Measuring Financial Access - Some Lessons for India

Why is financial access and its measurement necessary?

Inclusive growth requires financial inclusion

Economic growth of the economically, socially and geographically disadvantaged segments of the population of any country requires access to financial services. In addition to a bank account, financial services include savings, credit, insurance and payments facilities and other financial social security measures. Financial inclusion denotes delivery of financial services at an affordable cost to the disadvantaged and low-income groups.

Well functioning financial markets provide equality of opportunity. One of the crucial functions of the financial system is to allocate resources to most productive uses, thus boosting economic growth, improving opportunities and income distribution and reducing poverty. Financial development exerts a disproportionately positive influence on the poor by expanding their opportunities. According to Asli, Demirgüç-Kunt, Ross and Levine (January 2008), access is different from use. Figure-1 illustrates these differences. Access is more difficult to measure since it is not observed as use is. It is also likely to be wider since some may have access but may not wish to use financial services for cultural and religious reasons. On the other hand, there are the involuntary excluded who, in spite of demanding financial services, do not have access to them.

Access to financial services and its mirror image, financial inclusion, depend on a number of factors. First, there is a group of households and enterprises that do not have enough income or constitute too high a lending risk. This group is considered un-bankable by commercially oriented financial institutions and markets. Second, there might be discrimination against certain population groups based on social, religious or ethnic grounds. Third, the contractual and informational framework might prevent financial institutions to reach out to certain population groups since it is too costly to be commercially viable. Finally, the price of financial services or the product features might not be appropriate for certain population groups. While the first group of involuntarily excluded cannot be a target of financial sector policy, the other three groups demand different responses from policy makers.

The distinction between access and use suggests that not only it is important to collect information on the use of financial services, but also on barriers to access, in order to identify boundaries and causes of exclusion. These barriers, by excluding large parts of the population from access to finance, are likely to play an important part in perpetuating inequality and limiting economic opportunities for the poor.

* BASIX, India.

Performance of financial sector is traditionally assessed broadly on the basis of whether the financial sector promotes economic growth and whether it displays price stability - domestic prices in terms of low inflation and international prices in terms of stable foreign exchange rates.

**Traditional Measures - Growth and Stability**

Economic growth is the increase in the amount of the goods and services produced by an economy over time. It is conventionally measured as the percent rate of increase in the gross domestic product (GDP). An increase in GDP of a country is generally taken as an increase in the standard of living of its inhabitants. In the mid 20th century, it became the policy of most nations to encourage growth of this kind. It required enacting policies and being able to measure the results of those policies. This gave rise to creating measurements for underlying conditions, such as GDP growth rate, unemployment rate, and inflation.

The purpose of economic policy is to enable economic activity, particularly increasing production and consumption, without causing a rise in the general level of prices. In other words, GDP growth with near full-employment and price stability is the Holy Grail of macro-economists and central bankers. However, in a vast majority of developing countries, the goal of financial inclusion has to be added as a third deliverable from the financial sector, because for decades, these countries have witnessed a dual economy, with one part showing robust growth while another part has stagnated in terms of incomes. We illustrate this below for India.

Assessing the Financial Sector on Inclusion or Access is a must

In India many of who work as agricultural and unskilled / semi-skilled wage labourers, micro-entrepreneurs and low-salaried worker, are largely excluded from the formal financial system. Over 40 per cent of India’s working population earn but have no savings. Only 34.3 per cent of the lowest income quartile has savings, and only 17.7 per cent have a bank account. By contrast, in the highest income quartile, 92.4 per cent have savings and 86.0 per cent have bank accounts.

The National Sample Survey Organization (NSSO), 59th Round data reveals that out of a total of 89.3 million farmer households in India 45.9 million (51.4%) do not access credit, either from institutional or non-institutional sources.

In spite of the vast network of bank branches and credit co-operatives, only 27% of total farm households had borrowings from formal sources.

Note: Government of India, Committee on Financial Sector Reforms (Chairman Prof. Raghuram Rajan), 2008.
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Farm households not accessing credit from formal sources as a proportion to total farm households was especially high at 95.9%, 81.3% and 77.6% in the North Eastern, Eastern and Central Regions of India respectively, all of which have lower per capita income than the all India average.

The Economic Census, 2005 reported that there were 42.1 million enterprises functioning in India in 2005. Yet there were only 23.6 million non-individual deposits accounts (BSR March 2005). Thus there were only 56 deposit accounts for every 100 enterprises. In fact some of these may be non-individual accounts pertaining to trop production or plantation or entities engaged in non-economic activities.

The Economic Census, 2005 reported that only 14.3% per cent of enterprises engaged in non-agricultural activities availed credit facilities from the scheduled commercial banks.

Financial inclusion, broadly defined, refers to universal access to a wide range of financial services at a reasonable cost. These include not only banking products but also other financial services such as insurance and equity products (see Figure 2).

Households need access to finance for several purposes, the most important being for contingency planning and risk mitigation. Households build buffer savings, allocate savings for retirement (for example via pension plans) and purchase insurance and hedging products for insurable contingencies. Once these needs are met, households typically need access to credit for livelihood creation as well as consumption and emergencies (in the event that they do not have savings/insurance to fund them). Finally, wealth creation is another area where financial services are required. Households require a range of savings and investment products for the purpose of wealth creation depending on their level of financial literacy as well as their risk perception.

If access is important, then it needs to be measured

We can measure access to financial services from the demand side, based on sample surveys of individuals, households, farms and enterprises, to understand the nature and extent of demand for different kinds of financial services (transaction banking, savings, credit, insurance, remittances, pensions, mutual funds, commodity price, hedging, etc.) and their usage from formal sources.

One can also get information on the supply of financial services from banks, insurance companies and other financial intermediaries. By comparing the two, we can measure the gap between demand and supply. We can also identify the specific types of financial services gaps for different segments of the society in different geographies. We can also get a sense of the demand supply gap from the extent to which informal alternatives or higher-priced alternatives are being used.


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Measuring Access to the Demand Side

The best possible way to assess financial access from the demand side is household surveys with representation from different segments of the society and parts of the country. In India, in order to study the access to credit by households, the Reserve Bank of India (RBI) conducted the All-India Rural Credit Survey in 1951-52. Information on assets, economic activities, particulars of credit operations and the incidence of "inabilitatton" was collected in the survey to assess the demand for rural credit. This was followed up with the All-India Rural Debt and Investment Survey in 1961-62 by the RBI. The scope of the survey was extended to include capital expenditure in the household sector and other associated indicators of the rural economy.

All India Debt and Investment Survey (AIDIS)

The responsibility of conducting the third such survey was given to the National Sample Survey Organization (NSSC). The NSSC undertook the All India Debt and Investment Survey (AIDIS), in its 26th round survey during July 1971-September 1972. During this survey, for the first time the sample was extended to urban areas as well. Since then, NSSC is regularly conducting AIDIS once in ten years in both rural and urban areas.

In the most recent round of AIDIS (2002-03), about 150,000 households were surveyed; 88,718 from rural and 61,282 from urban areas respectively, were surveyed from 1st July 2002 to 30th June 2003. The states that were considered in the report were those with population of ten million or more in respect of rural or urban sector separately. The survey was canvassed in a sample of 14,000 households selected randomly in each village/block. In order to reduce recall errors, particulars relating to the entire agricultural year 2002-03 were collected by visiting each sample household twice during the survey period. The first visit to the sample households was made during the first eight months of the survey period, while the second visit was made during the next four months.

The AIDIS report gives details of all financial transactions, particularly those of cash borrowings and repayments during the year 2002-03. The report highlights the borrowings and repayments by the households describing mainly the incidence of borrowing and incidence of repayment, state level variations, details by credit agencies, different types of security against which borrowings were made, purpose of borrowings etc. The data was analysed separately for rural and urban households. Further analysis was by occupation and asset ownership. The occupation for rural area was divided into cultivators and non-cultivators and for urban into self-employed and others. The households were divided into 10 classes with asset holding less than Rs.16,000 as the lowest and Rs.500,000 and above as the highest.

Following are some highlights from the NSS 59th round report describing the magnitude, incidence, state level variations, credit agencies, different types of security, purpose etc., highlighting the borrowings and repayments to give us some understanding about its prevalence to measure the demand side of the credit on the basis of household survey in India.

- The aggregate amount of cash borrowings by the household sector during 2002-03 was Rs.98.300 crore, of which rural households accounted for 62 percent.
- The percentage of households reporting cash borrowings in rural and urban areas was 21 and 15 percent respectively in 2002 and 2003.
- The average amount of cash borrowings per rural household was Rs.3,726/- and Rs.5,162/- for an urban household.
- The average amount of borrowing of a household belonging to the highest holding class in rural areas was Rs.1709/- which was about 27 times of the average borrowing by the lowest assets holding class.
- Tamil Nadu, Kerala and Andhra Pradesh were the three top states. In the order of ranks, where the proportion of households reporting cash borrowings ranged between 42 to 53 per cent in rural and between 35 to 30 per cent in urban areas. In contrast, in Jammu and Kashmir, Uttaranchal, Delhi and Jharkhand, the incidence of borrowings ranged from 3 to 6 per cent.

Non-institutional credit agencies accounted for 87 per cent of the total borrowings among households in the lowest asset ownership, while institutional credit agencies accounted for about 90 per cent of.

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the total borrowers among households in the top asset holding class.

In the rural areas, among different types of security, highest proportion of households who borrowed, did it against personal security (49 per cent).

During 2002-03, among rural households, borrowings for purposes of 'expansion in farm business' and 'household expenditure' accounted for the highest proportions viz., 38 and 36.6 per cent, respectively of total cash borrowings.

From the above highlights it is clear that the survey is comprehensive in nature in terms of its geographical, rural-urban, income-varying variations. Though it provides a lot of data on credit usage, it does not provide any clear picture on the credit demand by different segments. Usage is often supply-constrained and is not necessarily a good surrogate for demand.

**Invest India incomes and Savings Survey (IIS) 2007**

In India, research related to household investment behaviour has traditionally focused on the higher income segments. Equal attention is needed regarding the cross market financial behaviour of the millions of households at the middle and lower end of the income distribution. In an effort to overcome the data gaps in household financial behavior, IIMS Dataworks and Invest India Economic Foundation (IEF) commissioned the Invest India Incomes and Savings Survey 2007 (IIS 2007), based on in-depth interviews with 101,000 respondents aged 18 to 59 years with cash incomes, drawn from a household listing sample of one million households, the Survey is the largest-ever privately financed study of its kind in the world. The fieldwork for this survey with a stratified random sample of urban and rural households was completed in July 2007.

This survey generated a unique integrated database which directly links the incomes, savings, investment portfolio, retirement preparations and outlook, insurance and credit positions, labor market characteristics and demography of over 321 million paid members of the Indian workforce as well other individuals with incomes.

This survey report explains mainly three broad categories like income distribution, retail penetration of different financial services and attitude pre-disposition of Indian economers regarding finance, keeping variations in terms of rural-urban, with four different types of urban places, seventeen different categories of occupation, 27 different states, etc. Following are some of the highlights from the IIS 2007 report:

- 96% of rural households in India earned less than Rs.50,000 annually.
- Agriculture wage laborers earned Rs.21,295 per year in contrast to the self employed professionals earning more than Rs.3,19,556 per year.
- 51% of earners had taken loans from money lenders in the previous two years, as compared to 24.7% from banks and co-operatives.

Though the sample size for both AIIDIS and IIS is almost the same, the focus of the two surveys is different. For instance AIIDIS is more focused on the borrowings and repayments, while IIS is more focused on analyzing a wider range of financial services like savings, insurance and mutual funds. But both the surveys have proven the ability to collect and process large amount of data from different parts of the country.

**Measuring Access from the Supply Side**

On the supply side, the largest source of data on financial access is RBI reports, based on returns filed by banks in terms of deposits and credit. Post offices also provide information mainly on savings and money orders. The "Handbook on Indian Insurance Statistics" by the Insurance Regulatory and Development Authority (IRDA) highlights mainly performance of the Indian insurance companies in life and non-life insurance in terms of business and aggregated penetration in different geographies.

**RBI data**

The Basic Statistical Returns of Scheduled Commercial Banks in India, is an annual publication since 1972, based on data collected through Basic Statistical Returns (BSR) 1 and 2. As on March 31, 2007, it covered 73,199 offices of scheduled commercial banks including regional rural banks. The report focuses mainly on credit and aggregate deposit keeping the population group, states, and occupation (sector) as variables. As RBI is conducting this survey since 1972, one can see the trend of credit and deposit over a period of time. It gives the
number of accounts and amount of loan or deposit outstanding.

Data is divided mainly into rural, semi-urban, urban and metropolitan. The occupation variable for credit is under the categories - agriculture, industry, transport operators, professional and other services, personal loans, trade and finance. It also gives details on bank group wise distribution. Keeping the above variables in mind following are some of the highlights from the report which gives some picture of financial inclusion from the supply side.

- The number of deposit accounts increased by 7.0 per cent to 519.1 million from about 485 million in March 2006.
- Nationalised banks continued to have a major share in aggregate bank deposits at 48.5 per cent in 2007.
- The number of borrower accounts increased by 10.5 per cent to 94.4 million in 2007 compared to 85.4 million in 2006.
- The growth of bank credit to agriculture was 33.3 per cent in 2007 as against 36.8 per cent in the preceding year.

- The number of small borrower accounts (with credit limit up to Rs.200,000) contributed 89.3 percent of total number of accounts, while the share of outstanding credit of small borrower accounts was 14.4 per cent of the total bank credit.
- The share of credit to co-operative sector declined to 4.5 per cent in 2007 as compared to 5.2 per cent in 2006.
- Credit data is also available by district and within each district by various major purposes like agriculture, small industry, transport, etc.

Post Office data - on savings, money orders

India has the largest postal network in the world with over 1,55,204 post offices of which 89% are in rural areas. On an average, a post office serves an area of 21.2 sq. km and population of 7,166 persons. Post offices also cater to financial services mainly savings deposits and money orders. Recently they have started offering a onestop shop for providing a range of banking and insurance services like term depots, mutual funds, pension, insurance services (Rural Postal Life Insurance), especially health insurance etc. The annual report provides some aggregated information on deposits and money orders.

<table>
<thead>
<tr>
<th>Name of Scheme</th>
<th>Number of Accounts</th>
<th>Total Amount Deposited (Rs. in Million)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Saving Accounts</td>
<td>64,342,873</td>
<td>186,646.7</td>
</tr>
<tr>
<td>RD Accounts</td>
<td>67,027,234</td>
<td>826,300.4</td>
</tr>
<tr>
<td>TD Accounts</td>
<td>12,429,827</td>
<td>367,154.6</td>
</tr>
<tr>
<td>MIS Accounts</td>
<td>24,921,146</td>
<td>1,094,369.7</td>
</tr>
<tr>
<td>PPF Accounts</td>
<td>812,853</td>
<td>48,607.6</td>
</tr>
<tr>
<td>Total</td>
<td>2,111,082</td>
<td>194,583.2</td>
</tr>
<tr>
<td></td>
<td>785,260</td>
<td>222,843.0</td>
</tr>
</tbody>
</table>

Table-2 : Money Order traffic and value

<table>
<thead>
<tr>
<th></th>
<th>2005-06</th>
<th>2006-07</th>
<th>Increase / Decrease (in %)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Money Order Traffic (in Million)</td>
<td>96.79</td>
<td>99.10</td>
<td>(+) 3.46%</td>
</tr>
<tr>
<td>Value of MOs Transmitted (Rs. in Million)</td>
<td>71834.3</td>
<td>77567.06</td>
<td>(+) 7.98%</td>
</tr>
</tbody>
</table>

Source: India Post Annual Report 2007-08

Some short but in-depth studies in India

Surveys based on a large number of respondents improve the credibility and quality of the findings. In India there are some studies attempted by researchers with small number of samples on financial inclusion which are actually very rich in depth of the subject matter and are highly valuable. For example study on “Financial Flows of Rural Poor in Dungarpur, Rajasthan” (Prof. M. S. Shriram and Shaswati Ghose) was designed to understand the financial flows and financial behaviour of the rural poor. The study team undertook a detailed household survey amongst 416 households that were classified as being below poverty line in two blocks of Dungarpur. It was also intended to help the supply side (financial service provider) to design their products according to the need of the poor.

The other study “Financial Services for the Rural Poor and Women in India: Access and Sustainability” (Vijaya Mahajan and Bharti Gupta Ramola) commissioned by the World Bank, reviewed the performance of Indian
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financial institutions in providing services to the rural poor and examined the key issues faced by policy makers and institutions. The study polls two sets of causal variables for institutional performance: (i) internal Franchise Attitudes (IPA’s), and (ii) Mechanisms for client interface that either enhance or thwart access by the rural, poor and women (NEAs). The study sought to identify changes in these variables that could improve access to financial services by the rural poor. It covered a range of financial service providers (banks, co-operatives, insurance companies, private financiers, moneylenders, self-help groups, NGOs, etc.) with coverage of 80 villages in which about 800 rural poor individuals (300 men and 300 women) and 110 rural branch officers were canvassed using structured questionnaires. An in-depth analysis was carried out of over 600 loan records and 750 deposit accounts. This was supplemented by a review of available published material and analysis of finances of NGOs and a number of RRBs and co-operative institutions.

During 1999-2000, Orlando Rusten carried out a survey “Indian Financial Diaries” study. The Financial Diaries survey traced the daily income, expenditure and financial device usage for 40 households over the course of one year. The study argues, “Many microfinance initiatives assumed that poor people had little or no financial life other than being exploited by wily moneylenders. The Financial Diaries were designed to examine whether or not poor people have active financial lives, and if so, what form they take and what the reasons behind them are.” One might argue that, because they are away from formal financial services, the rural poor might use less financial instruments. However, the study found that they tend to use as many financial instruments as urban households and also more informal instruments than formal.

The Rural Finance Access Survey, 2003 (RFAS-2003) conducted jointly by the World Bank and the National Council of Applied Economic Research, India (NCAER) highlights inadequacies in rural access to formal finance and the exorbitant terms of informal finance, which provide a strong need and ample space for innovative microfinance approaches - that combine the safety and reliability of formal finance with the convenience and flexibility of informal finance to serve the financial needs of India’s rural poor. The survey covered 6,800 households and micro-enterprises (households that rely on non-farm income for more than 50 percent of their income) in two states, AP and UP. The sampling framework methodology for the survey used random sampling techniques including stratified random sampling. RFAS 2003 reveals that 70 percent of marginal / landless farmers do not have a bank account and 87 percent have no access to credit from a formal source.

There are other studies done by different institutions and researchers from time to time in India. Though all of them were not intended to be large studies but depth wise, they give pointers to work by both civil society, government and market players in understanding the issues of access to financial services by poor household.

What more can be done to measure access and financial inclusion?

Multi-Country Data Sources

The Consultative Group to Assist the Poor (CGAP) is the international apex body for microfinance and inclusive financial services. It has commissioned a multi-country study on financial access. A recent CGAP working paper “Multi-Country Data Sources for Access to Finance”, Christoph Kreiding, Edward Ah-Husayn and Ignacio Masi (February 2009) review various data sources that have a bearing on microfinance, or access to finance more broadly and discusses their relevance. The paper was restricted to sources that achieve some level of comparability of data. In the annexure, the paper presents a comprehensive summary of different surveys and data sources being conducted mostly in six broad categories with a comparative analysis in eleven parameters ranging from coverage, number of relevant financial questions, frequency, and methodology to scope of the survey.

1. Household Data Sources (LSMS, LSMS Phase IV - Financial Module, FinScope, MECDIV, Financial Diaries etc.)

2. Enterprise Data Sources (Investment, Climate, Enterprise Surveys, World Business Environment Survey, Business Environment and Enterprise Performance Survey)

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3. General Opinion Data Sources (Afrobarometer, Eurobarometer, Latinobarometro, World Values Surveys; Gallup World Poll)


5. Regulatory: Policy Data Sources (Doing Business, Financial Sector Development Indicators, Payments Systems Worldwide, IBRD/World Bank, CGAP, CGAP Resource Center on Regulation and Supervision, Bank Regulation and Supervision)

6. Funders Data Sources (CGAP Microfinance, Funders Survey, FIRST Initiative, MIX Market, OECD DAC, PLAD)

It is quite clear that supply side surveys are more in number. The paper also shows that the survey conducted by World Bank, “Living Standard Measurement Survey (LSMS)” was first of its kind since 1980. Later on it was upgraded to “LSMS Phase IV Financial Module” in terms of increasing the number of relevant questions, frequency of the survey, using standard survey instruments, etc.

Learning from FinScope Survey of South Africa

In the present paper we explore the importance of demand side household based surveys to suggest a comprehensive demand side survey for India to measure access to different financial services. We found that the FinScope survey implemented by “FinMark Trust” in 15 countries (14 in Sub-Saharan Africa, plus Pakistan) with 30 to 40 relevant financial questions which, if conducted every year, is the most comprehensive household based survey.

FinScope™ is a national household sample survey of financial services, needs and usage among all South Africans. Underwritten and co-ordinated by FinMark Trust and participating syndicate members, the FinScope Research Programme was initiated to achieve a measure and understanding of consumer demand within the financial services arena. Furthermore, the study gives insight into people’s awareness and understanding of these products and can assist in determining where communication channels or service providers are failing and how best to address these issues. It is designed to establish useful benchmarks and highlight opportunities for innovation in products and delivery.

FinScope was piloted in 2002 with 1000 households in urban areas. The pilot was followed by full scale surveys across 3000 households in urban and rural areas in 2003 and 2004 and, 2005-08, across 9000 households. The survey tracks the changing landscape of access to financial services across all the main product categories: transaction banking, savings, credit and insurance, emphasizing the market needs and attitudes in both informal and formal financial offerings.

The sampling methodology was designed and compiled by Professor Stoker of Statistics South Africa, using the statistical frame of the Census 2001. The enumerator area mapping, field work, data processing, analysis and report writing was executed by Research Surveys from 2003 to date. The survey is conducted annually to fuel dynamic financial market development, by allowing focus to drive product and service innovation.

Respondent Profile:
- South African residents 16+ years
- 48% male and 51% female
- 85% non-metropolitan and 35% metropolitan

Sampling Method:
- Sample drawn systematically with Probability Proportional to Size (PPS)

National representative sample (weighted and benchmarked to Census 2007 mid-year estimate information)

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- Sample design stratification and multistage sampling procedure
- Selection of individual respondent per household by Kish Table method (random selection, those 16+ yrs of age)

Coverage and Methodology:
- 3900 face-to-face interviews
- Representative sample at a national level, drawn from 80000 Enumerator Areas
- Stratification and multi-stage sampling using GIS
- Fieldwork: September/October/November

Key elements of questionnaire translated into vernacular languages

Uses Financial Services Measure (FSM) and displays data using the Access Strand (see explanation of these terms below).

Financial Service Measure (FSM) a new way of segmentation

Traditional surveys segmented households on the basis of Living Standard Measures (LSM). The LSM 1-10 categories were used extensively by marketers and advertisers as a means to segment the population. It is a crude proxy for wealth, with the lower LSM groups comprising the most impoverished end of the spectrum. FinScope carried out a new segmentation model: the Financial Services Measures or "FSM" which offers valuable new insights into consumer behavior and, additionally, can be used in conjunction with LSM. The FSM is designed to segment the market not only on what households spend or on what people earn, but on key psychological elements. This is to provide an overall and holistic understanding of individuals in the financial services arena.

There are a few key structural differences that warrant mentioning: LSM is calculated at a household level, FSM at an individual level. FSM is highly correlated with household income and measures assets that people have whereas FSM is not necessarily correlated with personal income as it measures people’s perceptions as well as the products they have. Essentially, FSM is a “here and now” measure. FSM looks to the future and takes into account potential future take-up in the financial sector. The model includes the combination of five broad components:
- Financial penetration
- Physical access to banks
- Financial discipline
- Financial knowledge and control
- Connectedness and optimism

The FSM measure classifies people into eight tiers based on a variety of measures. FSM1 and FSM6 are the lowest and highest respectively in the scale. FinScope indicates how much of the total population comes under which tier of FSM: For instance 13% of the total population South African category comes under FSM1 category which is the lowest banked category. FinScope details each tier in terms of race, gender, age, banking level, living standard, personal monthly income, geographical distribution etc. For instance of all those who come under FSM1, 98% are black, 43% reported no income, 96% never banked, etc.

Access Strand - A graphic representation of Financial Access

The Access Strand is a representation of the financial inclusion/exclusion of the population. It is segmented into three broad segments as formally included, informally served and financially excluded.

1. Formally Included: “Formal” products supplied by institutions which are governed by a legal covenant of any type e.g.: cheque account or funeral policy. Adults who use at least one or more of these products are included in this segment. This is not exclusive usage, as they can also use “informal” products. This is again divided into two sub segments - traditional banking products supplied by a financial institution; and other formal products not supplied by a financial institution, e.g.: funeral policy or store account.

2. Informally Served: “Informal” products that operate without legal governance that would be recognized e.g.: a burial society or smaller Savings club. Respondents who currently use one or more of these “informal” products are included in this segment. This is an exclusive usage set the respondents in this segment do not use any “formal products”.

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3. Financially Excluded: Neither holders of "formal" nor "informal" products. Any respondent who is not using any of these products is included in this segment and is said to be "unbanked".

Using this three-fold classification, a horizontal bar is drawn in three colours and this graphic is dubbed the Access Strand. This Access Strand can be drawn for any disaggregate - by race, age-group, gender, decades or years, income group, living standard, urban-rural etc. For instance the Figure 3 below is a representation of the Access Strand for three different years in South Africa from 2005 to 2007.

![Figure 3: The Access Strand by South Africa](image)

Need for a FinScope type of Survey in India

In India presently the supply side information is the only source to measure the total number of citizens who come under some sort of financial inclusion availing some or the other form of financial services. But India's banks, post offices and insurance companies serve a fraction of the population. Hence supply side information does not give a clear picture of the measurement of the financial inclusion or exclusion as comprehensively as a FinScope type of survey can.

The demand side survey in India AIDS conducted by NSSO is not comprehensive in nature. It talks only about credit and repayment. Moreover it is conducted only once in ten years. Though the private ISS 2007 had a wider scope it has had one round only. Moreover it is not focused on the un-banked and underserved category as in case of Finscope.

Hence to assess the demand at this level we need a comprehensive survey in place taking FinScope as a model. It should be done frequently, say, once in two years. The survey should primarily focus on:

- The lower income segment as it represents the majority of the Indian population. It should focus on assessing the demand by different segment of the population for financial services;
- Study the access to financial services by individuals, not just households as women have much lower access, which gets muddled in household data;
- Include physical access to the point of service, convenience of the process to access, total time required to access, etc;
- Gauge how much access to all financial services is available from one point, how much technology is currently used to ease the access etc.

IND-FLINT

We propose a once-in-two-years large-scale national sample survey to measure financial access in India. This can be called the "Indian Index of Financial Literacy, Inclusion and Transactions (IND-FLINT)". It will consider three major parameters as the name suggests:

- A. Financial Literacy - Level of awareness of various financial services and products offered by various service providers.
- B. Financial inclusion - Physical proximity to financial service outlets, likelihood of being able to fulfill conditions for use (such as address proof for bank account and age proof in case of life insurance), suitability of products; transaction costs etc.
- C. Financial Transaction - Level of user-ship in terms of actual volume, frequency and number of products / services; repeat purchase and long usage.

A comprehensive national survey on financial access namely IND-FLINT would provide information to policy makers. It can also be used by the media and consumer groups to create pressure on the system to act towards inclusion. This will then lead to regulatory changes as well generate institutional incentives for offering new products and services and innovative delivery channels, leading to greater financial inclusion and inclusive growth. Thus IND-FLINT is a worthwhile public investment.

IND-FLINT needs to be creatively documented so that it can be easily understood by all sections and
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disseminated to a large number of institutions and concerned individuals who are working towards financial inclusion and economic development.

Conclusion

For inclusive growth, financial inclusion is a necessary, though not sufficient condition. Inclusion is not just one time exercise and certainly does not begin and end with opening a no-frills bank account. The access to financial services, particularly by lower income segments, needs to be constantly measured. This will require periodic, large scale sample surveys like IND-FLINT.

Of the doing surveys is not enough, however. We need to see the influence the process of these surveys on the financially inclusion. To do that, surveys need to be properly analyzed and indicate the point of immediate and long term interventions. It may work in terms of changing some policies and regulations and also helping in developing innovative products and channels to achieve financial inclusion.

Financial regulators like the RBI, IRDA, SEBI and NABARD must emphasize access to financial services by the excluded segments, occupations and geographies. Their reports on this issue must be tabulated in the Parliament and the Standing Committee on Finance should review progress on financial inclusion. It is only when the issue acquires political salience that it will be addressed comprehensively.

<table>
<thead>
<tr>
<th>Connectivity</th>
<th>Pros</th>
<th>Cons</th>
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<tbody>
<tr>
<td>Shy/Messages Service (SMS)</td>
<td>1. Easier to bulk applications 2. Low cost for operators 3. Billing with credits can be automated by tight integration with operators</td>
<td>1. SMS untraceable - delivery &amp; message error guarantee 2. Requires user to subscribe to service 3. Data size per message is restricted to 160 characters 4. Multi SMS billed transactions can cause user resistance</td>
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| General Packet Radio Service (GPRS)/Code Division Multiple Access (CDMA) | 1. Provides ability to build advanced features 2. User interacts with a well designed user interface (UI) and does not require training 3. Can integrate seamlessly with e-commerce scenarios 4. Development toolkit for GPRS is widely available | 1. GPRS/CDMA still unpopular 2. GPRS in particular requires separate hardware and is not present wherever GSM connectivity is available 3. Band in turn do not have a pan India presence 4. CDMA requires specialised toolkit which is not widely available |

| Handset Technologies | 1. End-user availability of application as and when customer buys a new SIM-card 2. Operator is closely associated with the mobile banking project and hence the usual delivery of service is easy | 1. Requires customer’s assistance in replacing existing SIM cards 2. Operator lock-in for banks 3. Technology may not be interoperable in multiple operator scenarios |

| Mobile Application Development | 1. Operates independent 2. Development toolkit is widely present for GPRS 3. Ability to design and deliver better features and user interfaces | 1. Development toolkit is rare for CDMA 2. Data security is a concern |

| Emerging Technology | 1. Ease of use 2. Experience similar to credit card usage | 1. Still in nascent stages, various pilots being conducted across the world 2. Mobile phones still costly |

| Near Field Communication (NFC) | 1. Ease of use 2. Experience similar to credit card usage | 1. Still in nascent stages, various pilots being conducted across the world 2. Mobile phones still costly |

| Mobile Phone as a device | 1. End-user availability of application as and when customer buys a new SIM-card 2. Low cost for operators 3. More-hands-free, thus less accountants 4. Telecom operators already have sophisticated billing systems and can deliver converging services independent of banks. | 1. Not built for mobile transactions 2. Connected to Point of Sale (POS) Automated Teller Machine (ATM) devices which are built and certified for banking activities 3. Premature Personal Identification Number (PIN)-based authentication, concerns in ability to remember pin numbers (EPIN) are not in integrated biometric scanners with phones |


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