Financial Performance of Conventional...*, (June).

Efendic, V., & Hadziahmetovic, N. (2017). The social and financial efficiency of microfinance

institutions: The case of Bosnia and Herzegovina. *South East European Journal of Economics and Business*, 12(2), 85–101. <https://doi.org/10.1515/jeb-2017-0018>

Gong, Y., Liu, J., & Zhu, J. (2019). When to increase firms' sustainable operations for

efficiency? A data envelopment analysis in the retailing industry. *European Journal of Operational Research*, 277(3), 1010–1026. <https://doi.org/10.1016/j.ejor.2019.03.019>

Goodell, J. W., Goyal, A., & Hasan, I. (2019). Comparing Financial Transparency Between For-

Profit and Nonprofit Suppliers of Public Goods: Evidence from Microfinance. *Journal of International Financial Markets, Institutions and Money*, (xxxx), 101146.

<https://doi.org/10.1016/j.intfin.2019.101146>

Griffin, D., & Husted, B. W. (2015). Social sanctions or social relations? Microfinance in

Mexico. *Journal of Business Research*, 68(12), 2579–2587.

<https://doi.org/10.1016/j.jbusres.2015.06.023>

Gutierrez-Nieto, B. (2006). *Working Paper Series Social Efficiency in Microfinance Institutions*.

Gutiérrez-Nieto, B., Serrano-Cinca, C., & Mar Molinero, C. (2009). Social efficiency in

microfinance institutions. *Journal of the Operational Research Society*, 60(1), 104–119.

<https://doi.org/10.1057/palgrave.jors.2602527>

Hartarska, V., Caudill, S. B., & Gropper, D. M. (2011). The Cost Structure of Microfinance

Institutions in Eastern Europe and Central Asia. *SSRN Electronic Journal*, (809).

<https://doi.org/10.2139/ssrn.905911>

Iqbal, N., Tufail, M. sajid, Mohsin, M., & Sandhu, M. A. (2019). Assessing Social and Financial



Efficiency : The Evidence from Microfinance Institutions in Pakistan Abstract : *Pakistan Journal of Social Sciences (PJSS)*, 39(1), 149–161.

Javid, A. Y., & Abrar, A. (2015). Microfinance institutions and poverty reduction: A cross regional analysis. *Pakistan Development Review*, 54(4), 371–387.  
<https://doi.org/10.30541/v54i4i-iiipp.371-387>

Kar, A. K., & Rahman, S. (2018). Changes in total factor productivity and efficiency of microfinance institutions in the developing world: A non-parametric approach. *Economic Analysis and Policy*, 60, 103–118. <https://doi.org/10.1016/j.eap.2018.09.012>

Khan, A. A., Mustafa, F., Khursheed, A., & Siddiqui, F. (2018). *Social Business Innovation : Comparison of Operational Efficiency of Microfinance Institutions in Pakistan*. 4(3), 12–20.

Louis, P., Seret, A., & Baesens, B. (2013). Financial Efficiency and Social Impact of Microfinance Institutions Using Self-Organizing Maps. *World Development*, 46, 197–210.  
<https://doi.org/10.1016/j.worlddev.2013.02.006>

Mia, M. A., & Ben Soltane, B. I. (2016). Productivity and its determinants in microfinance institutions (MFIs): Evidence from South Asian countries. *Economic Analysis and Policy*, 51, 32–45. <https://doi.org/10.1016/j.eap.2016.05.003>

Morduch, J. (2000). The Microfinance Schism. Princeton University, New Jersey, USA. *World Development*, 28(4), 617–629.

Morduch, Jonathan, & Graduate, R. F. W. (2002). *Analysis of the Effects of Microfinance on Poverty Reduction Analysis of the Effects of Microfinance on Poverty Reduction*.

Muhammad, S. D. (2010). Microfinance challenges and opportunities in Pakistan. *European Journal of Social Sciences*, 14(1), 88–97.

Saad, M., Taib, H. M., & Bhuiyan, A. B. (2018). Determinants of Outreach Performance of Microfinance Institutions in Pakistan. *Research Journal of Finance and Accounting*, 9(15), 21–27.

Saravanan, S., & Purohit, B. C. (2019). *Social Performance Of Microfinance Institutions in South Asian Region : A Case Study of India , Bangladesh , Nepal and Sri Lanka*. (March).

Widiarto, I., & Emrouznejad, A. (2015). Social and financial efficiency of Islamic microfinance institutions: A Data Envelopment Analysis application. *Socio-Economic Planning Sciences*, 50(2015), 1–17. <https://doi.org/10.1016/j.seps.2014.12.001>

Wijesiri, M. (2016). Weathering the storm: Ownership structure and performance of

microfinance institutions in the wake of the global financial crisis. *Economic Modelling*, 57, 238–247. <https://doi.org/10.1016/j.econmod.2016.05.011>

Wijesiri, M., Viganò, L., & Meoli, M. (2015). Efficiency of microfinance institutions in Sri Lanka: A two-stage double bootstrap DEA approach. *Economic Modelling*, 47, 74–83. <https://doi.org/10.1016/j.econmod.2015.02.016>

Wijesiri, M., Yaron, J., & Meoli, M. (2017). Assessing the financial and outreach efficiency of microfinance institutions: Do age and size matter? *Journal of Multinational Financial Management*, 40, 63–76. <https://doi.org/10.1016/j.mulfin.2017.05.004>