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Financial vs Social Efficiency of Indian MFIs

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Abstract:

MFIs were established with the main objective of poverty alleviation but it is to be analysed whether they fulfil the object of poverty alleviation by extending efficiency in social outreach or only fulfilling their financial efficiency by neglecting social efficiency objective. The present study intends to study the objectives to find out social efficiency of financially efficient Indian MFIs and to compare the financial and social efficiency of profit-for and non-profit Indian MFIs. Five diamond Indian MFIs which were registered in Mix Market were selected for the present study. The data set covers 10 years period from the financial years from 2004 to 2013. The present study analysis the financial and social efficiencies of MFIs under three forms using DEA analysis by using inputs as equity and operating expenses and outputs for financial efficiency as Deposits and Gross Loan Portfolios while uses, Depositors and Borrowers for analysing the social efficiency of MFIs. The study found that financially efficient MFIs are performing equally well in their social efficiency and the MFIs which are less than 100 per cent in their financial efficiency their preference is primarily to stabilise financial efficiency over social efficiency. It is also found that almost all non-profit MFIs are better in their social efficiency than their financial efficiency.

Key words: Financial Efficiency, MFIs and Social Efficiency

1. Introduction

An increase in access to microfinance was considered to be an important instrument for reducing poverty in developing countries (Mersland 2009). Micro Financial Institutions (MFIs) were started to provide micro finance behind the motive of poverty alleviation after micro finance movement. Hence forth MFIs offered their potential to alleviate poverty while paying for itself and the sector attracted growing attention from academics, NGOs, development practitioners in snail pace and more recently to the private sector also. It is more visible as shown by the growth of mushrooming of MFIs in the world and gradually it is also discerned that these MFIs are turning to a profit motive. Accordingly MFIs developed two approaches viz., Financial System Approach and the Poverty Lending Approach (Robinson 2001).

Financial System Approach aims first on the financial sustainability of the microfinance programmes rather than targeting the poorest clients, in other words the majority of MFIs would like to cover costs with higher interest rates by preferring a higher clientele than very poor households. Social System Approach refers to MFIs structured in such a way to direct all their resources to overcome the poorest conditions with lower interest rates. In this contour, different kinds of MFIs were developed across the globe in growing in size, importance, different ages, different legal status with different financial intermediation, different outreach, different regulations, by different scales and with different target markets.

The catastrophes of APMFIs anecdotes about MFIs have driven borrowers to commit suicides as the role of MFIs has changed its tune from poverty eradication to commercialisation. So many doubts cropped up in the minds of people whether these MFIs really contribute to the lessening of poverty or not? Such queries remained very strong and reinforced partly with the recent trend of commercialisation of microfinance and the corresponding expansion of services by MFIs.

As MFIs being established with the main objective of poverty alleviation, it is to be analysed whether they fulfil the object of poverty alleviation by extending efficiency in social outreach or only fulfilling their financial efficiency by neglecting social efficiency objective. It was observed from the recent studies that most of the MFIs focus entirely on either financial efficiency or on social efficiency. There should be a trade off between efficiency and outreach. The present study is to study explicitly the nature of trade off between social efficiency and financial efficiency of selected Indian MFIs

The staunch proponents of MFI movement seems to have glorified the role of MFIs beyond proportions, as if it is a panacea which can remove all ills in the socio-economic structure of their dents, against this changed background, especially when there is a lot of hue and cry in the country over the functioning of the MFIs in India. This necessitates a close examination of the nature of inter-relatedness between the MFIs' objectives of outreach and financial performance.

2. Review of Literature

In a study carried out by the Nieto et al (2009) pointed out that the Efficiency of MFIs rely on two components in order to capture the double bottom line mission of MFIs, i.e., the financial efficiency and social efficiency.

Haq et al (2010) studied the MFIs cost efficiency across the countries and found that non-government MFIs are more efficient and results are also consistent with the dual objective of MFIs of poverty alleviation and achieving financial sustainability.

Cull and Morduch (2007) found there was no direct linkage between outreach and financial stability and found that most profitable lenders are those that serve the poor to the least extent.

Hatarska and Nadolnyak (2007) examined whether regulation affects outreach and operational sustainability of MFIs and found that there is no direct linkage between outreach and operational sustainability.

The literature shows positive and negative linkage between financial and social objectives of MFIs but a few studies focussed on the role of financially efficient MFIs in performing their social efficiency. Hence the present study intends to study the following objectives.

3. Objectives of the Study

- To find out social efficiency of financially efficient Five Diamond Indian MFIs.
- To compare the financial and social efficiency of profit-for and non-profit Five Diamond Indian MFIs.

4. Methodology

Indian MFIs those have attained five diamond scale by the MIX Market were selected from MIX Market data base for the present study. Five diamond MFIs are those MFIs having highest score in its certificate of transparency, recognising its scope and impact, financial data and risk rating by the International Organisation Microfinance Information Exchange. The data set covers 10 years period from the financial years from 2004 to 2013. The data is collected from Mix Market Database and Micro Financial Institutions network. The names of the selected MFIs and their details are furnished in the following Table-1.

| | Legal Status | Status of Regulation | Profit status |
|-----------|--------------|----------------------|---------------|
| Bandhan | NBFI | Regulated | Profit |
| Chaitanya | NBFI | Regulated | Profit |
| Equitas | NBFI | Regulated | Profit |
| SCNL | NBFI | Regulated | Profit |
| UFSPL | NBFI | Regulated | Profit |
| Ujjivan | NBFI | Regulated | Profit |
| Utkarsh | NBFI | Regulated | Profit |
| Biswa | NGO | Not Regulated | Non-Profit |
| Guardian | NGO | Regulated | Non-Profit |
| Prayas | NGO | Regulated | Non-profit |
| Sarala | NGO | Not Regulated | Non-profit |

Table 1 Source: Mixmarket.org.in

The present study attempted both the models of Data Envelopment Analysis viz., The Constant Returns to Scale Model (CRS) (Carnes, cooper and Rhodes Model) and the Variable Returns to Scale Model (VRS) (Bankers, Charmes and Cooper Model) to know the social and financial efficiency of MFIs. The study used output orient model where the efficiency is estimated by the output of the firm relative to the best practice level of output for a given level of Input. MFIs efficiency in this study requires two models; one is to measure social efficiency and other for financial efficiency. The present study analysis the financial and social efficiencies of MFIs under three forms Variable Returns to Scale, Constant Returns to Scale and Scale efficiency. A unit is said to be scale efficient when its size of operations is optimal so that any modifications on its size will render the unit less efficient. This is referred as scale efficiency. The present study uses Inputs as equity and operating expenses and outputs for financial efficiency as Deposits and Gross Loan Portfolios while uses, Depositors and Borrowers for analysing the social efficiency of MFIs. Descriptive statistics of the selected MFIs and their inputs and outputs are presented in Table-2.

| Descriptive | Inputs For Financial And Social Efficiency | | Outputs For Financial Efficiency | | Outputs For Social Efficiency | |
|-----------------------|---|-----------------------|----------------------------------|-------------------------|-------------------------------|----------------------------------|
| Statistics | Equity | Operating Expenses | Deposits | Gross Loan Portfolio | Number of Depositors | Number of active Borrowers |
| Maximum | 165728814 | 44607210 | 99702857 | 814457811 | 1220023 | 4804053 |
| Minimum | -4,479 | 0 | 0 | 0 | 0 | 0 |
| Average | 14219774 | 3280868 | 2998278 | 70015568 | 54816 | 381771 |
| Median | 2070137 | 103402 | 0 | 7424237 | 0 | 16153 |
| Standard Deviation | 28077348 | 7957025 | 12574916 | 155615372 | 191644 | 916965 |

Table 2: Descriptive Statistics of Inputs and Outputs Source: Mixmarket.org.in

| | Equity | Operating Expenses | Deposits | Gross loan portfolio | Depositors | Borrowers |
|----------------------|--------|-----------------------|----------|-------------------------|------------|-----------|
| Equity | 1 | | | | | |
| Operating Expenses | 0.859 | 1 | | | | |
| Deposits | 0.334 | 0.463 | 1 | | | |
| Gross loan portfolio | 0.959 | 0.786 | 0.501 | 1 | | |
| Depositors | 0.073 | -0.112 | 0.127 | 0.431 | 1 | |
| Borrowers | 0.943 | 0.758 | 0.554 | 0.983 | -0.081 | 1 |

Table 3: Pairwise Correlation Coefficients between Inputs and outputs of financial and social efficiency average scores of five diamond MFIs Source: Author's calculation

Source: Author's calculation

Table-3 shows the correlation coefficients between inputs and outputs of financial and social efficiency average scores of five diamond MFIs. It is observed from the table that there is a positive correlation exists between the equity and Gross Loan Portfolio & Operating Expenses and Gross Loan Portfolio under financial efficiency but no correlation is observed between equity and deposits, operating expenses and deposits in the same efficiency level. Whereas the correlation coefficiency between inputs and outputs of social efficiency of MFIs there is a positive correlation exists between equity and borrowers, operating expenses and borrowers and negative correlation coefficiency exists between operating expenses and depositors and no correlation exists between equity and depositors.

Tables 4,5 & 6 shows the average performance of Financial and Social Efficiency of selected five diamond Indian MFI based on Variable Returns to Scale, Constant Returns to Scale and Scale Efficiency methods of DEA. These results were shown in Figures-1, 2 and 3.

From the Table-4, it is very evident that the performance of MFIs Bandhan, Ujjivan and Guardian are efficient in both financially and socially during the study period, where as UFSPL, Saral and Equitas are more socially efficient than financial and the rest Prayas, SCNL, Chaitanya and Utkarsh are more financially efficient than social during the study period under Variable Returns to Scale.

Table-5 shows the efficiencies of MFIs under Constant Returns to Scale. The MFI Guardian is the only MFI whose performance is efficient in both financially and socially while as Saral, UFSPL, Ujjivan and BISWA are performing better in social efficiency than their financial efficiency and the rest of selected MFIs under the study viz., Bandan, Prayas, Chaitanya, Equitas, SCNL and Utkarsh are performing better in their financial efficiency than social efficiency.

Table-6 shows their efficiencies under scale efficiency model. MFI Guardian is the only MFI whose performance is efficient both socially and financially while as Saral, UFSPL, Ujjivan, BISWA are more socially efficient than their financial efficiency and the rest have better financial efficiency than social efficiency.

From the study it is very clear that the MFI Guardian is efficient in both financially and socially in all the models while as UFSPL and Saral, and Ujjivan are more socially efficient than their financial efficiency during the study period and rest are financially efficient than their social efficiency, but their financial efficiency is not so proficient.

| Name of MFI | Financial efficiency (%) | Social efficiency (%) | | |
|-------------|--------------------------|-----------------------|--|--|
| Bandhan | 100.00 | 100.00 | | |
| Ujjivan | 100.00 | 100.00 | | |
| Guardian | 100.00 | 100.00 | | |
| UFSPL | 98.00 | 100.00 | | |
| Sarala | 92.00 | 100.00 | | |
| Equitas | 66.50 | 82.33 | | |
| Prayas | 89.00 | 86.00 | | |
| SCNL | 60.00 | 37.00 | | |
| Chaitanya | 34.63 | 33.10 | | |
| Utkarsh | 67.00 | - | | |
| Correlation | 0.929 | 0.929922 | | |

Table 4: Average Variable Returns to scale financial efficiency and social efficiency of five diamond MFIs Source: DEA online software

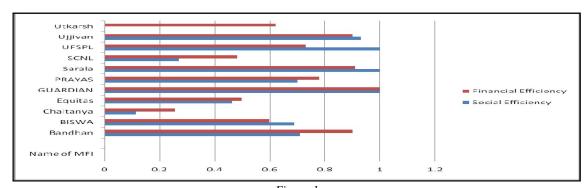


Figure 1 Source: Table 4

| Name of MFI | Financial efficiency (%) | Social efficiency (%) |
|-------------|--------------------------|-----------------------|
| Guardian | 100.00 | 100.00 |
| Sarala | 91.00 | 100.00 |
| UFSPL | 73.00 | 100.00 |
| Biswa | 59.96 | 68.92 |
| Bandhan | 90.00 | 71.00 |
| Prayas | 78.00 | 70.00 |
| Chaitanya | 25.70 | 11.50 |
| Equitas | 49.68 | 46.26 |
| SCNL | 48.00 | 27.00 |
| Utkarsh | 62.00 | - |
| Correlation | 0.897 | 7091 |

Table 5:Average Constant Returns to Scale financial efficiency and social efficiency of five diamond MFIs Source: DEA online software

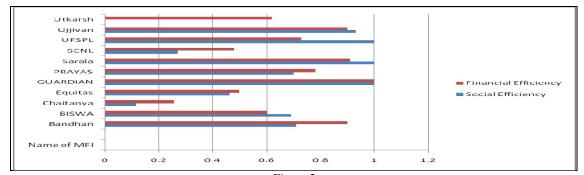
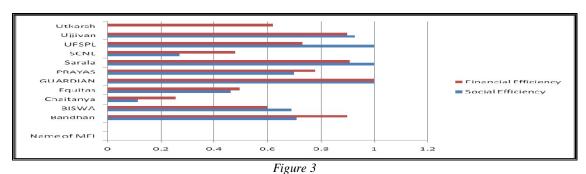


Figure 2 Source: Table 5

| Name of MFI | Financial efficiency (%) | Social efficiency (%) |
|-------------|--------------------------|-----------------------|
| Guardian | 100.00 | 100.00 |
| Sarala | 98.00 | 100.00 |
| UFSPL | 74.00 | 100.00 |
| Ujjivan | 90.00 | 93.00 |
| Biswa | 71.53 | 79.96 |
| Bandhan | 90.00 | 71.00 |
| Prayas | 88.00 | 86.00 |
| SCNL | 77.73 | 67.00 |
| Chaitanya | 74.00 | 49.20 |
| Equitas | 71.00 | 60.90 |
| Utkarsh | 83.00 | - |
| Correlation | 0.600 | 377 |

Table 6: Average Scale Efficiency model financial efficiency and social efficiency of five diamond MFIs Source: DEA online software



Source: Table 6

Comparison of Financial and Social Efficiency of Profit and Non-Profit MFIs.

Tables 7, 7(a), 8, 8(a), 9 & 9(a) shows the financial and social efficiency scores of selected profit-for and non-profit MFIs. The values of their efficiencies are calculated based on variables Returns to Scales, constant returns to scales and Scale Efficiencies. The correlation efficiencies between Financial and social efficiencies of profit-for and non-profit MFIs had shown a positive correlation except for non-profit MFIs under scale efficiency.

From the tables it is further observed that non-profit MFIs are showing better performance in their social efficiency than their financial efficiency except the MFI Prayas. While the profit-for MFIs are performing better in their financial efficiency than their social efficiency except UFSPL, Ujjivan and Equitas. Further it is found that the profit-for MFIs are efficient in their social efficiency only once if they are 100 per cent efficient in their financial efficiency with a few exceptions. Hence it is very clearly understood that non-profit MFIs are better in social efficiency than the profit-for MFIs

| MFI | Status | Financial efficiency (%) | Social efficiency (%) |
|-------------|------------|--------------------------|-----------------------|
| Biswa | Non-Profit | 59.96 | 68.92 |
| Guardian | Non-Profit | 100.00 | 100.00 |
| Prayas | Non-Profit | 78.00 | 70.00 |
| Sarala | Non-Profit | 91.00 | 100.00 |
| Correlation | | 0.891125 | |

Table 7: Comparison of non-profit MFIs under Constant Return to Scale Source: DEA online software

| MFI | Status | Financial efficiency (%) | Social efficiency (%) |
|-------------|--------|--------------------------|-----------------------|
| Bandhan | Profit | 90.00 | 71.00 |
| Chaitanya | Profit | 25.70 | 11.50 |
| Equitas | Profit | 49.68 | 46.26 |
| SCNL | Profit | 48.00 | 27.00 |
| UFSPL | Profit | 73.00 | 100.00 |
| Ujjivan | Profit | 90.00 | 93.00 |
| Utkarsh | Profit | 62.00 | - |
| Correlation | | 0.877957 | |

Table 7(a): Comparison of profit MFIs under Constant Return to Scale Source: DEA online software.

| MFI | Status | Financial efficiency (%) | Social efficiency (%) |
|-------------|------------|--------------------------|-----------------------|
| Biswa | Non-Profit | 84.29 | 83.00 |
| Guardian | Non-Profit | 100.00 | 100.00 |
| Prayas | Non-Profit | 89.00 | 86.00 |
| Sarala | Non-Profit | 92.00 | 100.00 |
| Correlation | | 0.85053 | |

Table 8: Comparison of non-profit MFIs under Variable Returns to Scale Source: DEA online software

| MFI | Status | Financial efficiency (%) | Social efficiency (%) |
|-------------|--------|--------------------------|-----------------------|
| Bandhan | Profit | 100.00 | 100.00 |
| Chaitanya | Profit | 34.63 | 33.10 |
| Equitas | Profit | 66.50 | 82.33 |
| SCNL | Profit | 60.00 | 37.00 |
| UFSPL | Profit | 98.00 | 100.00 |
| Ujjivan | Profit | 100.00 | 100.00 |
| Utkarsh | Profit | 67.00 | - |
| Correlation | | 0.92405 | |

Table 8(a): Comparison of profit-for MFIs under Variable Returns to Scale Source: DEA online software

| MFI | Status | Financial efficiency (%) | Social efficiency (%) |
|-------------|------------|--------------------------|-----------------------|
| Biswa | Non-Profit | 71.53 | 79.96 |
| Guardian | Non-Profit | 100.00 | 100.00 |
| Prayas | Non-Profit | 88.00 | 86.00 |
| Sarala | Non-Profit | 98.00 | 100.00 |
| Correlation | | 0.95387 | |

Table 9: Comparison of non-profit MFIs under Scale Efficiency Source: DEA online software

| MFI | Status | Financial efficiency (%) | Social efficiency (%) | |
|-------------|----------|--------------------------|-----------------------|--|
| Bandhan | Profit | 90.00 | 71.00 | |
| Chaitanya | Profit | 74.00 | 49.20 | |
| Equitas | Profit | 71.00 | 60.90 | |
| SCNL | Profit | 77.73 | 67.00 | |
| UFSPL | Profit | 74.00 | 100.00 | |
| Ujjivan | Profit | 90.00 | 93.00 | |
| Utkarsh | Profit | 83.00 | - | |
| Correlation | 0.348177 | | | |

Table 9(a): Comparison of profit-for MFIs under Scale Efficiency Source: DEA online software

5. Conclusion

Financially efficient MFIs are performing equally well in their social efficiency. It is found from the study that if the financial efficiency is less than 100 per cent then their preference is primarily to stabilise financial efficiency over social efficiency. There are some exceptions in MFIs like UFSPL, Sarala and Ujjivan are socially efficient than financial. It is also found that almost all non-profit MFIs are better in their social efficiency than their financial efficiency. While as the profit-for MFIs are usually performing better in their financial performance than their social performance except some MFIs viz., UFSPL,Ujjivan and Equitas.

6. Suggestions

To increase the financial inclusion, MFIs need to be taken as a mean through which financial services will be provided to the door steps of the needy. Although the government has taken many initiatives to this effect, efforts should also be strengthened to make the MFIs not only financially efficient, but also socially efficient for their sustainability. Even the profit-for MFIs will be encouraged by providing some incentives to do better in their social efficiency as a part of their corporate social responsibility. The government should also provide some lucrative subsidies to the MFIs which are performing better in their social efficiency in order to encourage them to do their best in reaching out the needy and to fulfil their core objective.

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