Article

Analysing the progress of financial inclusion in India

Journal of Development Economics and Management Research Studies (JDMS),
A Peer Reviewed Open Access International Journal
ISSN: 2582 5119 (Online)
08(08), 9-22, April-June 2021
@Center for Development Economic Studies (CDES)
Reprints and permissions
http://www.cdes.org.in/
http://www.cdes.org.in/journal/

Analysing the progress of financial inclusion in India

Pavan Kumar T and Aniket Chatterjee[1]

Abstract

In the context of modern India, it is widely accepted that nobody should be left out of coverage of banks and banking services – access to timely credit, deposits, insurance etc. It does not however imply that the access to affordable finances implies access only to banks but also the non-banking sector, given that there is a continued reliance on the latter in most sectors which are vital for development. Need for financial inclusion has only gone up in recent times as the financial system diversified over time. In this research paper, the authors analyzed the India's journey so far, bringing out a few ignored factors which in their opinion appear to have an effect on the process of inclusion. The paper attempts to show that there are certain non-financial macroeconomic, infrastructural, and technological bottleneck that obstructs the momentum of the inclusion process. The data for the current analysis has been sourced from secondary sources available in public domain on the official websites of the Reserve Bank of India, CSO and NPCI. An exploratory ex-post-facto approach is followed as the methodology in order to arrive at the desired results. The paper adds to the existing literature by giving a broad overview of how Indian Financial Journey has been so far and stresses on what more can be done vis-à-vis shortcomings noted and opines that India has gained a lot by focusing more on Financial Inclusion after the economy opened up than when it was a closed economy.

[1] Pavan Kumar is pursuing his MA Economics while Aniket Chatterjee is pursuing MA Financial Economics at the School of Economics, University of Hyderabad.

Keywords - Financial Inclusion, Credit, Insurance, Reserve Bank of India, Banking Sector, Non-Banking Sector

Introduction

Prior to the idea of financial inclusion, it is better to know what its corresponding antonym actually means - financial exclusion can be broadly termed as a 'partial prevention of a few sections of the society from participating in the formal financial system that exists in the country'. There lies a certain degree of inability of a population that prevents them from gaining access to the financial system. The basic idea behind financial inclusion is to deal with the consequences of financial exclusion such as posing impediments to better living standards and financial independence. To put it in simpler terms, if a person has no bank account or access to cheap and assured credit for his day-to-day activities, his financial security cannot be guaranteed which can then lead to negative economic consequences. Hence, it is imperative to enable everyone to tap finances with ease and ensure their finances are secured without any hassle.

In this context, the availability of credit plays a major role in the economic growth of any country. If the finances are at the hands of a very few then the entire idea of inclusive growth gets disrupted and amount of money in the hands of the public comes down. In order to break through the 'vicious cycle of poverty', a certain "push" in terms of finances and more importantly, access to finances for the common people, is therefore essential. Devoid of this will force individuals into the informal lending system characterized by exploitative interest rates lending conditions. Therefore, for a country like India, financial inclusion plays a vital role in the path of economic development. In this paper we try to study the roadmap of financial inclusion in India empirically with a critical analysis of certain policies taken aiming the same.

Review of Literature

Before embarking on this study, the authors perused through existing literature and tried to understand what they highlight, how they approach the topic and analyze the past and current trends. A few of them undertake a historical perspective and present a picture in a broad sense while a few of them have made attempts to construct a Findex (Financial Inclusion Index) for Indian states; so as to present a state-wise picture of how things are at the ground level. (Singh et al., 2014) presented a brief picture of the efforts undertaken by both Government of India and Reserve Bank of India since 2005 and focused on trends observed in select indicators. It noted that lack of financial literacy posed a major problem in bridging the gap between the system and the people and went on to add that financial services penetration in rural areas was still very low. The causes being multiple, it analyses the impact of initiatives made so far such as KYC, No-

Frills Accounts, Mobile Tech etc. The paper also provides three dimensions of Financial Inclusion – Branch, Credit and Deposit penetration which makes it easy to understand the whole process. In order to understand other modes by which financial inclusion can permeate to the ground levels, the authors looked at number of post offices, fair price shops, ATMs and mobile phone banking trends. It flags issues such as low financial literacy and lack of strong network of financial institutions in rural areas as impediments to financial inclusion and suggests that impetus be laid on technology led inclusion as well as improving post-office routed financial services. What it however tends to ignore is the ease of access to such formal machinery is constrained by various factors such as paper work, availability of credit and debit cards, adequate finance. What is also left out is the role of non-banking financial sector which plays a role in reaching out to those who find the formal set up too cumbersome; more so in the rural areas.

Sujlana & Kiran, 2018 add to the literature by highlighting that the word was originally coined by Dr YV Reddy who was the former RBI governor and points out the obvious: that the financial sector acts as a multiplier. It also brings out a timeline of the financial inclusion journey so far starting with Bank Nationalization, Priority Sector Lending, NABARD etc. all the way up to the recent times when Financial Literacy Centers have been started all over the country. The paper remarks that financial literacy and financial stability form the bedrock of financial inclusion and thus both are essential and need serious policy focus. It also lists detailed steps taken so far and presents a picture that there is a pressing need for quality financial services to be expended to the rural areas to boost growth. This paper too yet again misses out on the way NBFCs can add to the Financial Inclusion process rather than excluding them out.

The next paper we reviewed was (Ambharkane, Singh & Venkataramani, 2016) which built a comprehensive financial inclusion index. This heralds in a fresh approach to constructing financial inclusion indices by considering Indian factors and unlike others, factors in NBFCs and their role in furthering financial inclusion; It listed various types of metrics and methods used worldwide to construct such indices and added a fresh perspective by considering both demand and supply side factors. Alongside another paper (Ambarkhane, Singh & Venkataramani, 2014) authored by the same authors analyzed the progress state-wise and presented their findings for 21 out of 29 states. This gives a disaggregated and a more accurate picture. It brought out that Kerala, Goa, Punjab and Tamil Nadu came out to be among the Top 5 while Rajasthan, Chhatisgarh, Madhya Pradesh, Jammu & Kashmir (undivided) and Jharkhand came in the Bottom 5. Contrasting this with the growth in respective states would provide a meaningful perspective and the paper does it to some extent by comparing these ranks with the states' ranks in Infrastructure Index. In a way this makes a departure from traditional understanding and makes it more relevant in Indian context.

Yet another paper we reviewed was (Goyari & Sethy, 2018) which also added to literature on state-level progress on financial inclusion. Contrary to (Ambarkhane, Singh &

Venkataramani, 2014), it opines that no state comes under ‘high’ financial inclusion category (0.5 < FII score <1) and at the maximum, some have reached ‘medium’ financial inclusion (0.32 < FII < 0.5) while rest of the states fell under ‘low’ financial inclusion (0.1 < FII < 0.3). The paper explored what determined FII progress and found that per capita income, literacy rate and SHGs availability mattered very well and all impacted FII scores positively. It notes a pertinent point: that the FII depends on Banking Penetration, Banking Services and Usage of the Banking system. However, it would have been of much more relevance had it focused on NBFCs’ link too.

Research Objectives

The main objective of this paper is to look at the following questions and try to answer the same:

1. What are the factors that are influencing Financial Inclusion in India?
2. How has it changed over the last few years after the launch of Jan Dhan Yojana and Unified Payments Interface? What are the shortcomings and what needs to be done?

Historical Background

As pointed out in an article by (Venkatesh, 2021), the non-existence of formal banks during pre-Independence era had exacerbated the problem of financial exclusion and it saw the failure of banks like the Arbuthnot Bank in Madras Presidency in 1906. Post-Independence, the government decided to encourage the culture of savings by increasing bank presence and reduce reliance on informal lending. The population per office declined from 136,000 in 1951 65,000 in 1967. However, the pattern of branches in rural/semi-urban and urban/metropolitan centers remained broadly unchanged. A pan-India nationalization of banks saw private banks becoming public. The main objectives of social control were to achieve - wider spread of bank credit, prevent its misuse, and direct a larger volume of credit flow to priority sectors making it a more effective for economic development. (Report on Currency and Finance, 2013)

Table 1: Branch Expansion of Commercial Banks

	Rural	Semi Urban	Urban	Total
1952	540 (13.3)	1942 (47.8)	1451 (35.7)	4061
1960	831 (16.5)	2512 (50)	1633 (33.5)	5026
1965	801 (13.1)	2836 (46.2)	2354 (38.4)	6133
1967	1247	3022	2716	6985

Source: RBI Report on Currency and Finance, 2008 – Compiled by authors

Table 2 - Branch Network of Commercial Banks

	Rural Centres	Semi-urban Centres	Urban Centres	Metropolitan Centres/Port Towns	Total	Population per Bank office
June 1969	1,443	3,337	1,911	1,496	8,187	65,000
	(17.6)	(40.8)	(23.3)	(18.3)		
December 1975	6,807	5,598	3,489	2,836	18,730	31,660
	(36.3)	(29.9)	(18.6)	(15.1)		
December 1980	15,105	8,122	5,178	4,014	32,419	20,481
	(46.6)	(25.1)	(16.0)	(12.4)		
December 1985	30,185	9,816	6,578	4,806	51,385	14,381
	(58.7)	(19.1)	(12.8)	(9.4)		
December 1990	34,791	11,324	8,042	5,595	59,752	13,756
	(58.2)	(19.0)	(13.5)	(9.4)		

Source: RBI Report on Currency and Finance, (Figures in parentheses indicate region-wise percentage share of total branches in that period)

This inclusion clearly would not have been possible without nationalization. However, at this juncture, the question to be asked is despite rural coverage of banks, why is there a continued reliance on the Non-Banking Sector? The formalities involved in banks such as forms, additional details such as Aadhar, Asset Details etc. are needed in the former while in the latter there is much more flexibility. In this backdrop, we move to the financial inclusion indicators and see how India has fared.

Methodology

Nature of Study

This paper adopts an exploratory approach and takes the aid of publicly available secondary data to answer the research questions. It uses correlation analysis and regression (Multiple Linear Regression and Difference-in-Difference Model) along with relevant graph plots to add to the findings to compare the trends.

Sources of Data and literature

The paper uses secondary data published in various public platforms such as published research papers, CRISIL Inclusix, Global Findex, IMF Financial Access Survey, RBI and MOSPI.

Analysis and Findings

The paper's analysis is divided into two sections – 1. Trends in post-Liberalization Era (inclusive of Jan Dhan Yojana) and 2. Findings from Empirical Analysis.

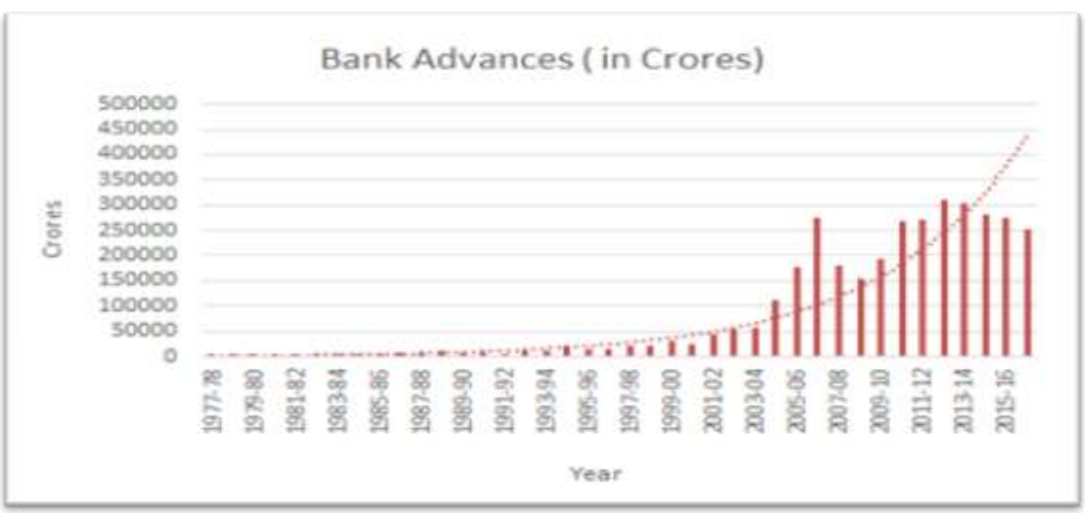
Financial Inclusion in the Post-Liberalization Era

From the earlier tables 1 and 2, we have seen the coverage factor. This is supported by NABARD's All India Rural Financial Inclusion Survey Report of 2018 which said that 88% of rural households have a savings bank account. We shall look backwards when nationalization of banks was in full swing (1969 and 1980). The population covered per branch decreasing meant that now, the banks were now under lesser burden and could provide easier access.

Considering the timeline of nationalization (phase 2 i.e., 1980), per capita income was low (400 - 600$) indicating low-income growth and the deposits too were not much. This implies low-income levels necessitated spending and not much of savings and thus growth in branches need not always translate into deposits. This is further supported by the savings rate data published by the World Bank. Until late 1980s, savings was around 15-16%.

Post restructuring and deregulation, savings rate as a percentage of GDP grew rapidly indicating informed awareness about safety of finances if put in banks in the form of deposits and other instruments as opposed to idle cash. This indicates that as income goes up, concern for its holding goes up and as a result, formal financial sector sees an inclusive growth. The rapid expansion of the branch network led to massive deposit mobilization by banks, which in turn, contributed to a higher saving rate. The household financial savings increased manifold as nationalized banks enhanced public confidence in the banking system. (Singh, Kavaljit, 2019).

Fig 1 - Bank Advances over-the-years (in Crores)



Source: RBI – Compiled by Authors

In Figure 1, we see that the advances were however insufficient to boost the savings rates or the level of growth given that all the three variables showed a similar trend. Thus nationalization, while ensuring access to banks to rural areas and fostering the savings culture, stopped short of full financial access. It is observed by the authors here that, simplification of procedures for opening up bank accounts and reducing the extensive paperwork could significantly improve the reliance on formal financial sector.

Technology and Financial Inclusion (Jan Dhan, UPI)

The banking sector, since liberalization has developed magnificently and ventured into unimaginable areas. Though ATMs was implemented a few years before liberalization, its incidence increased manifold owing to the technological transformation during and post 1991. Committees were established to modernize the banking sector and bring them closer to the masses. With the aid of the New Economic Policy, India achieved a magnificent growth rate during the 1990s which saw the emergence of private sector banks and foreign banks into the Indian Banking scene. The entire financial activity can be easily handled by the mobile phone and internet connection. Now the question arises that are the values of the registered mobile money accounts significant? How can we verify that there actually was a boom in mobile wallet users? The following figures drive home the point that they did. As far as the Jan Dhan Yojana is concerned, the data shows that the coverage has been skewed with UP having the maximum beneficiaries while parts of Central and Eastern India have benefited from it as well. This shows there’s a long way ahead as new schemes for inclusion are taken up from the side of the government.

Table 3 - Financial Access Survey Report (IMF) – Compiled by Authors

Key FAS Indicators	2015	2016	2017	2018	2019
No. of ATMs per 1000,000 adults	19.64	21.17	22	21.65	20.95
No. of commercial bank branches per 100,000 adults	13.52	14.21	14.51	14.50	14.58
No. of registered mobile money accounts per 1,000 adults	73.29	221.94	443.52	541.94	1264.79
Outstanding deposits with commercial banks (% GDP)	64.79	62.37	62.75	60.27	63.27
Outstanding loans from commercial banks (% GDP)	49.95	48.87	46.31	46.21	48.55
Outstanding SME loan from commercial banks (%GDP)	6.98	6.47	6.26	6.06	6.44
Value of mobile money transaction (during reference year) (% GDP)	0.06	0.13	0.31	0.57	0.90

Findings from Empirical Analysis

Part 1 - Correlation

We performed correlation test for a set of variables and based on those results, we undertook a Multiple Linear Regression analysis to see how the variables behaved. Correlation test was performed between Number of Office Branches of Scheduled Commercial Banks in states and Social Sector Expenditure (in Billion Rupees) incurred by the same states for a period of time. The results showed consistently high correlation of 0.90 and more indicating a positive relationship between Social Sector Expenditure and No. of Offices in Bank Branches.

Correlation (No of Offices, Social Expenses)	0.7879	0.7608	0.7220	0.5883	0.652	0.5215	0.5469	0.5859	0.4886

It can be inferred that as the number of branches rises across the country, the expenditure in terms of direct transfers is reaching the people at the grassroots due to adoption of digital identification and payment systems.

A similar set of correlation tests between Number of offices of SCBs and length of roads in states (y-o-y), State Domestic Product (at Factor Cost) of Agriculture and Railway Network revealed low levels of correlation indicating that they might not be that good an indicator of financial inclusion though there is a chance of indirect relationship in the form of chain effects. Hence there is a rise in bank branches in the hinterland and this is facilitating online banking too in a big way as the nearest bank branch aids in adapting to the online mode.

Part 2 - Regression Analysis

A simplistic Standardized Multiple Linear Regression was performed initially to ascertain how best fit a model can be to understand trends in variables which act as indicators of financial inclusion. The correlation analysis performed above gave us some insights and based on that, a series of Multiple Linear Regression was performed. This is followed by a Difference-in-Difference (DID) methodology estimating the effect of PMJDY and JAM.

Regression – 1

Outstanding Deposits = f (Value of Mobile Money as % of GDP, Loans Advanced to SHGs, Bank Branches per 1L Pop.)

Estimated Equation - $\mathbf{Y} = 3.49E\text{-}16 - 2.0581\,(\mathbf{X_1}) + 1.511(\mathbf{X_2}) - 0.4048\,(\mathbf{X_3})$
$(1.25E\text{-}15) \quad (-1.47575) \quad (0.8578) \quad (-0.56627)$

Y = Outstanding deposits $\mathbf{X_1}$ – Value of Mobile Money as % of GDP; $\mathbf{X_2}$ –Loans Advanced to SHGs; $\mathbf{X_3}$ – No of Commercial Bank Branches

The value in the parenthesis indicates the t-statistic of the corresponding estimated coefficients. The above model showed that while the p-values and the F statistic are insignificant, the model shows a high degree of goodness of fit with a Multiple R of 0.95 and R Square of 0.90. Value of Mobile Money Accounts as percentage of GDP has shown a negative relationship with the outstanding Number of Deposits (-2.0581) implying that there is a reduction in parking money in bank deposits and a rise in mobile wallets. The other aspect of this model is that there is a weak inverse relation between deposits and bank branches indicating the rise in digital payments and implies while banking coverage helps it is the digital mode which is fast bridging the gap between people and improving access to financial instruments and markets likewise. This finding goes contrary to popular perception that more bank branches improve access. The model shows a relationship between deposits and the loans advanced to SHGs indicating that they deposit the money safely in the banks and use it for business purposes.

Regression 2

After factoring in the number of bank branches per lakh population, we see if there's any impact in the number of SHGs taking loans, on financial inclusion given that a lot of loans have been given in last many years. The model used was –

Outstanding Deposits = f (Value of Mobile Money as % of GDP, Loans Advanced to SHGs, Number of SHGs)

The result was indeed a positive one validating the initial hypothesis that if SHGs take more loans and maintain them in safe Fixed or Recurring Deposits, this encourages more and more SHGs to join in and finance their plans in a better way, thus bringing in more coverage to those who were not covered earlier.

Estimated Equation - $\mathbf{Y} = 7.08E\text{-}16 - 7.01(\mathbf{X_1}) + 9.70(\mathbf{X_2}) - 3.64(\mathbf{X_3})$

$(1.32E\text{-}12) \quad (-762.589) \quad (600.0525) \quad (-469.869)$

Y = Outstanding deposits $\mathbf{X_1}$ **–** Value of Mobile Money as percentage of GDP; $\mathbf{X_2}$ **–** No of SHGs taking loans; $\mathbf{X_3}$ **–** Loans Advanced to SHGs.

The values in the parenthesis indicate the t-statistic of the corresponding estimated coefficients. We find that this model best fit to understand how SHGs positively impact financial inclusion. The R squared shows a very high value while the F statistic is significant. As seen earlier, the relation between outstanding deposits and value of mobile money, there is a negative relationship between the former and the amount of loans advanced to SHGs.

The interpretation is that the number of loans directed toward SHGs has reduced over time and thus needs to be increased as the penetration has improved with more SHGs taking loans. The paradox thus observed is while more and more SHGs have been taking loans, the NPA problem faced by banks is likely to have been the cause for reduction in loans advanced to them.

Comparing the above two regressions, it is clear that there is a need to improve access by digital means. This is evident from the negative relation between the deposits and value of mobile money and also reduction in loans to SHGs which play a big role at grassroots by way of microfinance. Insofar as this finding is concerned, it answers our research question on whether things have improved post 90s.

Correlation (Value of Mobile Money as % of GDP, Loans advanced to SHGs) = 0.966807556

Table 4: Correlation between Value of Mobile Money as % of GDP, Loans advanced to SHGs

	Loans Adv to SHGs	No of Branches per 1L Adults
Loans Adv to SHGs	1	
No of Branches per 1Lakh Adults	0.86690766	1

To support the above claim, we present the correlation results performed between the Loans advanced to SHGs and Value of Mobile Money Accounts as percentage of GDP and also No of Bank Branches per 1 Lakh adults.

Part 3 – Results from Difference-In-Difference Tests

Case 1: Savings post PMJDY and JAM (launched in 2014)

Using available data on gross savings, we used a dummy variable D as explanatory variable with value of D = 0 referring to period 2009-2013 while D =1 refers to period 2014-2018.

The model obtained is as follows:

Gross Savings = 29436.82 + 16221.69 (D)

(11.7489) (4.316327971)

The values in the parenthesis indicate the t-statistic of the corresponding estimated coefficients. The above model has, while showing an R squared value of 0.76, turned out be significant indicating that there has been a considerable rise in savings (gross) over last 4 years after the JDY was brought in to connect those who were previously outside coverage of the formal banking sector.

Case 2: Social Sector Expenditure (SSE) and increase in Credit

The model used for the answering question is as follows:

Credit = -227.054 + 0.23226 (Expenditure) + 914.5003 (D) - 0.62867 (Expenditure * D)

(-2.7150) (15.0021) (5.63123) (-5.3095)

The values in the parenthesis indicate the t-statistic of the corresponding estimated coefficients. As the estimates for the above model are significant, hence, SSE has increased the mean credit of regional rural banks. The coefficient of Expenditure is positive implying that SSE is positively affecting credit. Coefficient of dummy tells us the significance of the mean difference of credit before and after PMJDY. Coefficient of expression (EXP* D) is the slope drifter indicating the change in the slope coefficient of the second period from the first. It was observed that as expenditure rose, so did the credit. A similar exercise with deposits as the dependent variable fetches approximately same results.

Case 3: Impact of Financial Inclusion on overall Capital Formation via boosting Gross Savings

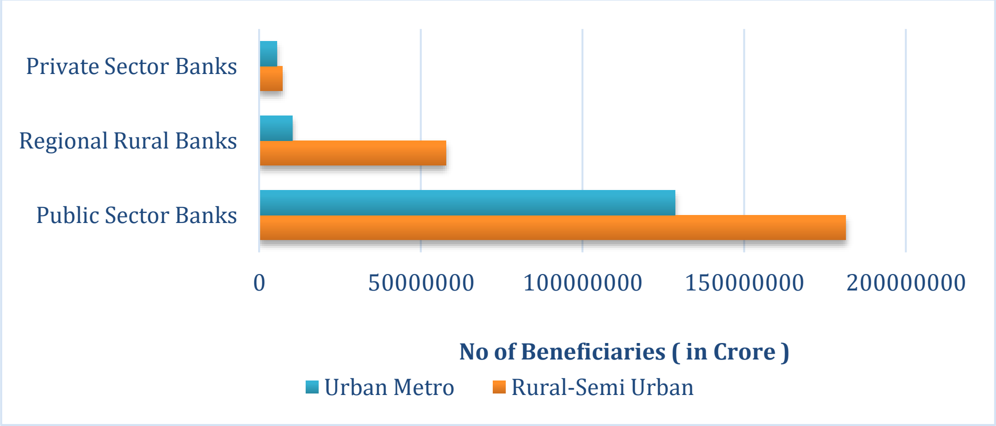
In this case, we have explored as to what is the impact of investment in economy on financial inclusion (through more saving in bank deposits). The following was the regression model used. :

$$\text{Capital formation} = -1699.34 + 0.7583\,(\text{Gross Savings}) - 0.1153\,(\text{D*Gross savings})$$
$$(-0.2624) \quad (3.4938) \qquad\qquad (-1.2851)$$

The values in the parenthesis indicate the t-statistic of the corresponding estimated coefficients. This model somewhat provides an alternative result. The coefficient of DID is insignificant implying that mean difference in capital formation from gross savings before and after JDY is not significant. In the final result we find that given Jan Dhan Yojana's role as a catalyst in furthering financial inclusion, the maximum beneficiaries have been in the rural and semi urban areas, mostly having accounts in the Public Sector Banks and Regional Rural Banks. This points to the heightened importance of the roles of RRBs and PSBs to bridge the gap further and connect more digitally and otherwise.

No of Beneficiaries of Jan Dhan Yojana - Bank-wise

Fig 2: No. of Beneficiaries of Jan Dhan Yojana (JDY) - Bank-wise – Compiled by authors



Thus, we find that while the progress has been good nationally in last couple of years, there is much more needed to be done actually at the state level as is evident from the analysis pertaining to states. A decentralized approach to Financial Inclusion is needed by way of digitization and also focusing on Financial Literacy to narrow the gaps between bank interface and common man.

Recognizing Role of NBFS[2] in Financial Inclusion

The role of NBFS is key to financial inclusion as at the grassroots rely more on the informal lenders. They have earlier played a key role in being the financiers and safety nets of many small businesses and MSMEs and thus know the intricacies of local business opportunities, financing methods and the needs at the grassroots given the trust factor. Thus it is essential we make them part of the journey to becoming financially inclusive and provide a robust banking and non-banking financial access.

The additional factor which makes NBFS best placed to undertake the job is their relatively low-cost operations model. Their adaption to latest technology too plays a key role as they can pass on the technology to their customers and educate them on how to use them. The rapid shift to digital payments after demonetization is a big indicator of the same as it also helps them keep correct accounts of transactions done.

The Way Ahead: Plugging the loopholes

Since Independence, Indian Financial system has undergone a lot of transformation. We can observe an improving trend as far as inclusion is concerned. The New Economic Policy of 1991 and Global Recession of 2008 had brought some structural shifts in the financial sector. An important issue that demands focus is bridging the rural urban gap. SHGs have shown that they can improve the access to financial services in the rural areas by connecting with the banking system. Similarly, given NBFS too plays a role, flexible regulations need to be adopted for them to grow.

Literacy is linked directly to this as lack of education forces the individuals away from the formal banks and end up taking credit from informal lenders thereby getting trapped into a vicious cycle of poverty. This is evident from the fact that farmer loan waiver helps only those farmers who have accounts and them who are informal debtors. Hence on the one hand we need digitization in a big way thereby making life easy for the urban populace and on the other, simplification of the system for the rural population.

References

1. Ambharkane, D., Singh, A., & Venkataramani, B. (2014). Measuring Financial Inclusion of Indian States - Dilip Ambarkhane, Ardhendu Shekhar Singh, Bhama Venkataramani, 2014. Retrieved 10 March 2021, from https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2485776
2. Ambharkane, D., Singh, A., & Venkataramani, B. (2016). Measuring Financial Inclusion of Indian States - Dilip Ambarkhane, Ardhendu Shekhar Singh, Bhama Venkataramani, 2016. Retrieved 20 March 2021, from https://journals.sagepub.com/doi/pdf/10.1177/0973005216633940

[1] Non-Banking Financial Sector

3. CRISIL. (2018). Financial inclusion surges, driven by Jan-Dhan Yojana. Retrieved from CRISIL: https://www.crisil.com/content/dam/crisil/crisil-foundation/generic-pdf/crisil-inclusix-financial-inclusion-surges-driven-by-Jan-Dhan-yojana.pdf
4. Financial Access Survey. (2020). Retrieved January 25, 2020, from Imf.org:
5. http://data.imf.org/?sk=E5DCAB7E-A5CA-4892-A6EA-598B5463A34C&sId=1460043522778
6. Global Financial Inclusion (Global Findex) Database. (2018, April 19). Retrieved February 17, 2019, from Worldbank.org: https://datacatalog.worldbank.org/dataset/global-financial-inclusion-global-findex-database
7. Goyari, P., & Sethy, S. (2018). Measuring Financial Inclusion of Indian States: An Empirical Study. Indian Journal of Economics and Development (2018) .
8. Retrievd from https://www.researchgate.net/publication/323963702_Measuring_Financial_Inclusion_of_Indian_States_An_Empirical_Study
9. Ministry of Statistics and Program Implementation, Government of India. (2019). Retrieved September 5, 2019, from Mospi.nic.in website: http://www.mospi.nic.in/
10. PMJDY. (2020). Pradhan Mantri Jan-Dhan Yojana, Department of Financial Services, Ministry of Finance. Retrieved January 25, 2020, from Pmjdy.gov.in website: https://pmjdy.gov.in/statewise-statistics
11. Ray, A. (2020). RBI prepares for full financial inclusion in hinterland. Retrieved 25 January 2020, from https://economictimes.indiatimes.com/markets/stocks/news/rbi-preps-for-full-fin-inclusion-in-hinterland/articleshow/67634489.cms
12. RBI - Publications. (2016). Retrieved 25 January 2020, from https://www.rbi.org.in/scripts/PublicationsView.aspx?id=17412
13. Reserve Bank of India - Handbook of Statistics on Indian Economy. (2019). Retrieved November 18, 2019, from Rbi.org.in: https://www.rbi.org.in/Scripts/AnnualPublications.aspx?head=Handbook%20of%20Statistics%20on%20Indian%20Economy
14. Singh et al. (2014). Financial Inclusion in India: Select Issues. Retrieved from https://www.iimb.ac.in/sites/default/files/2018-07/WP_No._474.pdf
15. Sujlana, Paramjit & Kiran, Chhavi, (2018). A Study on Status of Financial Inclusion in India Retrieved from https://www.researchgate.net/publication/324588733_A_Study_on_Status_of_Financial_Inclusion_in_India
16. UPI Product Statistics. (2017, March 31). Retrieved January 25, 2020, from - National Payments Corporation of India: https://www.npci.org.in/product-statistics/upi-product-statistics

17. Venkatesh, R. (2021). 'A Bank for the Indians' From https://www.dtnext.in/News/City/2021/02/28033828/1277848/A-bank-for-the-Indians--An-idea-that-took-birth-with-.vpf

18. Vijaya Bhaskar. (2013). RBI - Speeches. Retrieved January 25, 2020, from Rbi.org.in: https://www.rbi.org.in/scripts/BS_SpeechesView.aspx?Id=862

***