



## VARIATIONS IN FINANCIAL INCLUSION AMONGST INDIAN STATES: HOW FAR, HOW NEAR?

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*"I resist the temptation of asking you to guess how many people are actually excluded. Two billion people worldwide remain without a bank account; two billion people do not have a bank account. Now, there has been improvement, because it's 20 percent less over the last three years, but still two billion is a massive number,"*

IMF chief Christine Lagarde at Institute for New Economic Thinking Conf. on Finance and Society, 2015.

### Abstract

Financial Inclusion is a buzzword across the globe and there is a broad international consensus on the importance of financial inclusion as a powerful social development instrument. It is a well recognized fact throughout the world that inclusive growth cannot take place without inclusive finance. So, all the economies are directing their efforts towards promoting financial inclusion. In India, nearly 47% of the population does not have access to formal finance. There is not only presence of larger proportion of financially excluded population in India, but lots of variations also exist across different regions of the country. To ensure balanced and sustainable growth, India needs to put efforts not only in bringing the financially excluded population under the umbrella of financial inclusion but also to curtail down the presence of glaring disparities across different regions of the country. This paper is an attempt to measure the extent of variations in financial inclusion across different states of the country by carrying out time series analysis and study their magnitude in two phases namely; pre-reform phase and post-reform phase by constructing index of financial inclusion.

**Key Words:** Financial Inclusion, Regional Variations, Time-Series, Index, Variables.

### Introduction

Financial Inclusion is a prerequisite to ensure inclusive growth. It plays a crucial role in promoting sustainable economic and social development of the country. Despite broad international consensus on the importance of financial inclusion as a powerful social development instrument, over two billion people across globe continue to be financially excluded from the formal financial sector. As far as Indian scenario is concerned, the World Bank's Global Financial Index 2014 stated that only 52.8% of population (Age 15+) in India has access to formal bank accounts indicating that about nearly half of the population is excluded from the formal financial access. Further, only 14.4% of the population saved at the formal institutions in the past year while figure for the money borrowed stood at just 6.4% showing a downward trend from 7.7 in 2011. A pertinent point to be mentioned here is that the Global Findex data exclude Northeast states, remote islands, and selected districts. If these states are also included, the percentage of population having access to formal banking will come down significantly as most of the studies have concluded that north-eastern states lie at the bottom in terms of financial inclusion. Thus, India has a long way to go to ensure financial inclusion.

Though a focused and structured approach towards financial inclusion in India started in 2005 when RBI decided to implement policies to promote the same and the term gained further momentum in 2006, when Government of India constituted a "Committee on Financial Inclusion" under the chairmanship of Dr. C. Rangarajan, but to bring the masses into the combat of formal financial sector has always remained the priority of government plans and policies. The nationalization of major commercial banks in 1969 was an important landmark in the history of financial inclusion as it was intended to shift the focus of banking from class banking to mass banking. It was followed by a number of initiatives like introduction of Lead Bank Scheme, setting up of Regional Rural Banks, Service Area approach, Self-help Groups etc. The following table gives a summary of the key national financial inclusion initiatives undertaken by the government since the inception of planning era.

**Key Financial Inclusion Initiatives of GOI**

PERIOD	INITIATIVES
1960s, 70s	<ul style="list-style-type: none"> <li>• Focus on increasing credit to the neglected economy sectors and weaker sections of society</li> <li>• Development of the rural banking ecosystem including RRBs, rural and semi-urban branches etc</li> <li>• Implementation of the social contract with banks</li> <li>• Nationalization of Banks</li> </ul>



	<ul style="list-style-type: none"> <li>• Lead bank scheme launched for rural lending</li> </ul>
1980s,90s	<ul style="list-style-type: none"> <li>• Branch licensing policy to focus on expansion of commercial bank branches in rural areas</li> <li>• Establishment of National Bank for Agriculture and Rural Development (NABARD) to provide refinance to banks providing credit to agriculture</li> <li>• SHG-Bank linkage program launched by NABARD</li> </ul>
2000s	<ul style="list-style-type: none"> <li>• The term 'Financial Inclusion' introduced for the first time in RBI's Annual Policy Statement for 2005-06</li> <li>• Banks asked to offer 'no -frills account,</li> <li>• General credit card facility at rural and semi-urban branches</li> <li>• Know Your Customer (KYC) norms simplified</li> <li>• Banking Correspondent and Banking Facilitator concept introduced to increase out-reach</li> <li>• 100 percent financial inclusion drive launched</li> <li>• Restrictions on ATMs deployment removed</li> <li>• Pradhan Mantri Jan-Dhan Yojana (PMJDY) launched</li> </ul>

Source:[http://www.tcs.com/SiteCollectionDocuments/White%20Papers/Government\\_Whitepaper\\_Financial\\_Inclusion\\_09\\_2010.pdf](http://www.tcs.com/SiteCollectionDocuments/White%20Papers/Government_Whitepaper_Financial_Inclusion_09_2010.pdf)

Thus, the Government of India and the Reserve Bank of India have been making concerted efforts to promote financial inclusion as one of the important national objectives of the country. However, the approach followed till 1990s was protective and regulatory and emphasis was more on opening up more and more branches in rural/semi-urban areas and providing credit to agriculture and other neglected sectors on priority basis. As a result, the total number of commercial banks nearly quadrupled from 73 to 272 between 1969 and 1991. The number of offices in rural and semi-urban areas experienced a nine fold increase and expanded from 5,172 to 46,550 over the same period. The RBI also specified maximum deposit rates on savings and time deposits and differential lending rates linked to borrowers' income and type of business were introduced. By 1990, not only had there been impressive growth in deposits and credit advanced, public sector banks accounted for nearly 90 percent of total deposits and advances, with the residual evenly split between Indian private and foreign banks. During pre-reforms period, the development strategy took the form of centralized planning with emphasis on rural development and small industry. However, the 1991 balance of payments crisis marked the beginning of a phase of financial deregulation. The Reserve Bank of India (RBI) adopted a three-pronged approach aimed at creating a more profitable, efficient, and sound banking system. In order to introduce greater competition into the banking system, the RBI deregulated entry of new private and foreign banks into the sector starting 1993. As a result, during the post-reform period, the paradigm shifted to the market. Indian banking sector reforms were introduced to encourage operational self-sufficiency, flexibility and competition in the system and to increase the banking standards in India to the international best practices. So, Indian banking has passed through two major phases; one being regulatory phase covering a period till 1990 (pre-reform period) and second being deregulatory phase after 1990 (post-reform period). This paper is an attempt to analyze how far the regulatory approach (pre reform period) as well as deregulatory approach (post reform period) has been successful in reducing disparities in financial inclusion across different states in India.

### Review of Literature

Financial Inclusion being the buzz word across the globe so many researchers have tried to measure it at macro level as well as micro level by taking different indicators of financial inclusion. Many authors have carried out cross-country analysis like Park and Mercado, Jr.(2015), Amidži, Massara, and Mialou (2014), Cámara and Tuesta (2014), Samra (2008), and Beck, Demirgüç-Kunt, & Peria, (2007) in their work studied the financial inclusion level across different countries of the world. In India, Gupta, Chotia, Rao and Muralidhar (2014), CRISIL Inclusix (2013), Rajput and Oberoi (2013), Sahu (2013), Bagli and Dutta (2012), Laha and Kuri (2011), Chattopadhyay, S K (2011), Kumar and Mishra (2011), Pal and Vaidya (2011), Chakravarty and Pal (2010) & Mehrotra, Puhazhendhi, Nair, and Sahoo (2009) attempted to measure and understand financial inclusion levels amongst different states of India.

### Objectives of the Study

From the above review of literature it was found that most of the studies have been carried out by taking three or four indicators of financial inclusion and the index has been prepared at single point of time to measure the extent of disparities. So it was thought pertinent to carry out time series analysis to see the trend of disparities in financial inclusion and evaluate



what type of plans and policies are contributing towards the reduction in these disparities. More specifically, the objectives of the study are:

- To construct state-wise Index of Financial Inclusion in India at three different points of time.
- To examine the pattern of disparities in financial inclusion amongst the different states.
- To evaluate the impact of policy measures adopted during pre- reform and post- reform period on financial inclusion performance and
- To draw necessary conclusions and recommendations.

**Data Base and Methodology**

The study uses secondary data and the data for the banking sector has been taken from “Banking Statistics- Basic Statistical Returns” published by Reserve Bank of India. The data relating to population and area of the states has been taken from Census of India and the NSDP data has been taken from Central Statistical Organization, Government of India. The study covers a period of twenty years from 1993 to 2013. The index of financial inclusion has been constructed at three points of time namely for the year 1993, 2003 and 2013. The year 1993 depicts the status of financial inclusion at the time when reforms were introduced and the economy was deregulated (more specifically the effect of pre-reform policies) while the year 2003 depicts the effect of LPG reforms on financial inclusion. Since the momentum of financial inclusion gained ground in 2005, so the year 2013 reveals the impact of various initiatives adopted for inclusive growth. The study covers total 32 regions consisting of 28 states and 4 UTs. Three UTs namely Dadra and Nagar Haveli, Daman and Diu and Lakshadweep were excluded from the study due to non-availability of NSDP data. In most of the studies Volume of Deposits plus Credit as a proportion of NSDP has been taken as a single representative variable of the usage of banking services. Thus it was thought pertinent to leave the three UTs.

As, the inclusiveness of a financial system covers a number of dimensions like banking penetration, availability of banking services, usage of banking services etc, so in the present study ten variables representing these different facets of financial inclusiveness have been taken to construct the Index of Financial inclusion. The indicators selected for the study include:

1. Branches per lakh of population (Number)
2. Branches per 1000 sq km of area (Number)
3. Accounts (Deposit + Credit) per lakh of population (Number)
4. Accounts (Deposit + Credit) per branch (Number)
5. Average Deposit per Account (Rs in thousands)
6. Average Credit per Account (Rs in thousands)
7. Per Capita Deposits (Rs in thousands)
8. Per Capita Credit (Rs in thousands)
9. Credit-Deposit Ratio (%)
10. Volume (Credit + Deposit) to NSDP Ratio (%)

Since the above variables individually do not give any clear picture, so all the variables need to be taken together. In order to make them independent of their unit of measurement these variables need to be standardized. In the present study, for constructing the composite index, all the selected ten variables were normalized by applying Linear Scaling technique as given below:

$$dv_i = \frac{V_i - V_{\min}}{V_{\max} - V_{\min}} \dots\dots\dots (1)$$

Where:

- dv<sub>i</sub> is the normalized value of variable i
- v<sub>i</sub> is the original value of variable i,
- v<sub>min</sub> is the minimum value of variable i across all observations
- v<sub>max</sub> is the maximum value of variable i across all observations
- Here the normalized values will lie between 0 and 1.

Higher value of dvi means higher achievement of the state in variable i. If n variables of financial inclusion are considered, then a state s will be represented by a point DV<sub>s</sub>=( DV<sub>1</sub>, DV<sub>2</sub>, ..... , DV<sub>n</sub>) on the n-variable Cartesian space. In the n-dimensional space, the point O = (0, 0,.....0) represents the point indicating the worst situation while the point I = (1, 1,



.....,1) represents the highest achievement in all the variables. The index of financial inclusion, IFIs, for the sth state, then is measured by the normalized inverse Euclidean distance of the point  $DV_s$  from the ideal point  $I = (1, 1, \dots, 1)$ .

The formula then used for the construction of the index becomes:

$$IFI_s = 1 - \frac{\sqrt{(1-dv_1)^2 + (1-dv_2)^2 + \dots + (1-dv_n)^2}}{\sqrt{n}} \dots \dots \dots (2)$$

In formula (2), the numerator of the second component is the Euclidian distance of  $DV_i$  from the ideal point  $I$ , normalizing it by  $\sqrt{n}$  and subtracting from 1 gives the inverse normalized distance. The normalization is done in order to make the value lie between 0 and 1 and the inverse distance is considered so that higher value corresponds to higher financial inclusion.

**Findings of the Study**

As per the methodology discussed above, the Index of Financial Inclusion (IFI) has been constructed for the selected 32 regions at three points of time viz. 1993, 2003 and 2013 by incorporating all the selected ten variables. The computed values of IFI are presented in Table 1 below. It is seen from the table that in the year 1993 Delhi topped the list with an index of .7353 while Manipur was placed at the bottom with an index of just .0676 depicting the presence of huge variations amongst the states. In the year 2003, the extent of variations further deepened with the state at the top i.e. Chandigarh having IFI .8207 while Manipur continued to occupy the bottom place with a further decline in IFI from .0676 in 1993 to .0453 in 2003. During the year 2003, most of the states experienced a downfall in their financial inclusion index over a period of 10 years, only exceptions being Chandigarh, Meghalaya, Jharkhand, Sikkim, Andaman & Nicobar, Uttarakhand, Maharashtra and Karnataka. From the year 2003 to 2013, northern region states except Haryana, Rajasthan and Delhi experienced a down fall. Majority of the states improved their position and even the north- eastern states showed some signs of improvement exceptions being the states of Manipur and Meghalaya. It is pertinent to note that four states namely, Orissa, Andhra Pradesh, Karnataka and Tamil Nadu have shown consistent improvement in terms of financial inclusion whereas the position of Jammu & Kashmir and Gujarat has worsened over the period of twenty years from 1993 to 2013.

On the basis of IFI, all the selected 32 states were further divided into three categories namely:

1. States with high level of financial inclusion (Having IFI>0.5)
2. States with medium level of financial inclusion (Having IFI between 0.3-0.5)
3. States with low level of financial inclusion (Having IFI<0.3)

The above mentioned categories of states are presented in Table 2.

**Table 1: State-wise Index of Financial Inclusion in India**

STATE/ UNION TERRITORY	YEAR 1993		YEAR 2003		YEAR 2013	
	IFI	RANK	IFI	RANK	IFI	RANK
HARYANA	0.1969	12	0.1630	13	0.2100	10
HIMACHAL PRADESH	0.1726	14	0.1611	16	0.1454	14
JAMMU & KASHMIR	0.1791	13	0.1611	15	0.1261	20
PUNJAB	0.2560	6	0.2359	5	0.2246	7
RAJASTHAN	0.1278	16	0.1180	19	0.1371	16
CHANDIGARH	0.7237	2	0.8207	1	0.7679	1
DELHI	0.7353	1	0.6611	2	0.6990	2
ARUNACHAL PRADESH	0.1202	24	0.0819	28	0.1146	24
ASSAM	0.1163	26	0.0789	29	0.0908	27
MANIPUR	0.0676	32	0.0453	32	0.0608	32
MEGHALAYA	0.1017	28	0.1123	21	0.0801	28
MIZORAM	0.0997	29	0.0953	25	0.0712	30
NAGALAND	0.1179	25	0.0696	30	0.0715	29
TRIPURA	0.1210	23	0.0944	26	0.0983	26
BIHAR	0.0964	31	0.0691	31	0.0664	31



<b>JHARKHAND</b>	0.0964	<b>30</b>	0.1086	<b>24</b>	0.0984	<b>25</b>
<b>ORISSA</b>	0.1137	<b>27</b>	0.1090	<b>23</b>	0.1263	<b>19</b>
<b>SIKKIM</b>	0.1271	<b>18</b>	0.1562	<b>17</b>	0.1339	<b>18</b>
<b>WEST BENGAL</b>	0.2074	<b>10</b>	0.1628	<b>14</b>	0.1769	<b>13</b>
<b>ANDAMAN &amp; NICOBAR ISLANDS</b>	0.1277	<b>17</b>	0.1425	<b>18</b>	0.1381	<b>15</b>
<b>CHHATTISGARH</b>	0.1223	<b>21</b>	0.0928	<b>27</b>	0.1244	<b>21</b>
<b>MADHYA PRADESH</b>	0.1223	<b>21</b>	0.1147	<b>20</b>	0.1174	<b>23</b>
<b>UTTAR PRADESH</b>	0.1252	<b>20</b>	0.1095	<b>22</b>	0.1221	<b>22</b>
<b>UTTARAKHAND</b>	0.1252	<b>19</b>	0.1690	<b>11</b>	0.1346	<b>17</b>
<b>GOA</b>	0.3766	<b>3</b>	0.3475	<b>3</b>	0.2962	<b>4</b>
<b>GUJARAT</b>	0.2163	<b>9</b>	0.1798	<b>10</b>	0.2007	<b>12</b>
<b>MAHARASHTRA</b>	0.3230	<b>4</b>	0.3308	<b>4</b>	0.3536	<b>3</b>
<b>ANDHRA PRADESH</b>	0.1719	<b>15</b>	0.1640	<b>12</b>	0.2041	<b>11</b>
<b>KARNATAKA</b>	0.2035	<b>11</b>	0.2037	<b>8</b>	0.2256	<b>6</b>
<b>KERALA</b>	0.2238	<b>8</b>	0.2142	<b>7</b>	0.2143	<b>9</b>
<b>TAMIL NADU</b>	0.2355	<b>7</b>	0.2226	<b>6</b>	0.2281	<b>5</b>
<b>PUDUCHERRY</b>	0.2644	<b>5</b>	0.1993	<b>9</b>	0.2195	<b>8</b>

Source: Author's Calculation.

**Table 2: State-wise level of Financial Inclusion**

Financial Inclusion Index	Year 1993		Year 2003		Year 2013	
	STATES	No	STATES	No	STATES	No
High Financial Inclusion (>0.5)	Delhi, Chandigarh	2	Chandigarh, Delhi	2	Chandigarh, Delhi	2
Medium Financial Inclusion (0.3-0.5)	Goa, Maharashtra	2	Goa, Maharashtra	2	Maharashtra,	1
Low Financial Inclusion (<0.3)	Puducherry, Punjab, Tamil Nadu, Kerala, Gujarat, West Bengal, Karnataka, Haryana, Jammu & Kashmir, Himachal Pradesh, Andhra Pradesh, Rajasthan, Andaman & Nicobar, Sikkim, Uttarakhand, UP, MP, Chhattisgarh, Tripura, Arunachal Pradesh, Nagaland, Assam,	28	Punjab, Tamil Nadu, Kerala, Karnataka, Puducherry, Gujarat, Uttarakhand, Andhra Pradesh, Haryana, West Bengal, Jammu & Kashmir, Himachal Pradesh, Sikkim, Andaman & Nicobar, Rajasthan, MP, Meghalaya, UP, Orissa, Jharkhand, Mizoram, Tripura, Chhattisgarh, Arunachal Pradesh, Assam, Nagaland, Bihar, Manipur	28	Goa, Tamil Nadu, Karnataka, Punjab, Puducherry, Kerala, Haryana, Andhra Pradesh, Gujarat, West Bengal, Himachal Pradesh, Andaman & Nicobar, Rajasthan, Uttarakhand, Sikkim, Orissa, J&K, Chhattisgarh, UP, MP, Arunachal Pradesh, Jharkhand, Tripura, Assam, Meghalaya, Nagaland, Mizoram, Bihar, Manipur	29





	Orissa, Meghalaya, Mizoram, Jharkhand, Bihar, Manipur					
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**Table 3: Range-wise classification of States**

IFI Range	Number of States		
	1993	2003	2013
>.9 to 1			
>.8 to .9		1	
>.7 to .8	2		1
>.6 to .7		1	1
>.5 to .6			
>.4 to .5			
>.3 to .4	2	2	1
>.2 to .3	7	4	9
>.1 to .2	17	16	12
0 to .1	4	8	8
TOTAL	32	32	32

It is seen from the table that only two UTs namely Delhi and Chandigarh fall in the category of high level of financial inclusion. Goa and Maharashtra continued to be in the medium level during 1993 and 2003 but during 2013, Maharashtra remained in the same category but Goa pushed down to the category of lower level of financial inclusion. Majority of the states remained in lower category through- out the period under study. It is clear from the table that over the period of twenty years almost all the states continue to be in the same category and Goa is the only state which experienced the change and that too negative. It is interesting to note that despite showing signs of improvement over the period of ten years from 2003 to 2013, there was no upward shifts indicating the presence of high level of financial exclusion amongst the different states of India. To study further the extent of financial exclusion in depth, range-wise classification of states is depicted in Table 3. It is seen from the table that during 1993, only four states have FII less than 0.1 but the figure doubled in 2003 and 2013. Thus 25% of the states have a very high level of exclusion with FII below .01. Majority of the states, seventeen in 1993, sixteen in 2003 and twelve states in 2013 have FII between 0.1 to 0.2. Table 3 clearly shows that majority of the states falling in low level category lie at the extreme bottom indicating the presence of glaring level of financial exclusion. From the analysis, another important finding that comes out is that the level of financial exclusion increased during liberalization period because FII for the year 1993 depicts the effect of policies of pre-reform era (regulatory reforms) while the year 2003 shows the impact of post-reform era (de-regulation). During 2003 most of the states experienced downward trend in their FII. However, as the concept of financial inclusion gained ground in 2005 and since then a number of measures have been adopted to promote it, so the FII for the year 2013 shows the effect of these measures. The upward movement in the FII of most of the states clearly endorses the fact that the plans and policies are positively contributing to the goals of financial inclusion though a lot still needs to be done. The findings of the study are in line with the findings of the study carried out by Rupayan Pal and Rajendra R. Vaidya.

### Conclusion

Financial inclusion phrase, though gained momentum in India after 2005 but the plans and policies of the government has always been in this direction since the inception of the planning era. The main aim of nationalization of banks in 1969 was to reach to the masses and provide finance to hitherto neglected sectors of the economy on priority basis at reasonable rates. The banking sector has made a considerable progress since then and huge infrastructure has been created. What is disheartening to note is that despite rapid progress, the proportion of financially excluded is still very high till date. Despite all the policies aiming at reaching to the rural and unbanked areas for ensuring balanced regional growth, disparities continue to exist and showed an upward trend during post reform phase. In this paper, Index of Financial Inclusion has been prepared using UNDP approach for three points of time viz. 1993, 2003, 2013 by taking ten variables representing the different facets of financial inclusion. It is found that the level of financial inclusion is far lower than desirable in most of the states in India and glaring regional variations persist amongst the different states of India. Throughout the period of twenty years only two UTs namely Delhi and Chandigarh belong to the high IFI group and in 2013, one state i.e. Maharashtra belongs to medium group and rest all the states fall in low IFI group. Further, it is found that during pre-reform phase the disparities narrowed down but again



increased in post reform phase. In 2013, there are signs of improvement which may be attributed to the momentum this phrase gained since 2005. The presence of wide scale variations call for more consistent and vigorous efforts on the part of policy makers because lopsided development poses a threat to the sustainable growth by causing economic, social and political instability.

## References

1. Amidži Goran, Massara Alexander, and Mialou André (2014), "Assessing Countries' Financial Inclusion Standing —A New Composite Index" IMF Working Paper, WP/14/36.
2. Bagli Supravat and Dutta Papita (2012), "A Study of Financial Inclusion in India" Radix International Journal of Economics and Business Management, Volume 1, Issue 8. Available at <http://www.rierc.org/business/paper26.pdf>
3. Beck, H. T. L., Demirgüç-Kunt, A., & Peria, M. M. (2007), "Reaching out: Access to and use of banking services across countries" Journal of Financial Economics, 85, pp 234-266
4. Cámara Noelia and David Tuesta, "Measuring Financial Inclusion: A Multidimensional Index" Working Paper, No. 14/26 Madrid, September 2014,
5. Chakravarty Satya R. and Pal Rupayan (2010), "Measuring Financial Inclusion: An Axiomatic Approach" Available at <http://www.igidr.ac.in/pdf/publication/WP-2010-003.pdf>
6. Chattopadhyay Sadhan Kumar (2011), "Financial Inclusion in India: A case-study of West Bengal" RBI Working Papers series W P S (DEPR): 8 / 2011, Dept. of Economic and Policy Research,
7. Cyn-Young Park and Rogelio V. Mercado, Jr., "Financial Inclusion, Poverty, and Income Inequality in Developing Asia", ADB Economics Working Paper Series, No. 426, 2015. Available at <http://www.adb.org/sites/default/files/publication/153143/ewp-426.pdf>
8. Gupta, Anurag, Chotia, Varun & Rao, Muralidhar NV (2014), "Financial Inclusion and Human Development: A State-wise Analysis from India" International Journal of Economics, Commerce and Management, United Kingdom Vol. II, Issue 5.
9. Kumar Chandan and Mishra Srijit (2011), "Banking Outreach and Household level Access: Analyzing Financial Inclusion in India.
10. Laha Arindam and. Kuri Pravat Kumar (2011). "Determinants of Financial Inclusion: A Study of some selected districts of West Bengal, India" *Indian Journal of Finance* 5(8) pp29-36.
11. Laha Arindam and Kuri Pravat Kumar (2011), "Demand for and Supply of Financial Inclusion in India: An Inter-State Analysis" ELK Asia Pacific Journal of Finance & Risk Management.
12. Mehrotra, N, Puhazhendhi, V, Nair, G and Sahoo, B. B (2009): Financial Inclusion- An Overview, Occasional Paper – 48, Department of Economic Analysis and Research National Bank for Agriculture and Rural Development, Mumbai, 2009 . Available at [https://www.nabard.org/pdf/OccasionalPaperFinancialInclusion\\_080509.pdf](https://www.nabard.org/pdf/OccasionalPaperFinancialInclusion_080509.pdf)
13. Pal Rupayan and Vaidya Rajendra R. (2011), "Outreach of Banking Services across Indian States, 1981–2007 Converging or Diverging?" India Development Report 2011 pp 141-154. .
14. Rajput Namita and Oberoi Shelly (2013), "Reaching the Unreached: Financial Inclusion in India- A Study" Available at [http://www.internationalseminar.org/XV\\_AIS/TS%201/3.%20Ms.%20Shelly%20Oberoi.pdf](http://www.internationalseminar.org/XV_AIS/TS%201/3.%20Ms.%20Shelly%20Oberoi.pdf)
15. Sahu Kabita Kumari (2013), "Commercial Banks, Financial Inclusion and Economic Growth in India" International Journal of Business and Management Invention, [www.ijbmi.org](http://www.ijbmi.org) Volume 2 Issue 5, May 2013, PP. 01-06. Available at <http://www.ijbmi.org/papers/Vol%282%295/version-2/A250106.pdf>
16. Sarma Mandira (2008), "Index of Financial Inclusion" Available at [http://icrier.org/pdf/Working\\_Paper\\_215.pdf](http://icrier.org/pdf/Working_Paper_215.pdf) [www.crisil.com/about-crisil/crisil-inclusix.html](http://www.crisil.com/about-crisil/crisil-inclusix.html).