## **Research Paper**

Economics



## Conceptual Framework to Investigate the Accessibility and Impact of Financial Inclusion

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#### ABSTRACT

Access to safe, easy, and affordable financial services by the vulnerable sections of the society is a pre-condition for accelerating growth and eradicating income disparity and poverty. Theories of development also advocate this. Therefore, in making economic growth process more inclusive 'financial inclusion' of the households belongs to poor and vulnerable sections of society is critical. Having appropriate and up to date data conditioned about levels, trends and impact of access to financial services is a first step in this regard. This will facilitate designing a relevant policy approach to further deepen and strengthen the reach of financial sector thereby economy can have more inclusive growth. The purpose of this paper is to suggest a 'conceptual framework' to measure the accessibility and impact of access to financial services on the socio-economic status of the households belong to the vulnerable sections of the society.

# Keywords : Financial Inclusion, Impact of Access to Finance, Socio-Economic Status, Inclusive growth

#### Introduction:

Access to safe, easy, and affordable financial services by the vulnerable sections of the society is a pre-condition for accelerating inclusive growth and eradicating income disparity and poverty which improves people's lives, enables people to invest in better nutrition, housing, health and education and enables them to face the uncertain future against economic shocks. But in actual reality, household surveys at the macro level reveal that there is a disparity in access and use of financial services and a major part of the population that belongs to vulnerable sections of the society is excluded from full participation in the financial sector in India and around the world which slows down the pace of inclusive growth. This challenge faced by the developing economies, can be met by policies that encourage more and more financial inclusion which means delivery of the financial system of an economy to its citizens.

In India the banking industry has shown tremendous growth during the last few decades, but macro level data shows that the banking services are not made available to the entire population without discrimination. Theory states that 'inclusive financial systems provide the right incentives to individuals and help to overcome access barriers which are central not only to stability but also to growth, poverty reduction and equitable distribution of resources and capacities'. Therefore there is a need for the research and data to be conditioned on the nature and impact of financial inclusion in order to have effective programmes and policy to achieve inclusive financial system and inclusive growth in the developing economies of the world. This paper, therefore, is an attempt to analyze research framework to measure the access to formal financial services so as to provide a means to promote financial inclusion and to measure the impact of access to finance. The objectives of the paper are:

To discuss a quantifiable definition of financial inclusion

To explore research framework to measure the nature, impact of financial services

The first part of the paper focuses on the relevant literature on the theoretical and empirical evidence of relationship between access to finance and economic development. The second part consists of the dimensions of access to finance, data required for the measurement of access and impact of financial services, definition of financial inclusion and indicators of financial access. In the third section we have come out with a conceptual framework and variables identified to measure the nature, extent and impact of access to formal financial services.

# Theoretical Evidence on Financial Development and Economic Growth:

In the theories of economic development it is advocated that financial development creates enabling conditions for growth. In the theories it is perceived that the lack of access to finance is a critical factor responsible for persistent income inequality as well as slower growth. It was long believed that though in early stages of economic development would inevitably be accompanied by inequality and concentrations of wealth (Kuznets 1955, 1963, Kaldor 1966), later empirical evidence suggested that access to finance is pro-growth and pro-poor reducing income inequality. Recent development theory in this direction states that the lack of access to finance is a critical mechanism for the generation persistent income inequality, as well as slower growth which influences resource allocation and the comparative economic opportunities of individuals of the economy. The robust relationship between financial depths and growth is also provided in some of the extensive empirical evidence research (Demirguc- Kunt and

Maksimovic, 1998; Rajan and Zingales, 1998; Beck, Levine and Loayza, 2000; Levine, 2005). More recently researchers (Beck, Demirguc-Kunt and Levine, 2004; Honohan, 2004) have shown that financial depth is particularly beneficial to the poor and in reducing the income inequality.

Even after having encouraging theoretical evidence, at the macro level and especially in Indian economy there is relatively little empirical evidence linking access to finance to development outcomes and little guidance for policies on how best to promote access to formal financial services by the vulnerable sections. Therefore the study of financial inclusion policy and its impact is highly important for the society. This has resulted in focused attention on financial inclusion —the percentage of the population with access to formal financial services and its impact on households. In this backdrop measuring and conditioning data on financial inclusion and its impact on various socio-economic aspects is the need of the hour.

#### **Dimensions of Access to Financial Services:**

Financial inclusion refers to the delivery of the financial system of an economy to its citizens.

It is a multi-faceted concept with different dimensions. Some of the commonly used dimensions through which financial inclusion can be viewed are:

Access to formal financial services: Access – full or partial – is nothing but the ability to use available financial services and products from formal institutions which depends on the potential barriers to opening and using a bank account such as cost, physical proximity of bank branches etc.,.

Quality of financial services: This is a measure of the relevance of the financial services which encompasses the experience of the consumer, his attitudes and opinion towards the financial products available etc. This measure would be used to gauge the nature and depth of the relationship between the financial service provider and the consumer as well as the choices available and their implications.

**Usage of financial services:** This dimension throws light on the depth and extent of financial service or product. This is about the regularity, frequency and duration of use over time which also involves measuring what combination of financial products is used by the household.

Welfare component: This component measures the impact of access to finance on the socio-economic status of households measured through changes in the socio-economic status of households which indicates the improvement in wellbeing resulting from financial inclusion.

Definition of Financial Inclusion and Measuring Financial Access:

To condition the empirical evidence that links access to financial services to development outcomes, developing a contextually relevant and clear definition of financial inclusion is important which plays a deciding role in conducting a study on measuring access and impact of financial services.

Financial inclusion is timely delivery of financial services at an affordable cost to the vast sections of the disadvantaged and low-income groups. The various financial services include credit, savings, insurance and payments and remittance facilities delivered to low income households and individuals which is an attempt to lift them from one level to another so that they come out of poverty. This can be achieved through state driven intervention or through voluntary effort by the banking community to bring within the ambit of the banking sector the large strata of society (United Nations 2006). This definition encompasses the two dimensions of financial inclusion, viz., access to a range of formal financial services and availability of competitive options.

In the Indian context Rangarajan Committee on Financial Inclusion (2008) defines financial inclusion as "...the process of ensuring access to financial services and timely, adequate credit where needed, to vulnerable groups such as weaker sections and low income groups, at an affordable cost".

#### Data Required for the Measurement of Access to Financial Services and its Impact:

Having stated the dimensions of access to finance and definitions of financial inclusion, the data required for the study can be captured by considering its supply and demand sides. On the supply side of financial inclusion, there is a network of organized financial institutions which provides access to loans and other financial services to the poor for their business and livelihood. Supply side data provides information like number of accounts and product specifications, from financial services providers which also focus on the physical outreach of the supply side of financial services. Combination of supply side data with population data can be used as a proxy for determining the level of access to financial services. For example, Beck, Demirguc-Kunt and Martinez Peria (2007), World Bank (2008), Honohan (2005) used the supply side data in their respective studies.

On the demand side of the financial inclusion we have customers of banking services, especially the common man, who belong to weaker sections of the society. Their inclusion to the banking facilitates depends on issues like human development, access to land, infrastructure support, access to work etc. A clear picture of access to finance and its impact requires input from the demand side also that is from the actual and potential customer's financial services. Demand side approaches are based on samples of households and collect demographic information about the respondent, classified by income level, urban/rural residence, and employment etc. They help in measuring the penetration of financial services as a proportion of the population, especially the vulnerable sections of the society. Two examples of national surveys that focus purely on financial access in the past years are Fin Mark's Fin Scope Survey and the World Bank's Financial Access Survey. A representative sample of sufficient size drawn from appropriate sampling frame and random selection of respondents are the important attributes in conducting a guality demand side survey.

#### Indicators of Financial Access:

A study of financial inclusion has to be multivariate and multi-dimensional. Among experts, there seems to be no consensus as to which set of attributes/variables are important to measure financial inclusion. While measuring access to credit from banks, for instance, there are a number of indicators available to a researcher, viz geographic-branch penetration, demographic-branch penetration, geographic-ATM penetration, demographic-ATM penetration, credit accounts per capita, credit-income ratio, etc. The indicators broadly fall into two categories – those the measure the outreach of the financial sector in terms of access to banks' physical outlets, and those that measure the use of banking services. If one takes into account the occupational pattern or nature of activities of the beneficiaries, some more indicators can be also be added.

#### **Conceptual Framework and Methodology:**

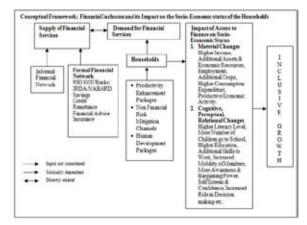
In the figure 1, a schematic representation of the conceptual framework about the accessibility and impact of access to finance on the socio-economic status of the households belong to vulnerable sections is suggested. This can be quantified with the combination of exploratory and descriptive approaches. To measure the characteristics of the units of population, both qualitative and quantitative methods of measurement, a combination of different scales measurement can be used.

The nature of financial inclusion can be explored by looking at the type of credit, savings, insurance, remittances and other services, accessed by the households. The extent of financial inclusion can be examined by looking at the outreach of financial services on various income levels, the different types of financial services accessed by the households, the number of years of accessing, amount of savings, credit and insurance, the number of member households etc.

To measure and quantify the impact of access to finance, we can explore the pathways through which members of the household experience change, they are viz. material changes, cognitive changes and perceptual changes among the members of the households.

Through the above mentioned pathways, the economic impact of financial inclusion on households will be studied by analyzing the changes in the pattern of households' income, employment, household assets, housing conditions, household expenditure etc. The social impact of financial inclusion on households will be analyzed by assessing the development of human and social capital. There are various factors which may influence the financial inclusion of poor households across different sections and regions of the economy. However, in this framework only the social and economic factors in the determination of financial inclusion are considered.

#### Figure 1: Schematic Representation of the Conceptual Framework



#### Source: Literature Survey

Depending on the scope of this study the selected household considered as the unit of analysis and the head of the household or any adult member who is in charge of discharging the duties and responsibilities on behalf of the head of the household can be interviewed to get the information on access to various financial services and other socio-economic factors by the household. Primary data can be collected by the multi stage sample survey method across the sections at a single point of time. A structured questionnaire will be used to interview the units of population. The collected primary data will be subjected to statistical analysis for drawing inference.

**Variables Identified:** Since the objective in this study is to study the access and impact of financial inclusion policy, it is important to gather data on various covariates which are stated in the table 1:

Table 1	Variables	Identified
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Core topics	Demand-side variables	Supply side variables
Nature of financial inclusion	Number of Households belong to vulnerable section Members having access to financial services in Household	Type of financial network Number of branches of various financial institutions Number of accounts per population Geographic distribution of banks, branches and other banking facilities in to different regions Population per bank branch Number, type of various financial products
Extent of financial inclusion	Household level of income Household asset level Number of years of access to finance Source of income Household particulars like caste, education, gender, head of household, housing pattern, consumption expenditure, employment etc	
Socio- Economic Impact of access to financial services	Material changes, Cognitive changes, Perceptual changes, Relational changes among the members of the households	

#### Source: Literature survey

**Conclusion:** Based on our analysis, the conclusion is that financial inclusion is the basis for pro poor growth or inclusive growth. Therefore broad access to financial services or financial inclusion is the need of the hour. But empirical evidence linking access to development outcomes is very limited. Towards broadening the access to financial services the first step is to measure it. With a clear-cut conceptual framework, a measurable definition, an appropriate list of indicators and covariates to be measured, clarity on the type of data to be collected, methods of data collection and analysis of financial inclusion will provide a solid foundation in building inclusive financial system.

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