Workshop on Measuring Financial Inclusion from the Demand Side

A BACKGROUND PAPER

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[This paper addresses the key points that are to be discussed in the 'Workshop on Measuring Financial Inclusion from the demand side' conducted by CAFRAL on June 8th, 2012 at NIBM, Pune. The focus areas are definition and measurement of demand side of financial inclusion.]

1   INTRODUCTION

The importance of access to financial services was recognised by the world leaders in the outcome document adopted at the 2005 world summit. The designation of 2005 as the International Year of Microcredit helped to raise global awareness of the pivotal role that more inclusive finance can play in achieving the Millennium Development Goals[1].

Financial inclusion can be described as the process of provision and ensuring timely access to a range of financial products and services at affordable costs by sound institutions in a fair and transparent manner to all sections of the society especially to the vulnerable groups such as weaker sections and low income groups.

The concept of inclusive financing is dynamic and has evolved significantly since its inception. Once viewed as means to tackle poverty and reduce income inequality, today the concept has developed into an important pre-requisite for financial stability and economic development. Inclusive financial systems allow producers and households to smoothen their production and consumption of good and services through which income is generated in an economy. Thus, financial inclusion drives income generation through increasing productive capacity especially among those without assets to start with and facilitates inclusive growth.

The over-reaching and cross-cutting nature of financial inclusion has made it one of the main pillars of the development agenda. Distress in the advanced economies has increased vulnerability of the poor and brought the needs for safety nets into even sharper focus.[2]

Numerous efforts have been made to develop and globalise the notion of inclusive financing. One of the significant efforts was establishment of the Global Partnership for Financial Inclusion (GPFI) by G20 leaders working with the Alliance for Financial Inclusion (AFI), the Consultative Group to Assist the Poor (CGAP), and the International Finance Corporation (IFC) to provide systematic coordination and implementation structure for the Financial Inclusion Action Plan. GPFI provides a platform for all member and non – G20 member countries for peer learning, knowledge-sharing, policy advocacy and coordination on financial inclusion. The efforts on financial inclusion will only be successful if they are supported by reliable data and common indicators. Various efforts have been made to define inclusive financing to effectively develop tools to measure financial inclusion. Figure 1 depicts the definition of financial inclusion by FinMark for the purpose of their study FinScope.

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[1] (UN Publication, 2006)
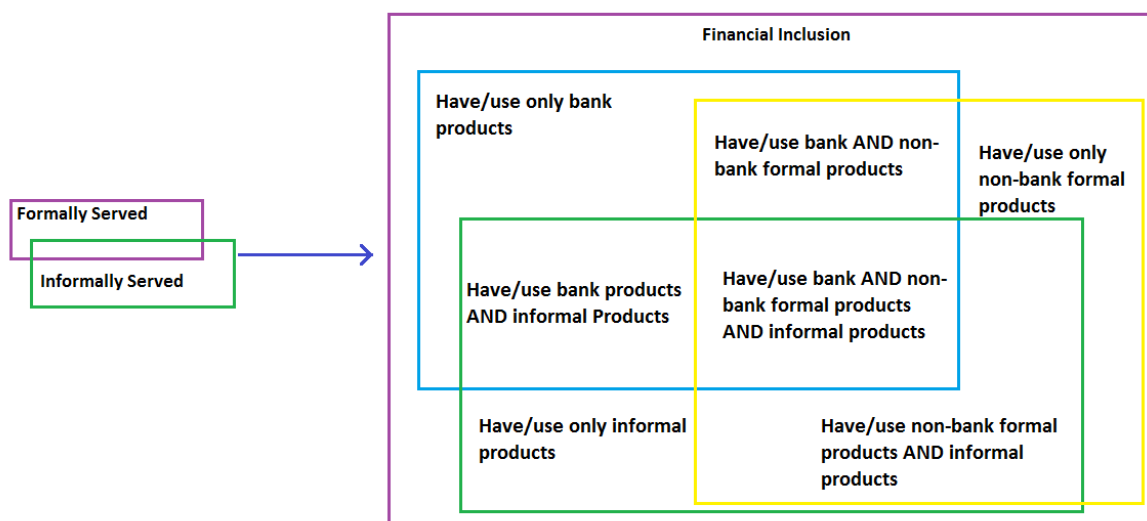[2] (Financial Inclusion Experts Group), (Joshi, 2010)

Figure 1: Financial Inclusion - FinScope[3]

2   LITERATURE REVIEW

There have been various efforts to collect the indicators of financial inclusion from the providers of financial services (supply side aspect) as well as from the users (demand side aspect). World Bank's Global Findex constructed with survey data from 148 countries, FinMark Trust's FinScope initiative, which covers 14 African countries and Pakistan and European Bank for Reconstruction and Development's Life in Transition Survey (LITS) which covers 35 countries in Europe and Central Asia are some of the most commonly cited user-guide data collection efforts. On the provider side, CGAP (2008 and 2009) and the IMF (2010) provide an updated and expanded version of Beck, Demiguc-Kunt, and Martinez Peri's collected indicators of financial outreach from 99 country regulators. Figure 2 summarises the key existing reports that have made an attempt to measure financial inclusion.

While a supply side approach is significant to understand the financial inclusion from the providers' aspect, as the data collected is only from the financial institutions, it provides a fragmented view of financial access. Further, aggregation can be misleading because of various factors like multiple or dormant accounts. Most importantly, the supply side approach does not allow the disaggregation of financial service users by income or by characteristics which leaves policy makers unable to identify segments of the population with the lowest use of financial services. Thus, a demand side approach is vital to supplement a supply side approach to give a comprehensive picture of the true extent of financial inclusion.

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[3] (Keulder & Naidoo, 2012)

NAME	DEVELOPER	KEY FACTS
Financial Access	• World Bank Group (WBG) • Published annually	• *Statistics on financial access in 139 countries* • Policies and regulations: bank agents, postal networks, branch and credit regulations, consumer protection • SME financing volume statistics added in 2010
Financial Access Survey (FAS)	• IMF	• *Cross-country geographic and demographic outreach of financial services* • Outreach: bank branch network, ATMs • Financial instruments: deposits, loans, debt securities, insurance
Enterprise Surveys	• World Bank (WB)	• *Comprehensive firm-level data in emerging markets, collected in 3-4 year rotation* • Currently gathering data covering 122 countries
Household and consumer surveys	• World Bank • WB and Gates • FinMark (FinScope)	• *Household level indicators of access to finance* • World Bank's household survey (forthcoming) • FinScope: 14 countries in Africa and Pakistan, focus on consumers' usage and perception on financial services
Financial Infrastructure indicators and data	• World Bank	• *Doing Business indicators: Getting Credit (covering credit reporting and collateral registers in 183 countries)* • Global payment systems survey (covering 142 countries) • Global remittance price database (launched in 2008, shows remittance data in 178 corridors)

Demand Side
Supply Side

Figure 2: Key existing Reports - Measuring Financial Inclusion[4]

The World Bank's Findex is the most comprehensive and the most recent effort in measuring the demand side aspect.

2.1   MEASURING FINANCIAL INCLUSION, THE GLOBAL FINDEX DATABASE[5]

In recognition of the need for better data to support the financial inclusion agenda, the World Bank's Development Research Group has built the Global Financial Inclusion Index.
The Global Findex as it is commonly known as aims to fill a major gap in the financial inclusion data landscape as is the first internationally comparable public database of demand-side indicators. This database documents financial usage across gender, age, education, geographic regions and national income levels across countries and over time. This will enable policymakers and researchers to construct and evaluate polices based on

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[4] Source: World Bank Group Team Analysis
[5] (Demirguc-Kunt and Klapper)

sound understanding of the behaviours and constraints that characterize individuals use of financial services.

World Bank has tied up with Gallup Inc. to interview at least 1000 people per country in up to 150 countries about their financial behaviour through the Gallup World Poll Survey. The full survey was rolled out in Jan 2011, and the first dataset was made available to the public in 2012.

2.1.1 SURVEY METHODOLOGY:

For the purpose of the survey, the economies were divided into two sections depending on the telephone coverage:

1. Economies where telephone coverage represents more than 80% of the population.

    a. Methodology: Telephone interview

    b. Sampling:

        i. Random digit dialing or a nationally representative list of phone numbers is used. In countries where cell penetration is high, a dual sampling frame is used.

        ii. Random respondent selection is achieved by using either the latest birthday or a random number table (Kish Grid)

        iii. At least 3 attempts are made to reach a person in each household, spread over different days and times of day.

2. Economies where telephone coverage represents less than 80% of the population

    a. Methodology: Face to face interview.

    b. Sampling stages

        i. identification of primary sampling units (stratified by population size, geography or both), consisting of clustering of households (achieved through one or more stages of sampling)

        ii. If population information is available, sample selection is based on probabilities proportional to population size or else simple random sampling

iii. Unless there is an outright refusal, 3 attempts are made by interviewer. If cannot obtain initial sampled household's response, simple substitution method is used.

iv. Respondents are randomly selected within each household using a random number table (Kish grid for Findex)

In most economies, the fieldwork is completed in two to four weeks.

2.1.2 DATA WEIGHTING:

To ensure a nationally representative sample for each economy, data is weighting is used. Base sampling weights are constructed to account for oversamples and household size. If oversample has been constructed – data are weighted to correct the disproportionate sample. Weighting by household size is used to adjust for the probability of selection.

Secondly, post stratification weights are constructed. Population statistics are used to weight the data by gender, age, and where reliable data is available, education or socioeconomic status.

Finally, approximate study design and margin of error are calculated. The average country-level margin of error for the account penetration indicator is plus or minus 3.9%.

All regional or income group aggregates are also weighted by country population

2.1.3 CORE INDICATORS OF THE GLOBAL FINDEX:

The core set of indicators used by the Global Findex database to measure financial inclusion can be briefly described in **Figure 3**

CATEGORY	INDICATOR	SUB-INDICATOR
Use of bank accounts	Percentage of adults with an account at a formal financial institution	Purpose of accounts (personal or accounts business) Frequency of transactions (deposits and withdrawals) Mode of access (such as ATM, bank branch, retail store or bank agent)

Savings	Percentage of adults who saved within the past 12 months using a formal financial institution	Percentage of adults who saves within the past 12 months using an informal saving club or a person outside the family. Percentage of adults who otherwise saved (e.g. In their home) within the past 12 months
Borrowing	Percentage of adults who borrowed within the past 2 months from a formal financial institution Percentage of adults with an outstanding loan to purchase a home or an apartment	Percentage of adults who borrowed within the past 12 months from informal sources(including family or friends)
Payments	Percentage of adults who used a formal account to receive wages or government payments within the past 12 months Percentage of adults who used a formal account to receive or send money to family members living elsewhere within the past 12 months	Percentage of adults who used a mobile phone to pay bills or send or receive money within the past 12 months.
Insurance	Percentage of adults who personally purchased a health insurance. Percentage of adults who are employed in farming, forestry or fishing and have personally paid for crop, rainfall or livestock insurance.	

Figure 3: Core Indicators - Global Findex Database

3 MEASURING DEMAND FOR FINANCIAL SERVICES IN INDIA:

The workshop seeks to answer the following questions:

3.1 WHY ATTEMPT A MEASUREMENT OF FINANCIAL INCLUSION FROM THE DEMAND SIDE?

- Even if more comprehensive data were to be obtained on usage rather than access from the supply side, as indicated above the understanding of the background behavior and constraints of users of financial services will enable both policy makers and providers of financial services to modify their policies and strategies

appropriately having got some insight into the characteristics of the households and businesses and the extent of their usage of formal financial services.

- One use of such measure could to customize financial products in specific regions and specific categories of consumers depending on their background and extent of exclusion in the different services

- Greater financial inclusion by itself does not imply greater welfare. The underlying assumption is that access to formal financial services is less taxing on vulnerable groups who have to pay much higher cost for informal services – this is something that could be tested.

- According to the C. Rangarajan Committee Report socio-economic factors affecting demand for financial services are of four types: (1) level of human, social and physical capital (2) level of productivity, local value addition, market linkages, (3) sources of risk, (4) access to work opportunities and so on. By correlating these factors and the extent of inclusion there could be valuable insights into ways in which the policy measures could be tweaked.

There could be other benefits and outcomes of putting in place such a measure which could be brought out by participants.

3.2   WHAT SHOULD BE MEASURED?

Household's demand for financial services usually comprises of (i) use of bank /post office account, (ii) payments, (ii) savings, (iii) credit and (iv) insurance. In case of small businesses too, these services are relevant except that the savings services may not be that important. Hence, it would be useful to be able to measure the extent of inclusion /exclusion for all these fours services and also be able to consider what weightage each service should be given for particular socio-economic groups. The workshop should be able to debate and come to some consensus on the parameters to be measured at the household / business level. In this context the parameters used by the Findex could be considered and also the details of the demographic and socio economic indicators that would need to be collected.

3.3   WHAT SHOULD BE THE SAMPLING DESIGN AND THE SURVEY METHODOLOGY?[6]

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[6] (Joshi, Session: Sample Survey and Methodology)

To begin with, a broad perspective on the analytical framework would help in deciding our survey design and survey methodology. Figure 4 is an illustration of the same used by FinMark in its South African SME study. The discussion on measurement and survey methodology could proceed along similar lines.
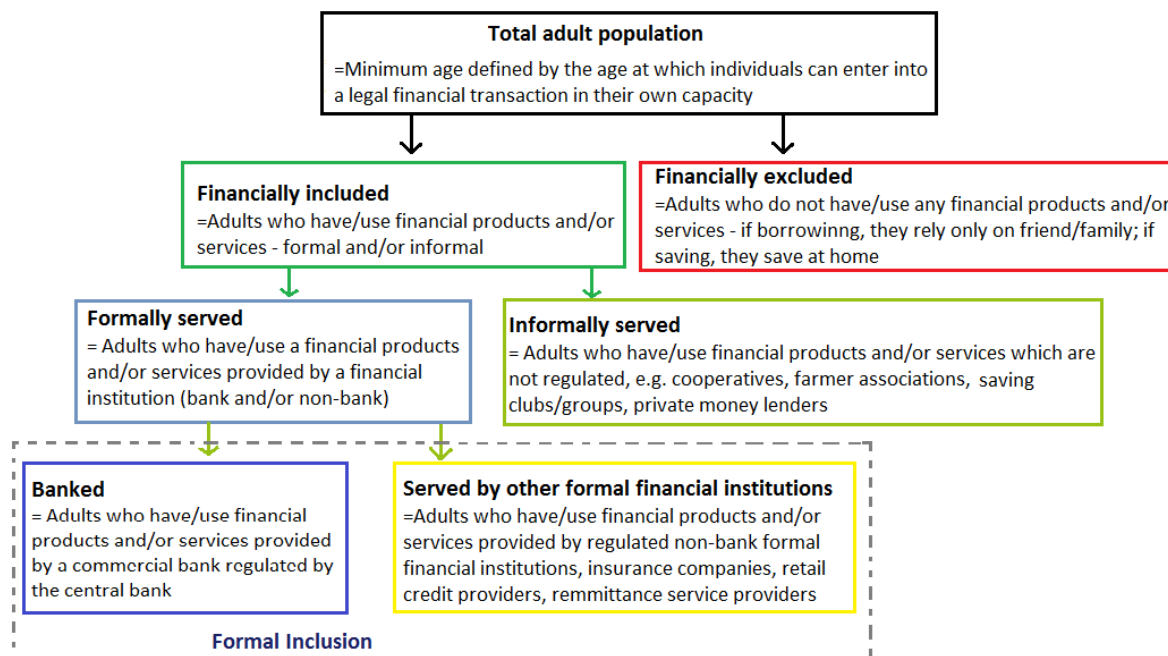

Figure 4: Analytical Framework

3.3.1 CONDUCTING HOUSEHOLD AND ENTERPRISE SURVEYS:

Although most countries have a household-level income and expenditure survey which may include some questions on financial access, these surveys collect a broad range of household information, and rarely provide enough detail about financial inclusion to be adequate. Furthermore, household surveys are expensive, and generally only carried out every few years (Kneiding, Al-Hussayni and Mas, 2009).

There are, however, two examples of national surveys that focus purely on financial access and which have already been conducted across a number of countries in the past five years or so: *FinMark's FinScope survey and the World Bank's Financial Access Surveys.*

FinScope, a nationally representative study of consumers' perceptions on financial services and issues was first conducted in South Africa in 2003, and has since expanded into 14 other African countries, plus Pakistan. It is run annually only in South Africa, but in five other countries (Kenya, Tanzania, Botswana, Uganda and Zambia), FinScope is being conducted for a second time. It is an individual-level survey which focuses on collecting comprehensive demographic information,

financial usage and psychographic information about the respondents. This information is then used to create comprehensive metrics on the use, access and attitudes to credit, savings, and other financial products. While it has been primarily used by the private sector, FinScope data has also proved useful to the public sector. The FinScope team is based within FinMark Trust, an Africa-focused financial sector development trust supported by the U.K.'s Department for International Development (DFID). However, FinScope surveys are consciously undertaken with the cooperation and support of local policymakers, and ideally, the process of questionnaire design and data dissemination is coordinated within a local institution, usually the Central Bank. In this way, FinScope actively seeks to engage the policy community and ultimately aims to have the supporting institution "own" the process of running further iterations of FinScope.

The World Bank's Financial Access Survey has several distinct differences from FinScope. First, the World Bank surveys gather information at the household level. This survey has been conducted in about 10 countries in total. It has been conducted as a stand-alone survey that collects detailed information about the households' use of accounts at various financial institutions (bank and non-bank), proximity to the institutions, success or failure of loan applications, as well as other data. It has also been conducted as a short module to be added to other household surveys, like the Living Standard Measurement Survey (LSMS) to collect basic financial information about households. Second, unlike FinScope, which actively seeks to engage policymakers in the design and distribution of the survey, policymakers have considerably less "ownership" and control over the design of these surveys.

3.3.2   HOW SHOULD THE SAMPLING BE DONE?

- How do we go about selecting the target areas keeping in mind that national representation is the key to most demand-side surveys?

- Do we use the census or a similar set of information to draw the sample across the entire country and for data weighting?

- How will we obtain the final sampling frame used for the drawing of the sample of primary sampling units (Enumerator Areas)?

- What stratification should be applied to the selected sampling units?

- What would be the various advantages and challenges with respect to using household as a unit for the survey?

- How do we draw the sample for survey of small businesses if it is decided that we need to do a survey of small businesses in addition to households?

3.3.3 HOW DO WE ENSURE RANDOM SELECTION OF RESPONDENTS?

- How many households/ enterprises will be systematically selected in each of the sampling units?

- Should all the members of the household be interviewed?

- How do we then select the households to be sampled (e.g.: Findex uses the Kish Grid)?

- Within the household, would members be identified as self-employed or running a business, qualifying them for small businesses?

3.3.4 WHAT SHOULD BE THE MODALITY AND COVERAGE OF THE SURVEY?

- The questionnaire should be able to give us a clear picture of usage of savings, loans, insurance and money transfers.

- It should cover not just formal but also informal products and services.

- It should bring out demographics, socio-economic lifestyle characteristics, and highlight key aspects of an individual's unique financial behavior.

- It should help us quantify not just use but also level of financial literacy.

- It should help bring out what according to the individuals being interviewed are the financial provider differentiators.

- It should throw light on socio-economic specific barriers and limitations to use.

- What will be the modality - face to face or phone - or both as done in the Findex survey?

3.3.5 SURVEY DESIGN:

- What should be the frequency of data collection?

- How will we select our control groups? For example, if we were to distinguish between the impacts of specific barriers to usage from other barriers then how will we select our control groups?

- How will the survey design allow us to measure improvements in income generating capacity, financial literacy and so on? This would require repeated cross-sections.

- If the objective were to be able to do comparisons across regions, then how will the survey design facilitation of benchmarking and measuring progress?

- What would the survey design be if it were to specifically answer policy related questions? Would this be a one-time cross section survey?

Figure 5 provides additional details by describing different types of surveys with different designs and objectives, in order of complexity:

TYPE OF SURVEY	DEFINITION	SURVEY OBJECTIVE	EXAMPLES
One time cross section	Cross section of the population is randomly selected and interviewed once.	Snapshot of current level of financial access.	Finscope – All countries except for South Africa. World Bank Access to Finance – 10 countries in total; household level survey conducted periodically, but not at regular intervals.
Repeated cross-section	Cross section of the population is randomly selected and interviewed once. In the next time period, another cross-section of the population (which resembles the first in population characteristics) is randomly selected and interviewed once.	Monitor progress of financial access across time.	FinScope – South Africa : Conducted Annually GFAS – Global demand side indicators to be collected every two years. Survey of Consumer Finances U.S: A multi-year approach used by U.S. Federal Reserve to assess consumer finance patterns patterns.
Panel	The same households/ individuals are interviewed multiple times at regular intervals.	Can be used to show a causal impact of changes in policy if combined with other factors.	Financial Diaries – Household level survey conducted in 3 countries which studied the use of financial products and flow of financial services; conducted at the high frequency of every fortnight for one year. ENNViH (family life survey) – Mexico: Conducted regularly; Collects information on household income and expenditure; has some financial access questions, particularly credit.

Figure 5: Survey Design

3.3.6 WHAT SHOULD BE THE ACTION PLAN - TIME LINES?

The issues to be debated are the timeframes for the following tasks

- Finalization of methodology, design of questionnaire and agreement of content among stakeholders

- Field trials where questions are piloted with a sizeable portion of the sample to ensure appropriate responses are received

- Analysis of the pilot results and survey redesign as necessary

- Preparation and final administration of the survey among the target population

- Preparation of survey results and cross-check against other data sources vary depending on the capacity available to mine the results.

4 SUMMARY:

The conference aims to provide an opportunity for leading scholars, practitioners and policy makers to help define an agenda on financial inclusion from the demand side. The key focus areas would be:

a) Deliberate on what are the objectives of measuring demand side of financial inclusion.

b) What should be measured?

c) Discuss the creation of a tool to measure demand side of financial inclusion.

d) Address critical issues to do with sampling and survey methodology.

e) Who should take ownership for this survey - what are the implications in terms of usage credibility etc.?

f) Identify the organizations capable of conducting such household and enterprise level surveys.

5 REFERENCES

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