

## **Examining Financial Capability of the Clients of Micro Finance Institutions**

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**Abstract:** *According to their level both poor and rich people require money for fulfilling their wants and desires of life. Managing money and getting access to available financial services and required capital at correct time is really a complex and almost unachievable especially for poor people. The objective of this study is to understand the financial behaviour of low-income people by looking at their own perceptions as users of money and financial services. The approach used in this study has been inspired and guided by the Financial Capability Index (FCI) methodology developed by Microfinance Opportunities (MFO). As per definition of Financial Capability, it covers four domain of human nature related to money. They are Spending Money, Estimating Cost, Choosing Products and Staying Informed. The present study wants to create a scoring mechanism by using factor and cluster analysis to examine and analyze people's nature related money in the four financial-capability areas. It has been found that out of all a person is able to manage one area but incapable to execute other things judiciously. The result shows that women obtain better scores than men on using, estimating and keeping track of their monetary matters. In most cases there is a significant impact of age and level of education to for defining Financial Capability. This paper points to the need for increasing financial awareness and literacy of low-income households as well as provides some suggestions for improving the Financial Capability of these people.*

**JEL Classification:** D85

**Keywords:** *Micro Finance, Micro Finance Institutions (MFIs), Financial Capability, Impact Analysis.*

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### **1. INTRODUCTION**

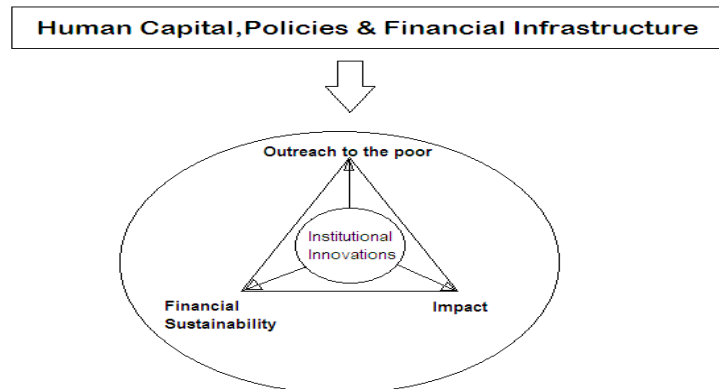
According to their level both poor and rich people require money for fulfilling their wants and desires of life. Managing money and getting access to available financial services and required capital at correct time is really a complex and almost unachievable especially for poor people (Rubin, 2007). From the supply side also, making business with modest account holders is not profitable when recompense is based on a percentage of the assets under management (Finke, et al., 2011). Several schemes, programs, organizations, and government policies have been tried to implement to include low-income individuals and communities financially. But at the same time it's very much true that with some additional benefits, proper financial knowledge and information poor people can change their financial behavior, and they require those changes very badly (Schreiner, et al., 2002; Mills, et al., 2004). To address this issue, more insights into the financial behavior of low-income people are very much required in today's time.

After more than 10 years of experimentation, the Microfinance Institutions (MFIs) in India has started operation and begun to increase very quickly. It attracts substantial attention of Government and people in India. In the context of sustained growth of Microfinance in India and given the twin imperatives of enhanced sustainability and expanded outreach, there is growing emphasis on impact analysis of the MFIs.

#### **1.1. The Critical Microfinance Triangle**

Figure 1 refers the critical microfinance triangle (Meyer, 2002). It represents an interrelated conceptual framework consisting of three policy objectives: outreach to the poor, financial sustainability, and welfare impact. To examine the performance of microfinance all three must be measured extensively. The inner circle in the triangle represents innovations in technology, policies, organization, and management that affect how well each objective is met. The outer circle represents

the environment within which microfinance operates. This environment consists of the human and social capital possessed by the poor, the economic policies of the country, and the quality of the financial infrastructure which supports monetary transactions.



Source: Zeller & Meyer (2002)

**Figure1.** *The Critical Microfinance Triangle*

**Impact:** For the present study, impact analysis is defined as attributing specific effects or benefits to specific interventions. In this research achieving better access to financial services can be considered as an indicator of impact.

Capability is defined as the ability to act, and financial capability as the ensemble of abilities related to making informed financial choices, managing money effectively, and using financial services for one's own benefit (Bickel and Mehwald, 2014). In social science theories there are different definitions for concepts like "capability" or "capacity" used for different purposes. For the purpose of this study we define capability as the ability to act, and financial capability as the ensemble of abilities related to making informed financial choices, managing money effectively, and using financial services for one's own benefit. The ability to act is shaped by personal attributes as well as by the environment in which actions are performed. And, vice versa, the ability to act, if realised, shapes personal attributes and the environment. Personal attributes, which are often referred to as human capital, comprise knowledge, skills and attitudes as well as physical, social, cultural and economic properties (e.g. health, social status and economic assets), which a person brings in to interact with his/her environment. The environment comprises physical infrastructure, social and cultural relations, and economic conditions given in the geographical areas where people act and interact. The Financial Capability Index is an evaluating tool to measure the changes in the financial capability of clients of MFIs in comparison to others over time in order to help assess effectiveness of the intervention of MFIs.

## 2. LITERATURE REVIEW

Micro finance is a movement which gives access to poor people to an appropriate range of high quality financial services (Adams & Graham, 1984). Micro Finance Institutions can support poor and needy people in poverty alleviation by delivering financial services through appropriate mechanisms (Fisher, et al., 2002). Micro credit is necessary but not adequate for micro enterprise development and promotion. The success of micro enterprises depends on the whole range of resources for example natural resources, human, and financial. The study by Wooler and Brau (2004) states that financial intervention has an impact on social relations partly through its economic effects. In many instances implementers of credit schemes have claimed that their work will lead to progressive social change, for example empowering women and changing gender relations in the households and in the community. Robinson (2001, 2002) argues that financial services are not the universal remedy for poverty alleviation but other strategies are needed for the very poor who need food and employment before they can make use of financial services. Formal financial institutions are regulated and supervised, offer a wide range of financial services and can extend across the country and internationally. But they are not so successful in implementing their social mission and delivering services to the poor (Karlan & Valdivia, 2009). Researchers criticized on the grounds that micro

finance is delivered in the absence of some critical measures of the well being of society such as savings, remittances and insurances. They found that many of the benefits from micro-credit are in fact loaned to people with existing businesses and not to the people who are looking for new venture. It was also seen men's income went up more than women.

Financial Capability has been defined by the researchers as the people's financial knowledge and their ability to manage their own finance and fulfill their needs (Atkinson et al., 2006; Dixon, 2006). Financially capable consumers plan ahead, find and use information, know when to seek advice and can understand and act on this advice, leading to greater participation in the financial services market (HM Treasury, 2007). U.S. government used the term financial capability as the "National Financial Capability Challenge." The challenge is: "Americans need better financial education and access to critical resources in order to make smarter financial decisions" (US Department of Treasury, 2009). It can be defined also as the financial capability is the ability to "to understand, assess, and act in their best financial interest" (Johnson & Sherraden, 2007). Hence it is required that people should be financially literate and also accessible to the proper financial product and services. As a whole, ability and opportunity contribute to a person's financial growth and life chances. Likewise, financial actions link explicitly to augment access to quality financial product and services.

If a person is financially literate, obviously it will help him/her to manage his/her finance more prudently. The concept of financial capability includes financial literacy but also addresses these institutional barriers facing low-income households. In the present research it is explored the causes behind financial capability and identify its characteristics. This study also set out a conceptual model for financial capability in a way that combines individual and institutional features. After understanding the financial capability of low-income poor amongst various target groups like people who are client of any MFIs or financially excluded people, it can be assessed the impact of intervention of MFIs on low-income poor people in India.

### 3. OBJECTIVES OF STUDY

Measuring the impact on clients of financial services provided by MFIs is the most difficult and controversial aspect of performance evaluation. The key problems faced in measuring impact are summarized in this section so readers can appreciate why the results of impact assessments must be interpreted with great caution. Because of the methodological difficulties and high costs involved in conducting robust studies, it has been argued that the most important evidence of impact should be whether or not MFI clients continue to use the services. If they do, they must value the benefits received more than the costs of obtaining them.

The objective of this study is to understand the financial behaviour of low-income people by looking at their own perceptions as users of money and financial services: How do people perceive money and financial services? What do they mean to them? How do they make their financial decisions? Which factors support or constrain their financial behaviour and capability?

### 4. METHODOLOGY

The approach used in this study has been inspired and guided by the Financial Capability Index (FCI) methodology developed by Microfinance Opportunities (MFO) (<http://microfinanceopportunities.org>). Financial capability can be conceived as encompassing four different areas or domain. These are Managing Money, Planning Ahead, Choosing Products and Staying Informed.

The indicators of the FCI are derived from Focus Group Discussions (FGDs) with participants coming from the target groups of financial inclusion strategies. Those indicators can be grouped into above four main categories: 1) basic behaviour around managing money (e.g. planning, saving, spending or handling, borrowing, earning, investing, use of formal or informal financial institutions); 2) personal characteristics (e.g. careful about spending money, confidence in making financial decisions for future investments, ability to plan ahead); 3) choosing products or making choices judiciously (e.g. using loans, bank accounts, insurance); and staying informed (e.g. part of a reciprocal support network vs. self-sufficiency, using assets, gaining financial knowledge & skills). The indicators thus derived are then used to develop a simple-to-use questionnaire that can be administered to individuals or target populations, to generate individual "scores" indicating financial capabilities.

Understanding local financial capability concepts requires starting from the people's own perceptions and priorities. The approach used in this study to some extent reflects what researchers call "grounded

theory” (Charmaz, 2006). According to this theory it develops local financial capability concepts through a step-wise analysis of statements made by the participants of Focus Group Discussions (FGDs) with the people of West Bengal (around 500) in three different districts say Kolkata, East Medinipur & Bardhaman. The sampling method uses a random location sample with 10 people at each location. The survey collects detailed information about respondents’ personal data so that it can be identified which groups of people have better and worse levels of financial capability. Initially target groups are divided into following basic categories:

- Client of one leading MFI in West Bengal or not
- Financial Included or Excluded
- Age
- Gender
- Income
- Number of earning members in their household
- Number of dependents
- Education
- Source of Income

The research questions are open to enable genuine discussions and they are aimed at understanding how people act when using and managing money. The study collects qualitative data through Focus Group Discussions (FGDs) with target group. Prior to actual data collection literature review helps to develop a model of Financial Capability and to review questions used in other surveys. Each of around 500 respondents gives answers to a wide range of questions. These questions capture all above-mentioned four domains required for measuring Financial Capability Score of any individual. By these it can also be able to analyze the impact of a MFI based at West Bengal upon the people of state. The present study wants to create a scoring mechanism to identify people’s relative strengths and weaknesses in the four financial-capability domains. Also this work describes the types of people most likely to display higher or lower levels of financial capability.

For assessment of Financial Capability, Factor Analysis (A Statistical tool) approach is used. It has been seen that financial capability can be measured indirectly by a number of pieces of already available information. Within a specific area, the questions assessing financial capability are analyzed to measure how far an underlying factor may be constructed that best explains the variation those are observed in the answers. One variable is then formed to replicate the best combination of information created from the range of questions asked. This approach seems best suited to the types of inter-related questions that are being used to assess financial capability in the survey. It makes use of many different pieces of information about each person. It is a tried-and-tested rapidly used statistical approach.

By using factor analysis one may estimate ‘factor score’ for every individual, which reflects a particular combination and weights of the questions used to assess that factor. In its ‘raw’ form this score has an average value of zero, with values typically ranging from +3 to -3, depending on the patterns of people’s answers to the key questions. For making it easy to read factor analysis rescaled these values which varies between 0 and 100. The weighting of each question within the factor score depends on how highly it is correlated with the underlying characteristic of interest. It is certainly possible, and indeed likely, that some of the questions perform rather better than others. The statistical work indicates the questions that best measure financial capability in each area, and identifies how far a single constructed variable may reflect the range of different answers.

After deriving financial capability, multivariate approaches are used (Linear Multiple Regression and Logistic Regression) to examine the groups with higher and lower levels. This study uses procedures that try to unlock the particular contributions of different factors while controlling for a wide range of information. For example, whether any effect from gender or age on financial capability is altered when this study includes information on household income. Respondents are divided into groups, based on levels of financial capability in different areas, and, if so, to recognize the features of every clusters. This kind of differentiation or cluster analysis can be fruitful along with the factor analysis, for policy purposes where a target population in higher need can be acknowledged.

After understanding the financial capability of low-income poor amongst various target groups like people who are client of any MFIs or financially excluded people, it can be assessed the impact of intervention of MFIs on low-income poor people in India.

**5. RESULTS**

The present study has used a statistical tool ‘cluster analysis’ to have a better realization of understanding of the relevant features of financial capability. This has been segmented cluster groups acknowledged by the cluster analysis according to their average factor scores compared with the overall averages. The clusters were then marked according to the numbers of areas of weakness in the four financial capability areas. It is important to note that within these clusters, particular individuals will have scored more or less than the group average. Then it has compared clusters according to their average scores within each cluster and the overall average.

**Table1.** *Key Cluster Groups*

No. of weak areas	Cluster	% of sample	Weighted base	Description
0	Oi	35	1826	More or less capable, higher income, aged people, many financial products.
1	Ii	11	670	Older, middle level income, reasonably fair in managing money, fairly capable.
1	Iii	12	701	Not so well organised, handling money not wisely, middle-aged.
2	IIIi	3	198	High-income, younger people, spendthrift.
2	IIIii	5	315	Young aged, well-organised, middle level income.
3	IIIi	3	149	Older, lower income, not so efficient in keeping track of money.
3	IIIiii	4	175	Middle aged, very low-income people, somehow able to make ends meet, fairly capable given their circumstances.
3	IIIiii	6	401	Young unmarried with some income and occupation.
4	IVi	15	851	Young, low-income, single people.
4	IVii	3	151	Early middle-aged, little bit of financial planning.
5	Vi	3	179	Younger with dependents, very low incomes, not at all stable, unorganised.

**Group 0: No Weak Areas**

The most financially capable is the first cluster. It is generally scored more than average on all factors excluding keeping track. Here it’s score is average. In this group, people tend to have higher incomes and also have high levels of product holding. They are little bit aged also.

**Group I: One Weak Area**

People are in this cluster [Ii] are specifically skilled at making ends meet. In fact they secure the maximum scores on this factor. They also achieve good rank on planning ahead but average on staying informed. Their level of income is more or less average. About 65% of their population are women. There are some people who have dependent children. People in cluster [Iii] secure really very poor score on keeping track of their finances. But otherwise they are good in choosing financial products and at staying informed.

**Group II: Two Weak Areas**

In this group people secured bad marks on keeping track of their finances and making ends meet. But they are good at planning ahead. They have slightly high incomes and high levels of product holding. But they are spendthrift. That’s the reason they cannot able to meet their basic requirements. On average, people in cluster [IIIii] are very poor on planning ahead and making ends meet. They are, however, very good at keeping track of their money and staying informed about financial matters. These people are relatively lower aged and more of them have dependents.

**Group III: Three Weak Areas**

People in cluster [IIIi] do not do well at choosing financial products or staying informed and are not at all good at keeping track of their finances although they are good at making ends meet. They are above average age, but both their incomes and levels of product holding are below average. Most of

them are women and some of them have children. People in next slot [IIIii] are very much successful in making ends meet and they are doing fairly well in respect to keeping track of their finances. But they have very low level of income and below average level of product holding. These reveal their poor performance in planning ahead, staying informed and choosing financial products. People in cluster [IIIiii] are fairly good at staying informed, but worse in making ends meet and planning ahead. They are the junior most of all the 11 cluster groups, with an average age of 35. They are also particularly likely to be single. Their levels of product holding are low and their incomes are below average.

#### **Group IV: Four Weak Areas**

People in this group secured below average on all most all the areas but out of them, at keeping track and money management their performance are relatively better. Those in cluster [IVi] were particularly good at keeping track of their money, but scored very low indeed on planning ahead, staying informed and choosing products. They are younger and have the lowest levels of average income. They included a disproportionate number of women, single people, and parents with children. People in cluster [IVii] have slightly above-average scores for keeping track and are taking comparatively better steps with regard to planning ahead. Their incomes are very similar to the survey average and they include one of the larger proportions of couples and parents with dependents.

#### **Group V: Five Weak Areas**

People in cluster [Vi] score well below average on all five features of financial capability. They are young of average age 35. They are included roughly equal numbers of single people and couples. Their incomes and levels of product holding are lower than overall average.

## **6. CONCLUSIONS**

Financial capability does not solely depend on only one single factor, but it may be understood by covering all four different areas which are 'managing money', 'planning ahead', 'choosing products' and 'staying informed'. This research used factor analysis to create scores for each domain based on the collective information from questions covering a particular area. It has been evidenced that individuals may be particularly capable in one or more areas, but lack of exposure or experience in others. The current study has also been able to locate the features which are the most strongly associated with low levels of financial capability. In addition to these research findings, the dataset will be available for exploring further research. The methods used imply that a future survey could be conducted to follow new adaptations in financial capability.

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