

## POLICY RESPONSE

May 2013

# Response to Proposed Survey under the National Strategy for Financial Education<sup>1</sup>

The Technical Group on Financial Inclusion and Financial Literacy proposes to carry out a nationwide survey to assess the ‘state of financial inclusion and financial literacy’ in India. Prior to commissioning this large-scale effort, it would be important to look into the design aspects of such a survey, including:

- (I) Coordinating with existing large-sample surveys on financial inclusion
- (II) Articulating the assumptions and testable hypotheses that will inform regulation and policy
- (III) Implementation issues in measuring financial literacy.

Each of these issues is discussed in detail below, followed by a set of recommendations.

## **I. Coordinating with existing large-sample surveys on financial inclusion**

Very recent nationwide, as well as international representative studies have captured details (to various degrees) on levels of financial access and use, as well as on barriers to access and household preferences.

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<sup>1</sup><http://www.rbi.org.in/scripts/PublicationDraftReports.aspx?ID=675>

Study	Coverage	Scope	Frequency	Year
NSSO - All India Debt and Investment Survey <sup>2</sup>	The survey of 1992 covered about 60000 households in the second stage	Quantifying household level assets (shares, debentures, and mutual funds), liabilities (details of loans outstanding, repaid, written-off, purposes for which loans were used, types of securities as collateral) and capital expenditure (purchase and repair of residential land and buildings, farm animals, equipment).	Every 10 years	2012
Census of India <sup>3</sup>	Covers India's population	The House-listing Schedule contains a question on availing banking services	Every 10 years	2011
SEBI NCAER <sup>4</sup>	38,000 households across 44 cities and 40 villages of India	To measure investment behavior of households in SEBI-regulated instruments based on demographic characteristics, income and consumption patterns; to understand the preferences and risk profiles of households for instruments like IPOs, securities and mutual funds.	One-time	2011
Global Findex <sup>5</sup>	150,000 individuals across 148 countries	Measuring financial inclusion (in terms of usage of bank accounts to save, receive and make payments, remittances; usage of MFIs, ATMs, retail stores, mobile phones, credit and debit card for personal and business transactions; usage of insurance) allowing for inter-country comparisons	One-time	2011
OECD PISA Financial Literacy Assessment <sup>6</sup>	Students (of 15 years of age) across 65 countries/ regions (TN and Himachal Pradesh in India)	Measuring financial literacy of young people in terms of knowledge of personal finances and their skills in terms of ability to apply it to their financial problems	Recurring (India covered in 2010)	2010
Yale Economic Growth Center -IFMR Socio-economic Mobility Survey <sup>7</sup>	10,000 households covering all districts of Tamil Nadu	15-year longitudinal study of household financial behavior that captures individual (education, cognitive abilities, health and employment status) and household level (family details, agriculture and business details, consumption expenditure, financial assets and liabilities, housing conditions, social networks) information	Resurvey in 3 years	2010
CMIE Household Panel Survey <sup>8</sup>	150,000 households covering 700,000 individuals	Measuring financial health and behavior of households via estimates of income, patterns of expenditure (under 100 expense heads), savings and investments (bank deposits, shares, mutual funds), borrowings (its sources and uses); usage of bank accounts, ATMs, credit cards, insurance, provident funds	Every quarter	2009

It appears that there are enough studies on the financial inclusion aspects or with specific modifications could be made relevant for the purpose of measuring the state of financial inclusion in India. Measuring financial literacy is dealt with in Section III.

<sup>2</sup>[http://mospi.nic.in/Mospi\\_New/upload/nssso/fod/Round\\_70\\_schedule\\_18.2\\_Visit\\_2.pdf](http://mospi.nic.in/Mospi_New/upload/nssso/fod/Round_70_schedule_18.2_Visit_2.pdf)

<sup>3</sup><http://www.censusindia.gov.in/2011-Schedule/Shedules/Houselist%20English.pdf>

<sup>4</sup>[http://www.sebi.gov.in/cms/sebi\\_data/attachdocs/1326345117894.pdf](http://www.sebi.gov.in/cms/sebi_data/attachdocs/1326345117894.pdf)

<sup>5</sup><http://siteresources.worldbank.org/EXTGLOBALFIN/Resources/8519638-1332259343991/ENGLISH.pdf>

<sup>6</sup><http://www.oecd.org/finance/financial-education/oecd-pisa-financial-literacy-assessment.htm>

<sup>7</sup><http://www.tnsms.org/design-and-survey-tools/#household-level-questionnaires>

<sup>8</sup>[http://www.cafra1.org.in/docs/Summary\\_June\\_8.pdf](http://www.cafra1.org.in/docs/Summary_June_8.pdf)

## II. Articulating assumptions and testable hypotheses that will inform regulation and policy

Given the intended policy relevance of this study, it is imperative to clearly state all underlying assumptions and develop a set of well-specified hypotheses early in the project planning process. This will require involving academicians to build in rigor from the early design stages. We discuss some of the assumptions that seem implicit in the proposed survey along with the relevant evidence on these issues.

*Assumption I: One of the biggest reasons for low use of formal finance (or “financial exclusion”) is low financial literacy.*

This is not necessarily a reasonable assumption, and the rationale for combining the measurement of financial literacy with that of financial inclusion is unclear. The extent of financial inclusion is heavily dependent on important factors such as product design, pricing, accessibility. These and many other reasons such as the absence of a suitable product, or a lack of trust of the existing provider can result in non-uptake by households that have enough awareness to take suitable action. The recent household surveys listed above conclude many such barriers, from that of low physical access, to barriers of eligibility, to discrimination, to inappropriate product design, among others.

The book *Portfolios of the Poor*<sup>9</sup> demonstrates that the poor are extremely sophisticated about their financial decisions, and carefully manage their financial lives. What is evident from the book is that the households studied exhibit a very high level of sophistication in their financial dealings, and use multiple strategies to make ends meet without losing sight of their plans for the family’s future.

The measurement of impact of the National Strategy on Financial Education could end up disproportionately penalizing the lack of financial literacy for the low participation levels.

*Assumption II: “Financial literacy” is defined and there is a clear consensus on what set of competencies and skills one needs to possess to be classified as “financially literate”.*

There is no consensus on what it means to be “financially literate,” and tests can range from simple budgeting to complex accounting trainings. Without clarity on this, a measure of financial literacy will be flawed, and nationwide policy interventions formulated based on the results of such a measure, are likely to prove ineffective.

*Assumption III: Controlling for confounding factors such as education and wealth, financial education will increase financial literacy, and will thereby shift households’ attitudes and behaviors, ultimately causing a greater uptake of financial services by households.*

There is evidence from research to suggest strong correlations between the lack of financial literacy and sub-optimal decision-making (such as borrowing at higher interest rates<sup>10</sup>, a higher likelihood of defaulting on mortgages<sup>11</sup>, acquisition of lesser assets by non-planners<sup>12</sup>), as well as with low levels of participation (such as less likelihood of investing in stocks<sup>13</sup>). However the broader question is two-fold, and is to establish:

<sup>9</sup>Collins, Mordoch, Rutherford, Ruthven. Princeton University Press. 2009

<sup>10</sup>Debt Literacy, Financial Experiences, and Over-Indebtedness. Lusardi and Tufano. 2009

<sup>11</sup>Financial Literacy and Subprime Mortgage Delinquency: Evidence from a Survey matched to Administrative Data, Gerardi, Goette and Meier. Working paper. 2010

<sup>12</sup>Baby Boomer Retirement Security: The Roles of Planning, Financial Literacy and Housing Wealth. Lusardi and Mitchell. 2007

<sup>13</sup>Financial Literacy and Stock Market Participation. Alessie, Lusardi and van Rooij. 2007

1. Whether financial education can increase financial literacy levels, and
2. Whether there is a causal relationship between financial education programs and meaningful uptake of financial services

There is evidence both from within India and from across the world, that financial literacy training has not produced enough meaningful increase in uptake of financial services. One such randomized evaluation study in India and Indonesia found that financial education had no effect on the probability of opening a bank savings account, and any impact that was found was among those who already had existing low initial levels of education and financial literacy<sup>14</sup>. Also, while introduction of mandated financial education curricula in American schools did indicate gradual increase in savings rates and consequent asset accumulation, these effects were seen when studied over a span of 40 years<sup>15</sup>. A subsequent study found that these high school financial literacy programs do not have any detectable effect on savings and investment behavior, while more general mathematics skills did affect investment decisions by women<sup>16</sup>.

*Assumption IV: That financial education can equip households to evaluate for themselves complex financial tradeoffs that require high numeracy skills; households will be able to make better household-level and business-level financial decisions.*

A business training program administered as part of a study, to micro-entrepreneur clients of an MFI in Peru<sup>17</sup>, resulted in higher repayment and client retention rates, but had no impact on business income or assets. Similarly, a randomized control experiment in the Dominican Republic<sup>18</sup> with two types of financial accounting training – the first, a standard approach that teaches fundamentals of financial accounting, and the second, a training approach based on simple rules of thumb – found that the former resulted in implementation of accounting practices taught in class but it did not translate into real business outcomes. The latter, a simplified rule-of-thumb training (which is practical to follow but does not enhance knowledge levels), produced significant economically meaningful improvements in business practices and outcomes.

*Assumption V: That all households can be expected, through financial education, to achieve a minimum level of understanding for the application of financial concepts to compare products in the market and make the right decisions, irrespective of issues with respect to cognitive ability, age, education levels, cultural factors and behavioral biases.*

In reality, decisions such as which mutual fund to invest in, or how to and how much to allocate one's retirement savings, involve complex tradeoffs that need deep understanding of probability, the risk-return tradeoff, the power of compounding, and so on. Cognitive ability (which in turn is determined by genetic and environmental factors) matters in such decision-making<sup>19</sup>. Studies in this regard show that propensity to invest in stocks and mutual funds (across 11 European countries) is strongly associated with cognitive abilities<sup>20</sup>; and that while more experienced investors used rules-of-thumb to invest, they did not have better investment skills,

<sup>14</sup>Prices or Knowledge? What drives Demand for Financial Services in Emerging Markets? Cole, Sampson and Zia. 2010

<sup>15</sup>Education and Saving: The Long Term Effects of High School Financial Curricular Mandates. Bernheim, Garret, Maki. 1997

<sup>16</sup>Is High School the right time to teach Savings Behavior? The Effect of Financial Education and Mathematics Courses on Savings. Cole and Shastry. 2010

<sup>17</sup>Teaching Entrepreneurship: Impact of Business Training on Microfinance Clients and Institutions. Valdivia and Karlan. 2006

<sup>18</sup>Keeping it Simple: Financial Literacy and Rules of thumb. Drexler, Fischer and Schoar. 2010

<sup>19</sup>If you are so smart, why aren't you rich? The Effects of Education, Financial Literacy and Cognitive Ability on Financial Market Participation. Cole and Shastry. 2008

<sup>20</sup>Cognitive Abilities and Portfolio Choice. Christelis, Jappelli and Padula. 2010

which varied based on external factors like education, ethnicity and income-levels<sup>21</sup>. Personal finance classes increase confidence without improving ability, potentially leading to worse decisions. Overconfident consumers are unlikely to ask for help, or spend adequate time and efforts in decision-making<sup>22</sup>.

Therefore, a focus on financial literacy efforts to increase household participation implies that these efforts are expected to produce competent and ‘empowered’ consumers who will make the right decisions. This however, in some way, shifts the burden of this decision-making complexity away from the regulator, the financial service providers and its representatives, and onto the consumer. Extending this argument, the consumer must also then be expected to be impervious to advertising and marketing campaigns undertaken by providers in an attempt to influence purchase decisions. Studies in this regard indicate otherwise. One such study found that showing fewer example loans, or not suggesting a particular use for the loan, or including a photo of an attractive woman increases loan demand by about as much as a 25% reduction in the interest rate<sup>23</sup>.

### III. Implementation issues in measuring financial literacy

Measuring financial literacy is methodologically very distinct and arguably, much more challenging than measuring financial inclusion. It would be very difficult to interpret whether, for instance, a survey participant knows compound interest rates or not, or to ascertain whether the lack of knowledge of such calculations implies a lack of understanding of the benefits of making small regular investments in a pension fund over long periods of time. In order to have a rigorous testing methodology in place, considerable time needs to be allotted to piloting and reviewing what would be appropriate for the Indian context. If such rigor is indeed achievable within existing resource constraints, then a detailed in-depth survey covering a smaller sample, would yield qualitatively much richer insights as compared to a nationwide survey effort.

### Recommendations

Keeping in mind the above issues, we make the following recommendations in the context of the Technical Group’s approach:

- (i) Measuring financial inclusion and measuring financial literacy appear to be distinct efforts and may best be undertaken separately using different methodologies. For the former, there are several existing efforts and it might be most efficient to expand the scope of existing efforts in this regard.
- (ii) Financial illiteracy may only be one factor for low levels of inclusion. Since this effort is being undertaken to inform regulation and policy, there is a case to have a broader focus on aspects of household finance, such as the manner in which financial products are perceived and used by customers as part of their household finances and gaps therein.
- (iii) We recommend the creation of an expert advisory group comprising academics that can provide guidance on methodological issues as well as ensure that the hypotheses are well stated.

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<sup>21</sup>Does Investment skill decline due to Cognitive aging or improve with experience? Korniotis and Kumar. 2007

<sup>22</sup>Against Financial Literacy. Willis. 2008

<sup>23</sup>What’s Advertising Content Worth? Evidence from a Consumer Credit Marketing Field Experiment. Bertrand, Karlan, Mullainathan, Shafir and Zinman. 2010