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## A study of financial inclusion in India

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### Abstract

Recently India has taken numerous steps in the direction of economic inclusion for attaining quicker inclusive growth. This take a look at seeks to have a look at the success of the Indian states concerning the financial inclusion. By applying the method of Rotated Principal Component Analysis this take a look at has computed a complete degree of financial inclusion for every state. For this evaluation ten signs of economic Inclusion were considered. This take a look at has used the facts posted through the Reserve Bank of India (RBI) and the Government of India. Ranks of the states according with the Composite rating display that despite the fact that the country of Goa is the best, maximum of the states in southern vicinity have accomplished higher in phrases of economic inclusion. However, the ranges of financial inclusion of the states in India have a low suggest and excessive disparity. This take a look at has discovered a robust advantageous affiliation among the human improvement and the financial inclusion of the states in India.

**Keywords:** Financial inclusion, Global indexes, RBI

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### 1. Introduction

The minimum banking offerings have the character of quasi-public items for which exclusion precept does now no longer characteristic efficiently. So, every citizen of a rustic need to have get entry to the minimum banking offerings without any discrimination. However, it did now no longer arise in any us of a. There can be a few those who voluntarily exclude themselves. But the deprived segment of the populace in everyone us of a commonly fails to have get entry to the offerings of formal economic establishments. It is these days termed as economic exclusion. RBI has stated that the economic exclusion in India results in the lack of GDP to the quantity of one percent [RBI, Working Paper Series (DEPR): 8/2011]. The externality of asymmetric statistics among the economic establishments and the deprived segment of the populace can be the primary motive of this exclusion. Besides, the geographical distance from financial institution, diffident, economic illiteracy, gender-inequality, paucity of profits and collateral assets, loss of evidence of identification of the deprived human beings are the conceivable reasons of economic exclusion. On the alternative hand scarcity of staff, excessive transaction fee, financial viability of the extension of department etc. are they not unusual place issues of the economic establishments in extending economic offerings to the deprived segment. So, there may be a vast scope of accomplishing overall economic inclusion in a rustic if it adopts essential steps to lessen the statistics gap. Against this backdrop, India has taken numerous steps towards economic inclusion. The top goal of those steps is to offer banking offerings at a less expensive fee to the weaker segment of populace. Since 2004 the Government and the economic regulators of India had been encouraging economic establishments to clear up these issues. In this context the SHG-centric microfinance programme has additionally obtained a deep attention. Some different steps like facility of 'no frills' account, Kisan Credit Card, have additionally been followed to gain overall economic inclusion with the aid of using 2015. In India economic inclusion has been began out with opening 'no frills' account and issuing some General Purpose Credit Cards for all. However, it isn't the give up of the tale of economic inclusion.

It emphasizes at the get entry to primary formal economic offerings at a less expensive fee in a sustainable way for the susceptible human beings (NABARD, 2008) <sup>[9]</sup>. Therefore, Financial Inclusion refers to a state of affairs in which human beings, in general, have reference to the formal economic establishments via protecting financial savings financial institution account, credit score account, coverage policy etc. It can also additionally assist the man or woman to have less expensive get entry to economic offerings like formal financial savings, credit score, payments, coverage, remittance etc. It hurries up the movement of foreign money and thereby will increase the GDP. Therefore, economic inclusion is vital for quicker inclusive growth. This take a look at has deliberated to rank the states in India in accordance with their overall performance concerning the economic inclusion. The next segment has reviewed the literature and said the objectives. Section three specifies the technique and information source. The findings had been supplied in segment four and segment five concludes this take a look at.

## 2. Literatures reviewed

In latest instances economic inclusion has regarded as a chief international agendum. At aggregate level, the not unusual place degree of economic inclusion are the wide variety of financial institution account according to adult, geographic department penetration, demographic department penetration, geographic ATM penetration, demographic ATM penetration, demographic deposit penetration, demographic credit score penetration, deposit earnings ratio, credit score earnings ratio and coins deposit ratio Chattopadhyay (2011) <sup>[3]</sup>. However, those researches did now no longer increase any composite index of economic inclusion. Sarma, (2007) <sup>[12]</sup> first computed the economic inclusion indices of forty five international locations for the year 2004. She has built the index thinking about the signs - the wide variety of financial institution bills according to hundred populations, the wide variety of financial institution branches according to thousand population and the ratio of financial savings and credit score to GDP of the country. Considering the nearly similar signs Chattopadhyay (2011) <sup>[3]</sup> has advanced the economic inclusion index for the primary states in India and for all of the districts in West Bengal. Karmakar, *et al.* (2011) <sup>[8]</sup> has built the economic inclusion for rural regions of the primary twenty states in India. They have taken into consideration wide variety of rural outlets, wide variety of bills according to outlet, according to outlet deposit quantity, according to outlet credit score quantity and according to account deposit quantity as indicator of economic inclusion. In order to evaluate the overall performance of the general public zone banks the Finance Minister of India has added Financial Inclusion Index primarily based totally on criteria, namely, the wide variety of extra branches included and the wide variety of recent no-frill account opened (Government of India, 2011) <sup>[5]</sup>. All the research has observed the same technique used for computation of Human Development Index and taken into consideration the size similarly essential. But every size might not be similarly essential to decide economic inclusion. So to increase a complete index of economic inclusion first, researchers have to derive the relative importance (weight) of the signs then compute the weighted common of the dimensional indices. Besides, the signs utilized by the research are now no longer good enough for gauging all viable dimensions of economic inclusion.

There can be other signs which include participation in SHG, according to capita mortgage superb etc. Varman P (2005) <sup>[15]</sup> has located that the SHGs in Tamil Nadu have inculcated the banking conduct withinside the rural humans. Several empirical research (Adhikary and Bagli, 2010, 2011) <sup>[1, 2]</sup> performed in West Bengal have proven that SHGs create a easy course of economic inclusion for the agricultural poor. The wide variety of overall deposit bills has extended to 734.eight million and credit score account to 118.6 million in 2010 for all banks and the wide variety of no-frill bills in all public and personal banks has extended to 33 million in 2009 from seven million in 2006 (RBI, 2010) <sup>[11]</sup>. Besides, KCC scheme has added ninety five million farmers below the purview of the banking machine in 2010 as in opposition to 84.6 million farmers in 2009 and the SHG financial institution linkage programme has helped seven million rural humans to have get admission to formal financial savings and formal credit score (Government of India, 2011) <sup>[5]</sup>.

## 3. Objectives of the study

Against this backdrop of literatures reviewed, to examine financial inclusion has set the following objectives as follows.

- First, this research examines the relative significance of the signs of financial inclusion.
- Second, we increase a composite index of financial inclusion for every country in India.
- Third, it has tested the degree of an affiliation between human improvement and financial inclusion.

## 4. Methodology and Data Used

Different researches have taken into consideration distinct units of the signs of monetary inclusion in accordance with their goals. Majority of the signs are not unusual place in all units. This examine has attempts to encompass maximum of the signs observed in literature for assessing the overall performance of the states in financial inclusion. The signs taken into consideration on this examine have been indexed in table-1.

**Table 1:** List of the Indicators of Financial Inclusion

Indicators
Number of bank branches per lakh population aged 7+ year
Number of banks per thousand square kilometer
Number of Self-Help Groups per hundred poor population
Number of deposit accounts per hundred population aged 7+year
Number of credit accounts per hundred population aged 7+ year
Percentage of savings to net state domestic product
Percentage of credit outstanding to net state domestic product
Per capita Domestic Savings (Rs. '000)
Per capita Loan Outstanding (Rs. '000)
Credit deposit ratio (percentage)

*Source:* Author's compilation

In order to derive the relative significance of the signs of financial inclusion and to assemble the Financial Inclusion Index for every kingdom in India this look at has implemented the method of Principal Component Analysis (PCA) on the chosen signs of monetary inclusion. Apart from deriving the relative weight of the signs, this method develops a small variety of uncorrelated variables referred to as Principal Components (PCs) from a hard and fast of big variety of variables. Initially, Principal Components were extracted through Kaiser Criteria which considers best the

additives having Eigen value more than one. However, in case of PCA without rotation, the eigenvectors won't align near the records clusters and hence won't attention the real states as well. The turned around PCA techniques rotate the PCA Eigen vectors in order that they align in the direction of the cluster of records. This look at has implemented Varimax rotation strategy, which maximizes the variance of the turned around squared PCs. PCA has been turned around specifying the constant variety of additives. Respective turned around aspect rankings were received through regression method. Finally, the Composite Index of Financial Inclusion (CIFI) has been calculated taking the weighted sum of aspect rankings. The weight of a selected PC is the share of versions

within side the records set defined through the respective PC after rotation. In order to observe the degree of association among financial inclusion and human improvement of the states this look at has calculated the Pearson correlation coefficient of Human Development Index (HDI) and CIFI. To look at the character of financial inclusion of 28 states in India, this look at has used the state wise secondary move phase records for the year 2009 posted through RBI in BSR, 2010, latest records through the Government of India in Economic Survey 2010-11, Census Report 2011 and records of SHGs from Status of Micro Finance 2009-10, NABARD. The correlation evaluation is based at the records of HDI from India Human Development Report, 2011.

**Table 2:** Descriptive Statistics of the Indicators of Financial Inclusion

Statistics	No. of Banks per thousand KM2	No. of Banks per lakh population	Credit Net State Domestic Product Ratio (%)	Deposit Net State Domestic Product Ratio (%)	No. of deposit accounts per hundred-population	No. of credit accounts per hundred-population	Per capita Savings (Rs, '000)	Per capita Loan Outstanding (Rs, '000)	Credit deposit ratio (%)	No. of SHGs per hundred poor population
Mean	29.29	9.29	46.59	88.94	65.21	8.79	36.03	18.94	51.69	2.95
S. D	28.46	5.39	32.15	32.04	42.59	5.88	33.58	18.53	22.90	4.44
Min.	0.95	3.42	17.55	48.71	20.83	3.12	10.20	2.73	25.29	0.30
Max.	113.54	31.87	172.91	189.56	251.84	28.00	179.60	91.47	108.09	23.93

Source: Author's compilation

According to Table 2, there are 65 average deposit accounts for every 100 people aged seven and older, but there are only 9 typical credit accounts. Therefore, even though there is wide variety, the average savings growth of the state's paints a reasonable picture of financial inclusion. The credit-widening statistic is discouraging, though. The variances of the number of banks per lakh and per thousand of the population square kilometers demonstrate the expansion of bank branches in accordance with the population density that is out of proportion to the land area. It might contribute to the north-eastern Indian states' severe financial marginalization despite their Human development is moderate. The average saving-to-income ratio for the states has been found to be rather high. On average, institutional credit has financed 47% of net state domestic income. It seems like a reliable sign of financial inclusion. It demonstrates that, on average, Indian states have attained a good position in terms of financial development. It can be seen that there are significant differences across the states in terms of per capita savings and per capita loan outstanding. In all the states, there has been a noteworthy increase in SHGs that cover the poor and fall

under the jurisdiction of conventional financial institutions.

**Table 3:** Results of Kaiser-Meyer-Olkin and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.758
Bartlett's Test of Sphericity	Approx. Chi-Square	369.525
	df	45
	Sig.	.000

Source: Author's compilation

The sample size in this study is sufficient for factor analysis, as shown in table 3 by the Kaiser-Meyer-Olkin (KMO) measure of Sampling Adequacy value of 0.758 (higher than 0.5 is ideal). In Bartlett's Test of Sphericity, the value of the chi-square statistic is statistically significant. It demonstrates the inter correlation of the chosen financial inclusion indicators. Therefore, PCA is a good tool for this situation to analyse the significance of the chosen variables in financial inclusion.

**Table 4:** Total Variance Explained

Component	Initial Eigen values			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	5.209	52.095	52.095	5.209	52.095	52.095	3.902	39.015	39.015
2	2.245	22.447	74.542	2.245	22.447	74.542	3.525	35.248	74.263
3	1.140	11.402	85.943	1.140	11.402	85.943	1.168	11.680	85.943
4	.796	7.964	93.907						
5	.332	3.320	97.227						
6	.133	1.328	98.555						
7	.089	.885	99.440						
8	.037	.369	99.809						
9	.015	.150	99.959						
10	.004	.041	100.000						

Source: Author's compilation

The comprehensive PCA results are displayed in tabTable-4, and they indicate the variation that was explained by each component in the initial condition, after extraction, and after rotation. Kaiser Criteria were used to extract the components, which were then rotated using the Varimax rotational approach. Three main components with Eigen values larger than one were taken into account in this study. According to Rotation Sums of Squared Loadings, the first rotated

principal component accounts for 39.015 percent of the overall variation in the states' financial inclusion. The variance has been explained by the second and third rotated main components in corresponding amounts of 35.248 and 11.680 percent. 85.943 percent of the overall variation in the financial inclusion of the states may be attributed to three factors.

**Table 5:** Component Score Coefficient Matrix

All factor loading			Indicators of Financial Inclusion	Highest factor loading		
Component 1	Component 2	Component 3		Component 1	Component 2	Component 3
.228	-.045	.194	No. of Banks per thousand KM2	.228		
.287	-.117	.001	No. of Banks per hundred thousand population	.287		
-.095	.311	-.092	Credit Net State Domestic Product Ratio (%)		.311	
.079	.094	-.317	Deposit Net State Domestic Product Ratio (%)		.094	
-.144	.304	.115	Credit deposit ratio (%)		.304	
.279	-.078	.053	No. of deposit accounts per hundred-population	.279		
.232	-.019	-.099	Per capita Savings (Rs., '000)	.232		
.017	.252	.204	No. of credit accounts per hundred population		.252	
.028	.227	-.063	Per capita Loan Outstanding (Rs., '000) (₹, '000)		.227	
.049	.039	.809	No. of SHGs per hundred poor population population			.809

**Source:** Author's compilation

The rotating factor loadings for the chosen indicators of financial inclusion are shown in Table 5 below. The indicators with the highest factor loading on component 1 are the per capita savings, the number of deposit accounts per 100 people, the number of banks per lakh people, and the number of banks per thousand square kilometers. Together, these variables account for the biggest percentage of variation in financial inclusion. Therefore, they are the most significant financial inclusion metrics. The indicators with the largest loading for component 2 are the ratios between credit and

state domestic product, deposit and state domestic product, credit deposit ratio, number of credit accounts per 100 people, and per capita outstanding loan. These indicators clearly explain the second-largest portion of the sample's variance. The secondary indicators of financial inclusion are therefore because of these. Last but not least, component 3's only indication, the number of SHGs per 100 poor populations, has substantial burdens. It attests to the fact that they are additional markers of financial inclusion in India.

**Table 6:** Composite indices of financial inclusion and human development indices from 2011 to 2021

NAME	Factor-1	Factor-2	Factor-3	CIFI	Rank	HDI
Goa	4.45414	-0.72952	-0.32618	144.25	1	61.70
Maharashtra	0.1414	3.738	-1.11829	124.21	2	57.20
Kerala	1.14818	0.48625	1.52051	79.7	3	79.00
Tamilnadu	-0.17423	1.94784	0.8057	71.27	4	57.00
Karnataka	0.10797	1.32277	-0.15032	49.08	5	51.90
Andhra Pradesh	-0.35053	1.23475	1.13212	43.07	6	47.30
Punjab	0.73724	0.24352	-0.1917	35.11	7	60.50
Tripura	-0.03783	-0.46571	4.09406	29.93	8	57.30
Himachal Pradesh	0.54129	-0.50387	0.08165	4.31	9	65.20
Haryana	0.18349	-0.12505	0.01389	2.91	10	55.20
West Bengal	-0.13222	-0.02871	0.06786	-5.38	11	49.20
Uttarakhand	0.60332	-0.50116	-0.97447	-5.51	12	49.00
Sikkim	0.15036	-0.08408	-0.99386	-8.71	13	57.30
Gujarat	-0.21038	0.04447	-0.28053	-9.92	14	52.70
Jammu & Kashmir	-0.18152	-0.1646	-0.90327	-23.43	15	52.90
Rajasthan	-0.81879	0.22395	-0.07242	-24.9	16	43.40
Orissa	-0.46801	-0.2357	0.11308	-25.25	17	36.20
Mizoram	-0.55395	-0.22079	0.262	-26.33	18	57.30
Uttar Pradesh	-0.27351	-0.4769	-0.35353	-31.61	19	38.00
Madhya Pradesh	-0.67363	-0.11957	-0.43053	-35.53	20	37.50
Meghalaya	-0.2796	-0.76363	-0.21351	-40.32	21	57.30
Jharkhand	-0.33205	-0.64132	-0.6284	-42.9	22	37.60
Assam	-0.54767	-0.65934	0.04027	-44.14	23	44.40
Arunachal Pradesh	-0.33214	-0.67137	-0.74113	-45.28	24	57.30
Nagaland	-0.64199	-0.70295	0.16175	-47.94	25	57.30
Chhattisgarh	-0.70191	-0.53573	-0.22327	-48.88	26	35.80
Bihar	-0.40046	-0.82511	-0.47367	-50.24	27	36.70
Manipur	-0.95696	-0.78642	-0.21782	-67.6	28	57.30

**Source:** Author's compilation

The corresponding rotated component scores were determined using the regression approach and are shown in table 6 below. These three rotated major components were used for calculating the composite index of financial inclusion since they contributed significantly to the explanation of the overall variance. The corresponding proportion of changes described by each rotated component has been multiplied by the acquired rotated component scores. In order to determine the composite ratings of the states, the products have finally been added up. The Composite Index of Financial Inclusion (CIFI) is the name given to this composite score for the state. Goa has the highest level of financial inclusion in terms of CIFI. In terms of the human development index for 2007–2008, Kerala was ranked first, followed by Maharashtra in second place with a score of 124.

With the exception of Gujarat, the western states have done well in terms of financial inclusion. Gujarat's economy has recently experienced rapid growth, however its results in terms of financial inclusion are not adequate. Gujarat has failed to achieve inclusive growth, on which the article focuses. Poor financial inclusion in the state of Gujarat may be caused by the unorganized sector's relative rapid growth. In terms of financial inclusion, Andhra Pradesh, which is ranked sixth among Indian states, has the most SHGs established. Four of the top six states, including Kerala (third), Tamil Nadu (fourth), Karnataka (fifth), and Andhra Pradesh (sixth), come from the southern region of India.

As a result, India's southern region has improved in terms of financial inclusion performance. West Bengal has held the 11th spot despite having a robust network of banks and cooperatives. In the northeastern region of India, five of the seven sibling states are located near to the bottom rows. It

might occur as a result of poor communication and a lack of nearby financial service providers. Most states have so far maintained low or very low levels of financial inclusion. When it comes to how well each state performs in terms of financial inclusion, there is a significant degree of variation. However, not all states' low levels of financial inclusion have the same root causes. They are unique to the area. For instance, low levels of financial inclusion may be attributed to low levels of education and income in Bihar, Jharkhand, Chhattisgarh, and Madhya Pradesh. Poor information technology has entrenched the issue of financial exclusion in Manipur and Nagaland. It shows that India will struggle to achieve true financial inclusion in its entirety by 2015.

**Table 7:** Correlations among Per Capita State Domestic Product, CIFI and HDI

	PCSDP	CIFI	HDI
PCSDP	1	.243 (.213)	.329 (.088)
CIFI		1	.515** (.005)
HDI			1

*Source:* Author's compilation

According to Table 7, there is a substantial and positive linear correlation between HDI and FII. However, there is no statistically significant correlation between the per capita state domestic product (PCSDP) and financial inclusion. Therefore, financial inclusion does not inherently promote growth, nor is income a key factor in determining financial inclusion. However, financial inclusion can encourage human development, which quickens the pace of financial inclusion.

**Table 8:** Growth percentage of India's Global financial inclusion

Series Name	2011	2014	2017	2021
Financial inclusion account, older (% age 25+)	38.03	56.33	83.04	81.23
Financial inclusion account, income, richest 60% (% ages 15+)	40.73	58.93	81.68	76.74
Financial inclusion account, in labor force (% age 15+)	43.56	63.02	83.82	81.06
Financial inclusion account (% age 15+)	35.23	52.75	79.84	77.3
Financial inclusion account, female (% age 15+)	26.49	42.64	76.64	77.47
Financial inclusion account, income, poorest 40% (% ages 15+)	26.97	43.48	77.08	78.15
Financial inclusion account, male (% age 15+)	43.74	62.47	82.94	77.15
Financial inclusion account, out of labor force (% age 15+)	25.71	40.52	75.06	72.66
Financial inclusion account, rural (% age 15+)	..	..	..	77.03
Financial inclusion account, urban (% age 15+)	..	..	..	77.62
Financial inclusion account, secondary education or more (% ages 15+)	59.47	63.95	84.94	80.74
Financial inclusion account, primary education or less (% ages 15+)	30.51	42.88	75.3	75.84
Financial inclusion account, young (% ages 15-24)	27.3	43.11	71.4	66.86

*Source:* Reports from database of Global Financial Inclusion Last Updated: 06/28/2022

## 5. Conclusion

Using a variety of factors, this study created a composite index of financial inclusion for each state. According to the CIFI computed numbers, the financial inclusion situation in India's states is not good at the moment. In the foreseeable future, increasing financial inclusion would be beneficial for governments, financial regulators, and other entities that create policy. The disadvantaged groups of our society are typically disenfranchised financially. Most of the time, their means of subsistence are not monetized, and they are excluded from the financial system. Additionally, they lack a thorough understanding of the banking services that are offered; on the other hand, banking officials lack a thorough

understanding of the requirements and capabilities of the people covered by this section. Banks are unable to include them under the concept of financial inclusion as a result. Therefore, in order to achieve financial inclusion, there must be widespread financial literacy and awareness among the disadvantaged groups of people. In contrast to this, financial institutions must be approachable and socially accountable in order to achieve full financial inclusion.

## 6. References

1. Adhikary ML. Bagli S. Impact of SHGs on Financial Inclusion-A case Study in the District of Bankura', Journal of Management and Information Technology.

- 2010;2(1):16-32.
2. Adhikary ML, Bagli S. SHGs and Access to Affordable Credit An Empirical Study in Bankura District in S. K. Dutta (Eds.), *Development and Rural Livelihood*, Department of Economics, Burdwan University. & Levant Books, Kolkata; c2011;170-191.
  3. Chattopadhyay SK. *Financial Inclusion in India: A Case-study of West Bengal*, RBI Working Paper Series (DEPR); c2011. 8/2011, Available at: <http://www.rbidocs.rbi.org.in> [Accessed on 22 January, 2012]
  4. Dr. Supravat Bagli, Papita Dutta. *A Study of Financial inclusion in India*”, *Radix International Journal of Economics & Business Management (RIJEB)*; c2012;1(8). ISSN: 2277-1018.
  5. Government of India. *Provisional Population Totals*, Paper 1 of 2011 India Series1, Table 2(2), Ministry of Home Affairs; c2011. Available at: <http://www.censusindia.gov.in/> [Accessed on 22 January, 2012]
  6. Government of India. *Economic Survey, c2010-11*, Ministry of Finance, Department of Economic Affairs, Oxford University Press, New Delhi; c2011.
  7. Government of India. *India Human Development Report 2011, Toward Social Inclusion*, Institute of Applied Manpower Research Planning Commission, Oxford University Press, New Delhi; c2011.
  8. Karmakar KG, Banerjee GD, Mohapatra NP. *Towards Financial Inclusion in India*’, Sage Publications India Pvt. Ltd, New Delhi; c2011.
  9. NABARD. *Report of the Committee on Financial Inclusion*’, January; c2008, Available from: [www.nabard.org/pdf/report](http://www.nabard.org/pdf/report) [Accessed on 16 September, 2011]
  10. NABARD. *Status of Micro Finance in India 2009-10*, Available from: <http://www.nabard.org> [Accessed on 22 January, c2012]
  11. Reserve Bank of India. *Basic Statistical Returns of Scheduled Commercial Banks in India c2010*’, 2010. Table No. 1.5, Available from: [http //www.rbi.org.in](http://www.rbi.org.in) [Accessed on 22 January, 2012]
  12. Sarma M. *Index of Financial Inclusion A Concept Note*, ICRIER Working paper No. 215 Indian Council for Research in International Economic Relations, New Delhi; c2008. Available from: <http://www.icrier.org/pdf/mandira> [Accessed on 14 January 2010]
  13. Varman PM. *Impact of Self-Help Groups on Formal Banking Habits*, *Economic and Political Weekly*. 2005;50(17):1705-1713.
  14. Papita Dutta. *Financial Inclusion in India: An Intertemporal Study*, *India Studies in Business and Economics*, in: Supravat Bagli & Gagari Chakrabarti & Prithviraj Guha (ed.), *Persistent and Emerging Challenges to Development*; c2022;411-432.
  15. <https://vikaspedia.in/social-welfare/financial-inclusion/financial-inclusion-in-india>
  16. <https://data.imf.org/regular.aspx?key=61063966>
  17. <https://databank.worldbank.org/reports.aspx?source=1228#>