Beyond Financial Inclusion – Measuring What Matters

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Abstract

Following India's success in providing access to banking services across the country, the policy focus is now slowly shifting to the deepening of financial inclusion. This paper looks at the progress made in measuring and monitoring the progress of financial inclusion. It argues that the desired outcome of India's financial inclusion mission should be 'Financial Wellbeing', defined as "*a state where households, and individuals within, are confident of meeting current and ongoing financial obligations and feel secure of their financial future.*" Specific recommendations on metrics and measurement for the way forward are also presented.

1. Introduction

Financial inclusion has been a policy priority in India since the 1950s. While several schemes have been launched over the years, the turning point was the launch of the Pradhan Mantri Jan Dhan Yojana (PMJDY) in 2014. It set ambitious but easy-to-understand targets, which focused minds and galvanized efforts by different stakeholders. Under its aegis, over 489 million bank accounts have been opened by May 2023 and the business correspondent (BC) network has expanded to more than 3 million. Several other laudable schemes for the provision of other financial services, such as credit, insurance, and pension have been introduced and they have had mixed success.

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Given the multi-dimensional nature of financial inclusion and the fact that several parallel efforts are underway at any given time, it is critical to identify and measure the right metrics for financial inclusion on a regular basis. Questions such as 'Where do we stand on financial inclusion and where are the gaps vis-a-vis consumer and product segments' and even 'What are the desired *outcomes* of financial inclusion and whether they are being achieved', are difficult to answer otherwise.

The Indicus Center for Financial Inclusion (ICFI) has produced several briefs on the metrics and measurement issues related to financial inclusion since 2014[2], yet many of the asks remain unaddressed and these will be taken up later in this paper. For instance, the paucity of publicly available official data on key metrics like gender, activity, and usage of accounts, makes it difficult to ascertain where exactly do gaps persist in India's financial inclusion mission. Moreover, as financial inclusion targets so far have been related to access to banking services, the ICFI policy briefs are mostly related to basic banking services. At this juncture, with PMJDY covering almost all households in the country with bank accounts[3], the policy focus is now slowly shifting to the deepening of financial inclusion. This requires the inclusion of a different set of metrics that can better capture the progress in meeting the diverse financial needs of households; and more importantly, the impact of financial inclusion initiatives on marginalized communities. This paper also deals with some of these issues.

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[2] India's Financial Inclusion Agenda 2019 - 24 - Policy Brief, February 2019, available at https://www.indicus.org/admin/pdf_doc/Indicus%20Analytics_Feb2019.pdf; Monitoring the Progress of Financial Inclusion in India - Policy Brief, March 2017 available at https://www.indicus.org/admin/pdf_doc/Policy-Brief-March-2017.pdf; Financial Inclusion Metrics-Part I - Policy Brief, October 2014 available athttps://www.indicus.org/admin/pdf_doc/20141125105416.pdf; Financial Inclusion Metrics-Part II - Policy Brief, October 2014 available at https://www.indicus.org/admin/pdf_doc/20141125112500.pdf

[3] PMJDY Statewise Household Report available at https://pmjdy.gov.in/statewise-statistics

In the first section of the paper, we look at the progress made in measuring and monitoring the progress of financial inclusion itself and argue that there is a natural limit to how far the current approach can take us. And therefore, more work needs to be done, especially from a household/customer perspective. In the second section, we address what outcomes should financial inclusion be judged on. We argue that the desired outcome should be 'Financial Well-being', especially of the disadvantaged. And this enables us to close with specific recommendations on metrics and measurement for the way forward, the last section.

2. Measuring progress

As noted above, financial inclusion efforts in India have largely been banking-led, so it is not surprising that RBI has been the main source of tracking progress as well. Since 2012, the RBI has been releasing a Financial Inclusion Progress table, currently covering 21 parameters that are aligned to the targets set under the Financial Inclusion Plans (FIPs) of banks. The progress is reported only annually giving a snapshot at the national level and shows an impressive outreach of banking services through branchless banking – the number of bank branches in rural areas has increased from 33,378 in March 2010 to 53,287 in March 2022[4], while the number of BC outlets in rural India has risen from 34,174 in March 2010 to 22,18,470 in March 2022. However, it does not provide any visibility into the activity or dormancy of BCs and accounts even at the national level, while data at a granular level, at for example district level are not provided. There is also no gender-disaggregated data on accounts and BCs.

Since the launch of the Pradhan Mantri Jan Dhan Yojana in 2014, some additional metrics, specifically for PMJDY accounts,

[4] Reserve Bank of India Report on Trend and Progress in Banking 2021-22, available at https://rbidocs.rbi.org.in/rdocs/Publications/PDFs/0RTP20212225730A6FC708454BB270AC1705CCF178.PDF

such as the number of women beneficiaries, provision of RuPay cards, urban-rural breakup, etc. have been made available at the national level. The PMJDY has covered almost all households in the country, and state-wise household coverage has also been uploaded on the website. However, these measures do not include other financial services, nor do they paint a consolidated and cohesive picture of financial inclusion in India.

2a. RBI's FI-Index

In order to overcome the shortcomings listed above, in 2021, the Reserve Bank of India published an index called the Financial Inclusion Index, which is a single measure of overall financial inclusion in India, covering insurance, pension, and postal sectors, in addition to banking. Based on a framework described in Financial Inclusion Strategy 2019-24, it is computed from 97 parameters under three broad categories – Access (30% weight), Usage (45%), and Quality (20%). The underlying data for the parameters are collected from various regulators. RBI publishes the final Financial Inclusion score every year in July.

RBI's Financial Inclusion Index also paints a picture of continued progress but of a long road ahead. The overall score on financial inclusion stood at 56.4 in March 2022, compared to 53.9 a year earlier and 43.4 in 2017. This implies a growth of 5% pa in the overall index.

RBI provided the value of the three sub-indices for the years 2017-2021 (See Table 1). Given the efforts made to expand the financial services infrastructure, especially bank branches, and recently BC, it is not surprising that the scores are highest for access, while those on quality are relatively lower and those of usage lowest. Though each has been improving, usage has been improving at 7% pa compared with access (4%) and quality (1%) since 2017.

Table 1 RBI Financial Inclusion Index

	Access	Quality	Usage	Financial Inclusion Index
2017	61.7	48.5	30.8	43.4
2018	63.9	51.4	33.7	46.0
2019	67.5	52.6	38.7	49.9
2020	71.6	53.8	42.0	53.1
2021	73.3	50.7	43.0	53.9
2022	NA	NA	NA	56.4
Growth (2017-2021)	**4%**	**1%**	**7%**	**5%**

Source: Reserve Bank of India and author's calculations

Shortcomings of FI-Index

The creation of the Financial Inclusion Index is a laudable initiative and fills a crucial gap. However, there is a major flaw in its publication - the values of 97 parameters are not published. For the latest year – 2022 – even the values of the three sub-indices are not shared. The press release, while releasing the overall index value for 2022, noted that there was growth in all three sub-indices without mentioning the quantum of growth.

At this point, the obvious needs to be made explicit. There is little benefit in publishing annual index values without an idea of what is working better and what is not. That is, this single aggregate index value orientation gives no direction to any of the stakeholders on where to focus – be it industry, policymakers at the state and central level, academia, or consumer protection groups.

Moreover, it is hard to know which financial services – banking, insurance, pension, or postal – are driving the changes in access and usage. Without these insights, it is difficult to know if adequate progress is being made in the availability and usage of non-banking financial services.

Also, given the vast complexity and disparity in India, the data needs to be captured and presented at a much higher level of granularity and separately by gender. Currently, the index values are provided only at the national level. From ICFI we have consistently argued that data about financial inclusion should be provided at village and city levels, to identify the gaps and create strategies for overcoming them. It is only when such data are available would industry participants be able to identify the micro-markets and segments where gaps and opportunities exist.

Though there has no doubt been an improvement on many fronts, the lack of availability of such data prevents serious analysis by any of the key stakeholders, including industry, regulators, policymakers, civil society, etc, on where they need to prioritize their activities. Progress itself is curtailed due to the inability of stakeholders of designing the right policy interventions, products, and services due to this lack of appropriate data.

It is not only the lack of deep information but also the design of measurement mechanisms. The RBI Financial Inclusion Index for instance is based on supply-side factors and does not shed light on demand-related issues. These include among others, penetration of different services used by the households; how many households both save and invest; or have taken credit and health insurance. Thus, if the goal of financial inclusion is to increase the usage of a diverse basket of financial services, then the measurement has to be able to capture the diverse usage of such services and products. But neither this index nor the underlying data, help determine the larger picture and the place of currently accessible products and services within them. And of course, the current index also cannot help in understanding the barriers – structural or perceptual – to higher adoption and usage of financial services. Demand-side measures would be critical to help better understand such factors.

2b. CRISIL Inclusix

Another notable initiative to measure financial inclusion holistically was CRISIL's Inclusix[5], first brought out in 2013. It covered the penetration of banking, insurance, pension, and microfinance and presented the scores at the district level. It may be considered a precursor to RBI's FI Index. However, it has brought out only four reports, the most recent one in 2018. Though this is still based on supply-side data, it provides insights into regional trends, for instance, microfinance played a pivotal role in credit penetration in the north and the east, while the south and west regions were led by a strong banking presence. It is not known when the next edition will be published.

2c. World Bank's Global Findex Database

Unlike the measures and indices discussed earlier, World Bank's Global Findex Database[6], published every 3-4 years, is based on a survey of individuals in 123 countries. It is an excellent source of comparative data on the status and trends in financial inclusion globally. It collects data on ownership and usage of financial services like credit and debit cards; savings, borrowing, payments, transfers, remittances etc.

According to the 2021 Global Findex, nearly 78% of the respondents in India had a bank account, and there was no significant difference between urban and rural; men and women; rich and poor, and educated and uneducated. This is clearly an indicator of the success of the account-opening drive under PMJDY. At the same time, a third of the accounts were found to be inactive with a 13% gender gap in inactive accounts. Insightful though they are, these results are based on a fairly

[5] https://www.crisil.com/en/home/our-analysis/publications/crisil-inclusix.html
[6] https://www.worldbank.org/en/publication/globalfindex

small sample, and this point will be taken up in the next section in greater detail.

2d. The Dvara Study using CMIEs Consumer Pyramid[7]

Consumer Pyramid Household Survey conducted by CMIE (CMIE-CPHS), which covers over 150,000 households three times a year is among the largest trackers in India. By surveying the same households repeatedly (panel) and having a large sample size, it provides dependable insights into trends. While it surveys more urban households than rural, it applies weights to make its data representative at the population level. Dvara analysed the data collected in a single round in 2019 from 1,74,405 households to get insights into some aspects of financial inclusion from the household/beneficiaries' perspective. Two key findings of Dvara's study are:

Bank Orientation: Purely a bank-based financial inclusion index, it overestimates the state of financial inclusion than a composite one that considers other financial services, such as investment, credit, insurance, and pension. Clearly, this is because of the focus on opening bank accounts over the past nine years. It underscores the need to make efforts to increase the penetration of other services.

Access vis-à-vis Usage: The average score for access is significantly higher than that for usage and this difference between the two has sustained over time. This only indicates that though there is relatively superior performance on the provision front, relatively poor customer orientation is getting in the way of usage.

Apart from the fact that this is a one-time study and therefore comparison over time is not possible, it does not go deeper into

[7] Snegdha Gupta and Misha Sharma, "A Demand-Side Approach to Measuring Financial Inclusion: Going Beyond Bank Account Ownership", Dvara Research Working Paper Series No. WP-2021-05 July 2021 available at https://www.dvara.com/research/wp-content/uploads/2021/07/A-Demand-Side-Approach-to-Measuring-Financial-Inclusion-Going-Beyond-Bank-Account-Ownership.pdf

the use of, and needs for, different products/services on credit, savings, insurance, etc.

2e. Other survey-based measures of FI

Intermedia conducted four Financial Inclusion Tracker Surveys[8] between 2013 and 2016, covering 45,540 respondents in the most recent one. In addition to gathering data about access and usage, it also asked questions about motivations for saving and borrowing, and the respondents' preparedness to withstand financial shocks. Another large sample survey is the NABARD All India Rural Financial Inclusion Survey 2016-17[9] that covered 1.88 lakh respondents from 40,327 agricultural and non-agricultural rural households across the 29 states.

Both these surveys were useful when conducted but have limited relevance for policy making currently. A regular, large-scale survey covering household financial lives in an in-depth manner would better be able to address the gap in understanding unmet demand and financial well-being.

Clearly, the present state of metrics on financial inclusion is quite sparse in India and there is a need for consistent, regular, and comprehensive measurement of financial inclusion, not just from the supply side, but also from the perspectives of the beneficiaries of these initiatives and policies. In the next section, we look at the metrics and measurements for the *outcomes* of financial inclusion.

3. Measuring the outcomes of financial inclusion

Undoubtedly financial inclusion can be a key enabler in reducing poverty and boosting shared prosperity. According to the RBI, as enunciated in National Strategy for Financial Inclusion 2019-

[8] Please see http://fii-website.staging.interactive.columnfivemedia.com/uploads/file/reports/India%20Wave%204%20Report_8-Jun-2017.pdf

[9] Available at https://www.nabard.org/auth/writereaddata/tender/1608180417NABARD-Repo-16_Web_P.pdf

24[10], '*access to formal finance can boost job creation, reduce vulnerability to economic shocks and increase investments in human capital*'. The government's definition of financial inclusion has itself been changing over time, with its remit being expanded for improving accessibility for an increasing range of financial services.[11]

However, merely improved coverage and access may not do the job for a range of reasons, including how the delivery of financial services matches the capacities, need, and even preferences at the household and individual level. The end objective is no doubt overall well-being therefore, it is critical that the objective of financial well-being be made explicit and placed at the center of policymaking and its delivery. As a corollary to the above, the success of financial inclusion should therefore be measured primarily from a customer vantage.

3a. Defining Financial Well-being

Financial well-being is a relatively newer concept, there is a definition emanating from the developed world, and perhaps as a consequence reflects the objectives and requirements of higher income countries. The OECD for instance uses a

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[10] Reserve Bank of India, National Strategy for Financial Inclusion 2019-24, available at https://rbidocs.rbi.org.in/rdocs/content/pdfs/NSFIREPORT100119.pdf

[11] The National Strategy Document 2019-24 discusses this evolution - As per the Committee on Financial Inclusion, 2008, headed by Dr C Rangarajan, Financial Inclusion has been defined as "*the process of ensuring access to financial services, timely and adequate credit for vulnerable groups such as weaker sections and low-income groups at an affordable cost*". The Committee on Medium-Term Path to Financial Inclusion headed by Deepak Mohanty, 2015, set the vision for financial inclusion as, "*convenient access to a basket of basic formal financial products and services that should include savings, remittance, credit, government-supported insurance and pension products to small and marginal farmers and low-income households at a reasonable cost with adequate protection progressively supplemented by social cash transfers, besides increasing the access of small and marginal enterprises to formal finance with a greater reliance on technology to cut costs and improve service delivery*". The National Strategy for Financial Inclusion, 2019, framed the vision as "*To make financial services available, accessible, and affordable to all the citizens in a safe and transparent manner to support inclusive and resilient multi-stakeholder led growth*".

definition borrowed from US' Consumer Financial Protection Bureau, that is, financial well-being is "a state wherein a person can fully meet current and ongoing financial obligations, can feel secure in their financial future, and is able to make choices that allow them to enjoy life."[12] As is apparent, the definition is too broad and does not lend itself well to specific measurable outcomes.

Financial well-being, from a lower-income country's context, is much better described as "***a state where households, and individuals within, are confident of meeting current and ongoing financial obligations and feel secure of their financial future.***" Note that our definition identifies both households and individuals within, as much of financial status needs to be seen at the household level. We also focus on obligations and not so much on the enjoyment of life. Finally, financial security is the underlying spirit behind our definition of financial well-being.

Financial security and its corollary, financial freedom, are therefore at the core of the concept of financial well-being which includes control over daily finances and the ability to make desired consumption or investment choices. Moreover, it should also include some capacity to absorb financial shocks such as poor health outcomes of family members, extreme climate-related events, occupational uncertainties, etc.

3b. Paucity of financial well-being data

If the working definition of financial well-being is that above, its measurement would necessarily require measuring the ability of households and individuals to meet routine and predictable payments, withstand financial shocks, and adequately plan for them. Measuring this can best be achieved through a combination of large-scale household, and smaller-sample, qualitative surveys. As discussed above supply-side data on

[12] https://www.oecd.org/financial/education/oecd-infe-2020-international-survey-of-adult-financial-literacy.pdf

delivery or access infrastructure and usage (such as active bank accounts), do not provide adequate insights into what the needs are. They do not reflect for instance the extent of the impact of financial inclusion on the lives of people government programs or market-based products and services are intended for.

Some initiatives that provide partial insights into financial well-being are discussed below.

Findex Database

To some degree, World Bank's Global Findex Database fills the gap. In addition to data about usage of financial services discussed in section 2C above, Global Findex 2021 also looked at resilience and gathered data about financial stress, which give an indication of financial well-being. It asked whether the respondent worried about:

- not being able to meet medical expenses.
- not being able to meet education costs.
- not have enough for old-age.
- not being able to meet monthly expenses.

As these parameters were covered for the first time in 2021, time-series data are therefore not available. Notably, the data for 2021 (not an ideal year given Covid associated stresses) shown in the table below suggests that most households were under significant stress:

Table 2 Global Findex India Results Financial Stress

Worry about not being able to:	Very worried	Somewhat worried	Not worried
Meet medical expenses	66%	17%	17%
Meet education costs	52%	15%	23%
Have enough for old-age	63%	16%	18%
Meet monthly expenses	61%	20%	17%

Source: Findex Database, 2021

From a well-being perspective, one goal of financial inclusion should be to alleviate this stress, and therefore its success may also be measured by the reduction in the level of stress over time. Improving the financial well-being of households calls for enhancing the provision of and removing the barriers to credit for livelihood enhancement or for consumption and increasing usage of products such as life insurance, pension, and medical insurance. In other words, our approach sees financial inclusion as a means to the end goal of financial well-being.

While the Global Findex Database is useful, it favours wider coverage over depth and therefore is not quite appropriate to gauge the state of financial inclusion in India. In the most recent survey, 128,000 adults were surveyed in 123 countries, with just 3000 in India. In a diverse and large country like India, a much larger survey is needed to get a fix on financial well-being and to monitor it regularly. Moreover, with such a small sample we obtain little by way of customer segmentation, differential usage of products, variety of needs, etc. Findex also takes the individual as the unit of analysis, whereas in India, the household is the more relevant financial entity for inclusion and well-being. A larger sample, periodic panel household survey would therefore be better suited for such data.

All India Debt and Investment Survey

The 'All India Debt and Investment Survey' conducted periodically by the National Statistics Office since 1951 is a valuable source of data about the financial status of households, especially assets and liabilities; borrowings from institutional and non-institutional actors and the terms of credit; expenditure on capital formation and other purposes, among others. It presents data by states, urban and rural, occupational categories, and decile classes of asset holdings. The most recent survey conducted in 2018 (report published in

2019[13]), also gathered data on subscriptions to pension and insurance schemes of the government including Pradhan Mantri Jeevan Jyoti Bima Yojana (PMJJBY), Pradhan Mantri Suraksha Bima Yojana (PMSBY) and Atal Pension Yojana (APY)), and premium paid for life and non-life insurance. The sample size of the survey was 69,455 rural and 47,006 urban households.

The survey provides important insights into the financial health of households, especially measures of indebtedness including debt-asset-ratio and expenditure on capital assets. It also provides measures of disparities in asset holdings, such as the Lorentz curve and Gini's coefficient. These are valuable for policy making. However, the survey is not explicitly designed to measure financial well-being. Also, the survey is not conducted frequently and results are released with a considerable lag of more than a year.

3c. Need for a specific survey on financial wellbeing in India

There is a need for a periodic, large-scale, household survey in India designed specifically for measuring and tracking financial well-being. It should help set targets and goals and inform policymaking. Dvara Research (2022[14]) has collated parameters used in a variety of financial well-being surveys in developed and developing countries in a research note. These parameters broadly relate to:

- Ability to save

[13] National Statistical Organisation, Ministry of Statistics and Programme Implementation, All India Debt and Investment Survey 2019 NSS 77th Round, available at https://mospi.gov.in/sites/default/files/publication_reports/Report%20no.%20588-AIDIS-77Rm-Sept.pdf

[14] Dasgupta Monami and Geetika Palta, 2022, "Measurement of financial well-being, a review of the Literature" available at https://www.dvara.com/research/wp-content/uploads/2022/03/Measurement-of-financial-well-beinga-review-of-the-literature.pdf

- Ability to manage shocks
- Debt and financial health
- Sufficiency of long-term financial comfort

Collection and monitoring of such data can form a superior basis for assessing the impact of the vast government resources being deployed for financial inclusion as well as the role of the markets. Over time, it will also allow a deeper understanding of the link between different types of financial inclusion efforts, such as those on access, usage, or quality, and their impact on financial well-being.

Designing household surveys: For effective policy-making and fine-tuning of schemes, there is a need to conduct large-scale, periodic household surveys in India that provide insights into:

Financial Inclusion

- Awareness and knowledge of diverse financial services and schemes available including insurance, credit, pension, savings, and investments
- Access to and the use of diverse financial services
- Reasons for using specific financial services and the buying behaviour/journey
- Satisfaction with the process, personnel, systems, and the products
- Barriers to the access and use of financial services including structural, procedural, and perceptual.
- Trust in the financial sector actors including intermediaries

Financial Well-being

- Income, expenditure, savings and investments
- Assets and liabilities
- Ability to pay back debt
- Confidence in the ability to:
    - Raise debt in an emergency at a short notice
    - Meet regular and routine expenses

- Meet planned or unforeseen healthcare expenses
- Invest for the future, especially old age
- Invest to augment/generate income.

An index of financial well-being should be constructed, which will allow target setting and monitoring. Also, the underlying data should be shared in the public domain at the maximum level of granularity. NSSO, which has expertise in running large-scale surveys could be made responsible or it could be conducted in partnership with private players. An expert group comprising representatives from diverse ministries (Ministries of Finance, Rural Development, Agriculture, Commerce and Industry etc), industry (selected banks, NBFCs, fintech firms, etc), regulators (RBI, IRDA), academia and civil society representatives working with the underprivileged, should be constituted to provide inputs on the design the survey, its regular fine-tuning and recommending coordinated policy action based on findings of the survey.

In the next section we put forth the way forward on measuring progress towards a more meaningful financial inclusion mission.

4. Key takeaways and the way forward

- The goal of financial inclusion should be rapid improvement in financial wellbeing, which should be measured rigorously. A systematic effort must be made to measure the financial well-being of households and small businesses. And a precondition for that is measuring both the status and impact of financial inclusion initiatives on people's lives.
- So far, financial inclusion in India has been bank-led and therefore it is natural for the RBI to have been monitoring progress, including the creation of financial inclusion-Index. RBI must release more data in the public domain collected for the computation of financial inclusion-Index transparently.

- However, with financial inclusion moving beyond banking, and a lot of work still to be done to increase the penetration of other services, another body, preferably independent of the Ministry of Finance should take up the monitoring work. This will avoid the inherent conflict between its roles as strategy formulator, implementor, and also monitor. The Niti Aayog could play such a role and could bring in Central Statistical Organisation to help implement the monitoring regime.
- The RBI will need to continue playing a key role in monitoring the progress of financial inclusion. Granular data on financial inclusion progress by the banking system needs to be published on a regular basis – at the city and village level and also by gender.
- The supply-side indices for financial inclusion should be complemented with demand-side data, gathered through a well-designed, large-scale survey among households. Central Statistical Organization (CSO), which has expertise in running large scale surveys for policy formulation and monitoring, could be tasked with this responsibility.
- In the interim, large-scale, credible surveys by private bodies or independent think-tanks should be used to understand the issues and monitor progress. A list of dimensions of financial well-being has been suggested elsewhere[15] covering economic, functional, emotional and informational aspects. This list is not exhaustive as it has been drawn from existing research, however, it provides some direction into the type of indicators that should be mapped to measure financial well-being.
- Finally, starting conversations amongst all stakeholders towards measuring financial well-being would help set goals towards holistic progress on financial inclusion, and debates among the stakeholders should be

[15] Please see https://www.dvara.com/research/evidencegapmap/

encouraged to achieve them. Credible data, at a granular level, is critical to set the frame for such an informed discussion.