# Financial Inclusion in India : An Analysis of Pattern and Determinants

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## Abstract

**The paper analyzed the pattern, progress, and determinants of financial inclusion in India during the post-reform period. Secondary data for 28 Indian states for the years from 2001 and 2011 was used. A multiple regression model was used to examine the determinants. Though India has witnessed an increase in percentage of people accessing banking services, particularly deposits in the post-reform period, a large exclusion of rural people from banking services is still a concern. The regression analysis suggested that the increase in the number of bank accounts availed by households is determined by factors such as the number of bank branches, population dependency per branch, and industry concentration in the state. Socioeconomic factors like per-capita income of the state, literacy rates, and urbanization did not emerge to be significant factors. Branch penetration has played an important role in financial inclusion in India. Effective implementation of the financial literacy programmes and leveraging existing bank branches will help in achieving greater financial inclusion. Incentive-based programs like Jan-Dhan Yojana have an important role to play in this regard.**

***Key words:*** **financial inclusion, determinants of financial inclusion, access to banking services, rural banking, financial inclusion policy, SHG**

**JEL Classification : G00, G18, G20, G21**

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Financial inclusion refers to the process of ensuring access to banking services for all sections of people in the society without any discrimination. It would help the people from lower income strata to build their savings, avail credit, insure themselves against income shocks, and meet emergencies such as illness or loss of employment. It would also help the banks in mobilizing a large number of low-cost deposits that would help manage both liquidity risks and asset-liability mismatches. Both the union government and sub-national governments have been implementing policies and incentives for financial inclusion. Similarly, the Reserve Bank of India (RBI) has also taken several policy initiatives in order to make financial services available to all sections of the society. Some of the major policy measures (see the Appendix Table 1) are nationalization of banks, self help groups-bank linkage programme, and business facilitator or business correspondent models. The recent announcement of Prime Minister's Jan Dhan Yojana (PMJDY) is a step in this direction. This policy is not only incentivized, but a massive awareness is made for the same in electronic and print media. An account opened here is also linked to the Aadhar number in order to avail LPG subsidy. The PMJDY is getting momentum and in first few months of its implementation, a record number of accounts have been opened.

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As per the Rangarajan Committee Report (2008) on financial inclusion, financial inclusion is defined "as the process of ensuring access to financial services and timely and adequate credit where needed by vulnerable groups such as the weaker sections and low-income groups at an affordable cost" (p.1). Financial inclusion can be analyzed in two important ways: Credit penetration (CP) and deposit penetration (DP). Credit penetration is the number of loan accounts, and deposit penetration is the number of savings bank accounts opened at a certain period of time and place. Deposit penetration is the key driver of financial inclusion (CRISIL, 2013). Keeping this in mind, in the present study, we have confined our analysis to deposit penetration only. There are several socioeconomic factors, like per-capita income of the state, literacy rates, urbanization, and industrial concentration that play an important role in analyzing the extent of financial inclusion. The findings of Kumar (2013) have validated the importance of regional economic conditions on the betterment of financial inclusion. So, it is important to examine the factors determining the degree of financial inclusion in a state.

Fastest growing economies of the world like India need to make sure that the growth is not skewed, and all sections of the society benefit from this growth process. Sustainability of the growth process is threatened when certain sections of the society are bypassed (Pathak, 2011). Financial exclusion leads to loss of opportunities of growth for an individual, which leads to loss of output for an economy and a reduction in the social welfare. These excluded sections are forced to turn to the informal sector to meet their medical and social obligations and get trapped into a vicious cycle of poverty and social exclusion.

Till 2011, only 58.7% of the households availed banking services in India. In rural areas, the number still remains low at 54.4%, and the figure was 67.8% in urban areas (Census of India, 2011). This financial exclusion could be on the grounds that the individual has either no savings/assets and hence, no savings/current account in a bank. Also, these individuals may not have access to any financial advice and perceive the cost of financial services as not affordable. There are other socioeconomic factors that play an important role in analyzing the extent of financial inclusion. Hence, it is important to analyze the pattern and growth of financial inclusion in our country.

Literature examining the perspective and importance of financial inclusion has been developed both at the national and international levels. The World Development Report (2008) of the World Bank (2007) identified that transaction costs ; price and production risks ; limited assets ; legal, regulatory, and supervisory framework ; and seasonality and demand for smaller loans are the major constraints for increasing access to finance. It is shocking to know that a large amount of people below the poverty line do not have access to financial services. Large numbers of branches were opened by banks in rural areas, encouraging self-employment through cheap subsidized credit for decades but with inappropriate policies, services, and loan products. The loan products of large amounts did not suit the needs of the poor, what they actually need is better access to these deposit services and products rather than subsidized credit (Pathak, 2011). A study conducted in Hooghly by Majumdar and Gupta (2013) showed that it is the higher class of society who actually benefits from the schemes implemented. Hence, it is necessary to study the socioeconomic structure of a place before implementing any such schemes. Ananth and Öncü (2013) argued that banks need to look at financial inclusion not as a capital expense or a charitable expense, but as a long-term investment. In line with the economic intuition, studies like the one conducted by Kumar (2013) highlighted that increase in bank branch network (captured by average population per branch) has a beneficial impact on deposit and credit penetration.

Studies have also been conducted on the kind of bank preferences. The Global Financial Development Report (2014) (The World Bank, 2014) found a very interesting fact on the use of bank accounts: 50% of the population had bank accounts and used them, 11% did not use their accounts because they did not have money. The remaining 39% did not use their accounts because of reasons like lack of trust, lack of documentation, distance to bank, religious reasons, or another family member already having an account. Hence, it is necessary to make people aware of the benefits of a good banking habit. The Nachiket Mor Committee favoured regional rural banks for meeting the goals of financial inclusion, but a useful study by Sangwan (2014) in Punjab pointed out that small branches of commercial banks are preferred by the villagers.

Panda (2007a), Panda (2007b), and Panda (2007c) emphasized on the importance of micro financing to the self-help groups (SHG) for empowerment of women, economic developments, managing poverty, and addressing the credit penetration side of financial inclusion. He also analyzed what factors need to be emphasized in order to make SHG-micro financing a success. Jerold (2008) highlighted the need of franchisee arrangements by banks with micro-credit institutions, self help groups, and non-government organizations in India for providing banking solutions for the urban poor and rural masses.

Siddik, Sun, and Kabiraj (2015) constructed a financial inclusion index for districts in Bangladesh and observed that rural population, household size, literacy rate, paved road networks, Internet, and deposit penetrations were significant determinants of financial inclusion. Verma and Garg (2016) analyzed the Pradhan Mantri Jan Dhan Yojana (PMJDY) as an important scheme for financial inclusion in India and ascertained the level of public awareness about the scheme.

From the analysis of above literature, it is clear that most of the studies have focused on banks, their branches, and the number of people availing banking services and credit services. The studies are mainly based on primary data based on household surveys. The various socioeconomic factors and the regional economic conditions are often ignored. Furthermore, there are no exclusive studies available on deposit penetration. In the present study, our focus is to find the influence of state level factors on financial inclusion. In this perspective, the main objective of this paper is to analyze the pattern and growth of households having bank accounts in India and the various determinants of financial inclusion.

## Data and Methodology

The necessary data for analysis was obtained from various sources of secondary data for the years 2001 and 2011 for all Indian states. Considering the data constraints on access to credit, we have limited our analysis only to deposit penetration. The data on percentage of households having bank accounts was taken from Census reports for the years 2001 and 2011. The data pertaining to the number of bank branches was taken from different volumes of branch banking statistics, Reserve Bank of India (RBI). Here, we have added up both the number of commercial banks and co-operative banks to get the total bank branches. The average population per branch in lakhs obtained by dividing the population in lakhs by the total number of bank branches is also collected from the same source. Comparable gross domestic product (GSDP) data taken from the Central Statistical Organization (CSO) was divided by population to get per-capita values. Data pertaining to literacy rates and urbanization was taken from Census 2011. Information on the number of industries in each State was collected from the Annual Survey of Industries 2011.

The simple percentage ratio method was used for analyzing the pattern. A multiple regression equation was employed to analyze the determinants of financial inclusion. The percentage of households availing banking services is the dependent variable. The independent variables taken in the study are: total number of bank branches, which is an aggregate of commercial and cooperative bank branches both in rural and urban areas; average population per branch is the ratio of population (in lakhs) to the total number of branches in the specific territory; per-capita income of the states is the total income divided by the total population; literacy rates show the percentage of literate people in the state; urbanization is the total urban population divided by total population; industrial concentration is the total number of factories located in the state to the total number of firms in the country. The summary statistics of the variables is presented in the Table 1.

✦ **The Model :** In order to analyze the determinants of financial inclusion in Indian states, a multiple regression equation of the following form is used :

$$Y = \alpha + \beta_1 \mathrm{Ln}(X_1) + \beta_2 \mathrm{Ln}(X_2) + \beta_3 \mathrm{Ln}(X_3) + \beta_4 (X_4) + \beta_5 (X_5) + \beta_6 (X_6) + E_i$$

Table 1. Summary Statistics of the Variables Used

| Variable | Obs. | Mean | Std. dev. | Min | Max |
|---|---|---|---|---|---|
| Percentage of households availing banking services | 28 | 59.12 | 15.52 | 29.6 | 89.1 |
| Total number of bank branches | 28 | 3245.17 | 3183.77 | 77 | 11267 |
| Average population per branch (in lakh) | 28 | 14.96 | 6.45 | 4 | 33 |
| Per-capita income of states | 28 | 36150.89 | 16860.08 | 12012 | 96884 |
| Literacy rates | 28 | 75.97 | 8.27 | 61.8 | 94 |
| Urbanization | 28 | 30.67 | 12.54 | 10.04 | 62.17 |
| Industrial concentration | 28 | 3.57 | 4.78 | 0 | 18.13 |

Source: Authors' own calculation; basic data - Census reports, ASI, & CSO

Table 2. Households Availing Banking Services (in %)

| All-India | 2001 | 2011 | Change |
|---|---|---|---|
| Total | 35.5 | 59.01 | 23.51 |
| Rural | 31.91 | 54.42 | 22.51 |
| Urban | 52.1 | 70.6 | 18.5 |

Source: Census 2001 &2011

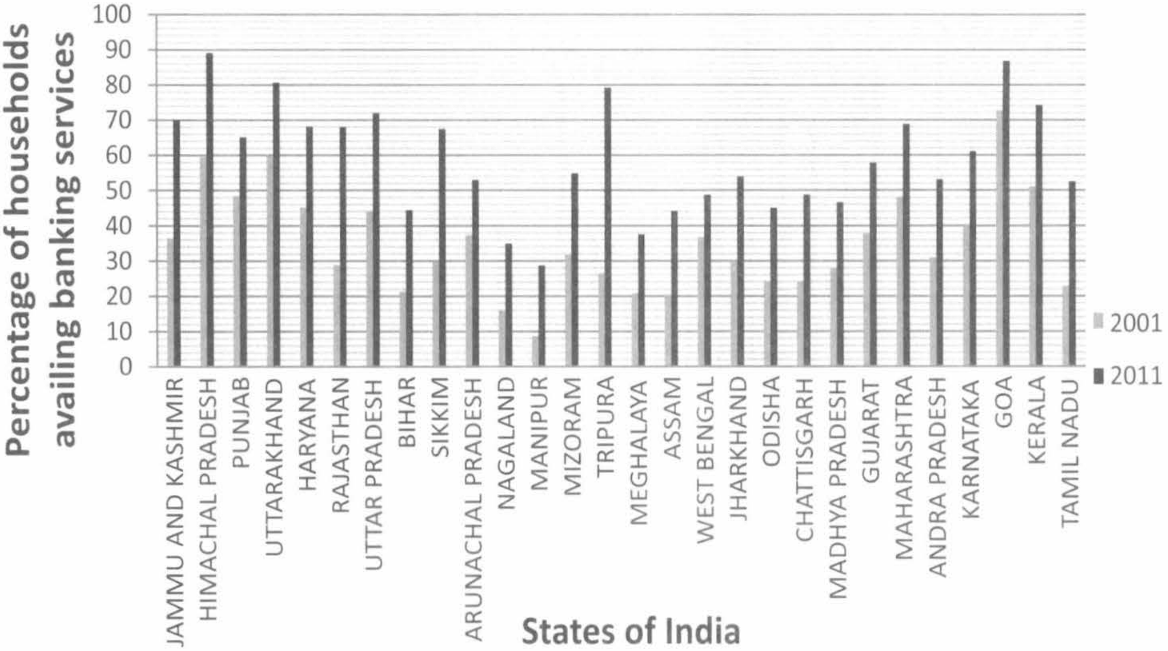
$Y$ = percentage of households availing banking services,
$\alpha$ = intercept coefficient,
$\beta_1 \ldots \beta_6$ = coefficients of explanatory variables,
$X_1$ = no of bank branches,
$X_2$ = population per branch,
$X_3$ = per-capita income,
$X_4$ = literacy,
$X_5$ = urbanization,
$X_6$ = industry concentration ratio,
$E$ = error term.

## Pattern and Growth of Financial Inclusion

Financial inclusiveness is improving steadily over the years. The Table 2 gives the all-India figures of households availing banking services in percentage. There was an increase of 23.5% in the all India figures of people accessing banks for deposits during the period of one decade, that is, from 2001 to 2011. The rural areas showed a similar improvement in the last decade, and more than 50% of the rural households availed banking services. The increase was because of state-specific programmes and other programmes by RBI and GOI. In the urban areas, only 52.1% of the households availed banking services in 2001 ; in 2011, it increased to a level of 70% . However, only 54.4% of the people in rural areas had access to banks in 2011, which is a matter of concern.

The Figure 1 shows the percentage of households having deposits in banks from an inter-state perspective for the years 2001 and 2011. The bold lines represent the figures for 2001, and the thin bars represent the figures for 2011. There are 13 states above the All States average in 2001, and the number remained the same in 2011. States like Rajasthan, Sikkim, and Tripura which were below average in 2001 are found to be above the national average in 2011. States which are still lagging are Bihar, Nagaland, Manipur, Mizoram, Meghalaya, Assam, Jharkhand,

Figure 1. Percentage of Households Having Deposits in Banks from an Inter-State Perspective for the Years 2001 and 2011




Source: Prepared by the authors using Census data for 2001 &2011

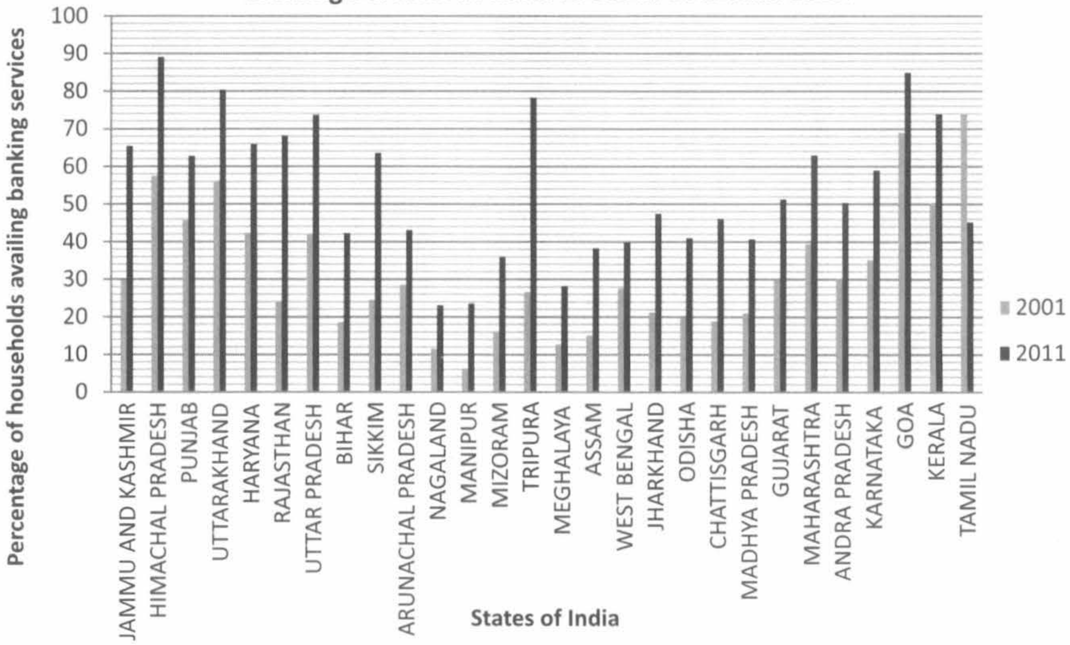
Odisha, Chhattisgarh, Madhya Pradesh, Andhra Pradesh, and Tamil Nadu. States which are performing well in both the periods are Jammu and Kashmir, Himachal Pradesh, Punjab, Uttarakhand, Haryana, Uttar Pradesh, Maharashtra, Karnataka, Goa, and Kerala. States like Arunachal Pradesh, West Bengal, and Gujarat reached an average in 2001, but could not reach the average figure in 2011. It is also observed that the national average of percentage of households having bank deposits increased from a level of 40% in 2001 to 60% in 2011.

It is observed from the Figure 2 that rural areas still need more attention than urban areas. In nine out of 28 states, the percentage of households having bank accounts were above the national average in 2001. The number of states above a national figure in banking habits increased to 19 in 2011. The percentage of households availing access to banks substantially increased in 2011 for almost all states. However, states like Bihar, Nagaland, Manipur, Meghalaya, Assam, West Bengal, Odisha, Chhattisgarh, and Tamil Nadu are still lagging. These states were below average in both the periods.

The Figure 3 shows the percentage of households having banking services in urban areas in 2001 and 2011. It is also observed that there was a significant improvement in accessing banking services in 2011 in comparison to 2001 in urban areas of Indian states. Approximately, 12 states reached the national average of 70% by 2011 in comparison to 8% in 2001.

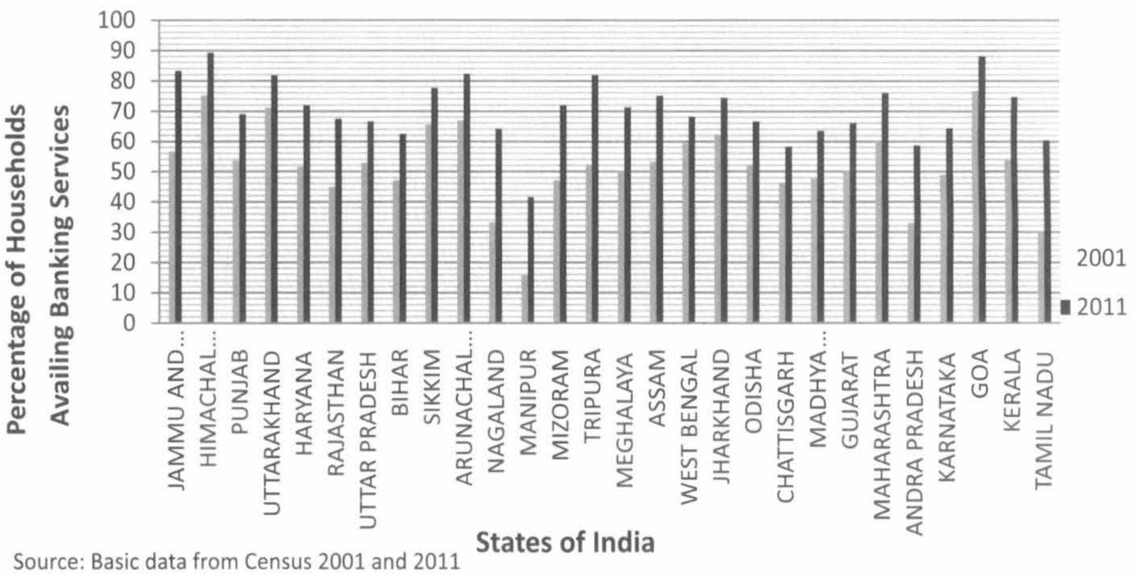
The Figure 4 shows the percentage of households availing banking services in rural and urban areas in the year 2011. While the first bar indicates the figures for rural areas, the second one represents the access to banking services by urban areas. In most states, the percentage of households availing banking services in urban areas is higher than the figures in rural areas. Only in Uttar Pradesh, the rural figures are seen to be greater than the urban figures. Widespread inequality is observed between urban and rural areas in accessing banking services, mainly in low income and Eastern and North Eastern states like Bihar, Arunachal Pradesh, Nagaland, Mizoram, Meghalaya, Assam, West Bengal, Odisha, and Madhya Pradesh. Access to banking services in rural areas needs to be emphasized. Focusing on the rural areas, the Table 3 shows the number of commercial bank branches in India for 2002 and 2009.

**Figure 2. State-Wise Percentage of Households Availing Banking Services in Rural Areas in 2001 and 2011**




Source: Basic data from Census 2001 &2011

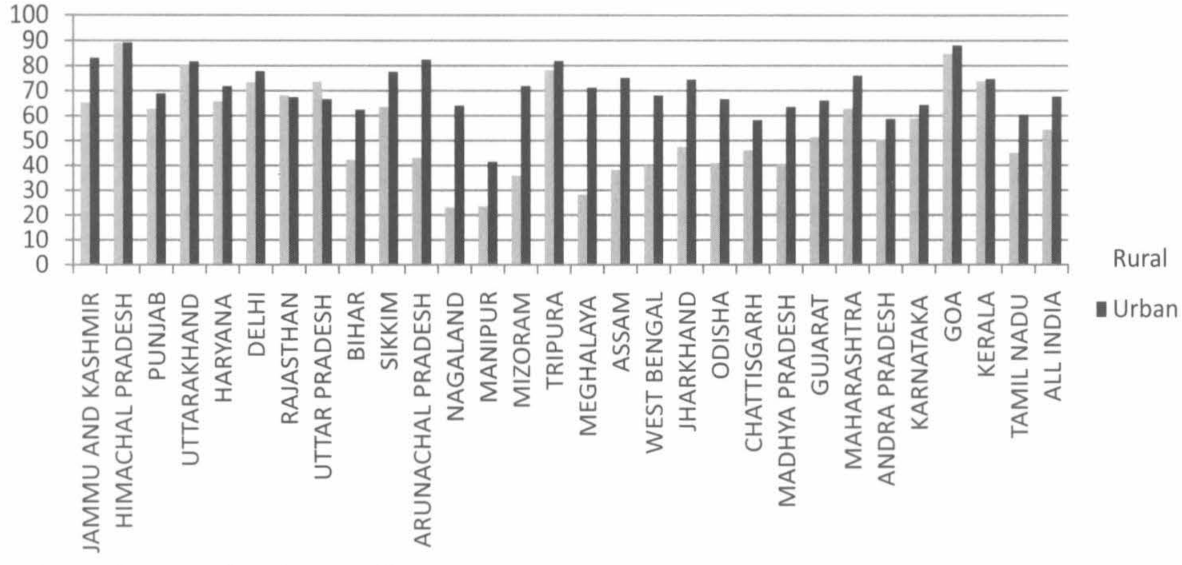
**Figure 3. Percentage of Households Having Banking Services in Urban Areas in 2001 & 2011**




Source: Basic data from Census 2001 and 2011

The total number of commercial bank branches have increased, but the branches in rural areas in terms of percentages to total decreased in 2009 in comparison to 2002. Commercial banks run with a profit motive, and they lay more emphasis on urban areas. This is a matter of great concern. Regional rural banks (RRBs) and co-operative banks play an important role in rural areas. In the Tables 4, 5,6, and 7, the states are divided into high, middle, low, and special income states. Rankings are given for states in each group based on deposit penetration (DP) and branch penetration (BP) in rural areas. A simple rank correlation is computed for each group.

**Figure 4. Percentage of Households Availing Banking Services in 2011: Rural and Urban Divide**




Source: Basic Data from Census 2011

**Table 3. Number of Commercial Bank Branches (All-India)**

| Year | Rural | All Branches | % |
|---|---|---|---|
| 2002 | 32,588 | 65,906 | 49 |
| 2009 | 31,695 | 79,779 | 40 |

Source: Branch Banking Statistics (BBS) 2002 and 2009, RBI

**Table 4. Profile of High Income States in Rural Areas**

| States | DP | BP | DP Rank | BP Rank |
|---|---|---|---|---|
| Goa | 84.9 | 40 | 1 | 1 |
| Gujarat | 51.3 | 34 | 5 | 3 |
| Haryana | 65.9 | 32 | 2 | 4 |
| Maharashtra | 62.9 | 28 | 3 | 5 |
| Punjab | 62.8 | 35 | 4 | 2 |
| Correlation | | | | 0.2 |

Source: Basic data from Census 2011 and BBS 2009

In the high-income states, there is a positive correlation between DP and BP, but it is not significant. Goa remains to be the first in both DP and BP. Haryana ranks 2nd in DP, but 4th in BP (Table 4).

In the middle income states, a negative correlation is seen in DP ranks and BP ranks. Kerala, which ranks first in DP, ranks fifth in BP. This is because in Kerala, cooperative banks play a major role in rural areas. West Bengal ranks second in DP, and 1st in BP. Karnataka ranks 3rd in DP and 2nd in BP; Tamil Nadu ranks 4th in both; Andhra Pradesh ranks 5th in DP and 3rd in BP (Table 5).

Low income states show a negative correlation, but it is not significant. Jharkhand ranks 1st in DP, but ranks 3rd in BP; Rajasthan ranks 2nd in DP, but ranks 6th in BP; Uttar Pradesh ranks 3rd in DP but 5th in BP; Odisha ranks 4th in DP and ranks 1st in BP; Madhya Pradesh ranks 5th in DP but ranks 7th in BP; Bihar ranks 6th in DP and 2nd in BP; Chhattisgarh ranks 7th in DP but ranks 4th in BP. Madhya Pradesh requires a special attention among these states because it ranks low in both the parameters (Table 6).

**Table 5. Profile of Middle Income States in Rural Areas**

| States | DP | BP | DP rank | BP Rank |
|---|---|---|---|---|
| Andhra Pradesh | 58.71 | 36.6 | 5 | 3 |
| Karnataka | 64.35 | 38 | 3 | 2 |
| Tamil Nadu | 60.37 | 29 | 4 | 4 |
| Kerala | 74.68 | 8 | 1 | 5 |
| West Bengal | 68.17 | 46 | 2 | 1 |
| correlation | | | | -0.1 |

Source: Basic data from Census 2011 and BBS 2009

**Table 6. Profile in Low Income States**

| States | DP | BP | DP Rank | BP Rank |
|---|---|---|---|---|
| Bihar | 62.4 | 61.4 | 6 | 2 |
| Chhattisgarh | 58.2 | 54 | 7 | 4 |
| Jharkhand | 74.48 | 57 | 1 | 3 |
| Madhya Pradesh | 63.54 | 44 | 5 | 7 |
| Odisha | 66.58 | 61.5 | 4 | 1 |
| Rajasthan | 67.42 | 45 | 2 | 6 |
| Uttar Pradesh | 66.68 | 50 | 3 | 5 |
| Correlation | | | | -0.11 |

Source: Census 2011 and Branch Banking Statistics 2009

Only in the case of special category states, a positive and significant correlation is seen between the ranks. Himachal Pradesh tops in both; Jammu and Kashmir is 2nd in DP but 7th in BP; Arunanchal Pradesh ranks 3rd and 2nd; Tripura ranks 4th and 9th; Uttarakhand ranks 5th and 8th; Sikkim ranks 6th and 3rd; Assam ranks 7th and 6th; Mizoram ranks 8th and 5th; Meghalaya ranks 9th and 4th; Nagaland ranks 10th and 11th; Manipur ranks 11th and 10th in DP and BP, respectively. In these groups, branch penetration is significantly correlated with deposit penetration (Table 7).

**Table 7. Profile of Special Category States**

| States | DP | BP | DP Rank | BP Rank |
|---|---|---|---|---|
| Arunachal Pradesh | 82.4 | 66 | 3 | 2 |
| Assam | 75.18 | 57 | 7 | 6 |
| Himachal Pradesh | 89.25 | 77 | 1 | 1 |
| Jammu & Kashmir | 83.27 | 56 | 2 | 7 |
| Manipur | 41.54 | 44 | 11 | 10 |
| Meghalaya | 71.26 | 62 | 9 | 4 |
| Mizoram | 71.94 | 59 | 8 | 5 |
| Nagaland | 64.12 | 42 | 10 | 11 |
| Sikkim | 77.63 | 65 | 6 | 3 |
| Tripura | 81.93 | 52 | 4 | 9 |
| Uttarakhand | 81.8 | 53 | 5 | 8 |
| Correlation | | | | 0.52 |

Source: Census 2011 and Branch Banking Statistics 2009

Table 8. Regression Coefficients of Households Having Bank Accounts

| Dependent variable Independent variable | Log Linear | Linear |
|---|---|---|
| Number of bank branches | 3.37**(2.11) | 0.0024** (2.590) |
| Population per branch | -23.94* (-4.16) | -1.509* (-4.42) |
| Per-capita income | 0.086 (0.01) | .0002 (1.69) |
| Literacy | 0.463 (1.10) | 0.365 0.95 |
| Urbanization | -0.2627 (-1.13) | -0.3406 -1.19 |
| Industry concentration | -0.5178** (-2.24) | -1.33* (-2.97) |
| Constant | 70.93 (0.71) | 52.0*** (1.88) |
| *F*-value | 19.77* (0.000) | 20.42* (0.000) |
| $R^2$ | 0.59 | 0.6178 |
| Number of observations | 28 | 28 |

Notes: *, **, *** indicate statistical significance at 1%, 5% and 10% levels of significance respectively. In order to correct for hetroscedasticity, robust standard errors are used.
Source: Calculated by authors on basis of basic data from CSO, Census and BBS,RBI

## Empirical Analysis of Determinants of Financial Inclusion

In order to determine the major determinants of financial inclusion, a multiple regression model has been estimated using cross section data for 28 states for the year 2011. We have regressed percentage of households having a bank account in each state on a set of explanatory variables. The explanatory variables included in the model capture mainly the socioeconomic developments of a state. They are number of bank branches, population per branch, per-capita income, literacy, urbanization, and industry concentration. The results of the estimated regression coefficients of households having access to bank accounts is presented in the Table 8.

In both linear and log-linear models, variables like number of bank branches, population per branch, and industry concentration emerged to be key determinants in explaining the percentage of households having access to bank accounts in Indian states.

The variable : number of bank branches is found to have a positive and significant impact on households having bank accounts. The coefficient of the number of bank branches is found to be 0.0024 in linear specification, and 3.37 in log-linear specifications. From a logarithmic model, it is observed that a 1% increase in number of bank branches in a state increases the percentage of people having access to bank accounts by 3.37%. This is clearly understandable as when the number of bank branches increase, the people can get a bank branch nearby and have easy access to the same.

The coefficient of population per branch is found to be statistically significant and negative. This indicates that when more people are dependent on a particular branch, then access to a bank for the people would be relatively lower. A 1% increase in population per branch (in lakhs) will reduce the percentage of people accessing bank accounts by 23.94%. Our result is consistent with earlier studies as Kumar (2013) also found that average population per branch had a negative and significant impact on deposit penetration.

The coefficient of industrial concentration is found to be statistically significant and negative. This indicates that when there are more factories as percentage to total factories in the country is located in a particular area, then the access to banks for the people in that state decreases. When industrial concentration increases by 1%, households accessing bank accounts will reduce by 0.51%. When more industries or factories are available in a state, banks will be more engaged in dealing with their businesses. Banks may not show much interest to encourage people to open accounts. Hence, the hypotheses that number of bank branches, population per branch, and industry concentration in a state do not significantly determine the number of bank accounts in the state have been rejected. So, the influence of these variables is realized on holding of bank accounts and financial inclusiveness.

Other variables in the study like per-capita income, literacy rates, and urbanization did not emerge to be statistically different from zero, and hence, did not influence the households availing banking services. For robustness checking, we estimated the coefficients on a linear model. The results in the model are quite similar to those obtained in log-linear models.

## Research Implications

The Government of India has been emphasizing on increasing financial inclusiveness. Recently, the Government launched the Jan-Dhan Yojana, and a massive awareness campaign was undertaken to analyze how more people can have bank accounts. Analysis of pattern of financial inclusion in this particular work will help the policy makers to understand the rural - urban divide in having bank accounts and similarly, the states which are lagging in financial inclusion. Findings of the study suggest that the rural-urban divide in accessing banks in terms of households having bank accounts was more persistent in low income and North-Eastern states of our country. Furthermore, 15 states in 2011 were below the national average in households accessing banking services, mainly deposits. Hence, the government needs to devise special schemes and create massive awareness in these regions for financial inclusion.

The determinant analysis aids to understand what state specific factors help to increase bank account holdings of people. The study provides vital inputs that increasing the number of bank branches and decrease in population dependency per branch in a state could help more people to have bank accounts. Industry concentration has an adverse impact on the number of people having bank accounts. The areas where adequate bank branches are not available, opening of new extension counters, bank branches, or bank service counters through business correspondents in those areas will help more people to open accounts and achieve financial inclusiveness.

## Conclusion

The main objective of the paper was to analyze the pattern of households having bank accounts and their determinants in Indian states. It is observed that there is a significant improvement in accessing banking services, that is, in terms of households having bank accounts in Indian states in the last decade. However, the developments in terms of bank accounts or accessing the deposits are uneven across states. A wide-spread disparity is also prevalent in accessing banking services between rural areas and urban areas. The rural-urban divide in accessing banks in terms of households having bank accounts is more persistent in low income and North-Eastern states. Furthermore, 15 states in 2011 are below the national average in households accessing banking services, mainly deposits.

From the determinant analysis, it is observed that a number of bank branches, average population per branch, and industry concentration are key determinants. Increasing bank branches has a significant impact on financial inclusion. Effective implementation of financial literacy programmes and leveraging existing bank branches will help in achieving greater financial inclusion. Banking services in rural areas, particularly in low-income and North Eastern states need to be emphasized. Incentive-based program like Jan-Dhan Yojana has an important role to play in this regard.

## Limitations of the Study and Scope for Further Research

The study is based on secondary data. So, the problem as associated with normal secondary data may partially retain in the analysis. As Census data are decadal in nature, we have limited our regression analysis to a cross section framework using 2011 Census data only. The pattern could be analyzed better by taking census data for past decades also, but the question on households availing banking services was added from 2001 census onwards.

Our study is a simple analysis of ascertaining financial inclusion through deposit penetration or account holdings. It would be interesting to conduct a similar research on credit penetration and its determinants. The present study focuses on the socioeconomic factors at the state level affecting financial inclusion, but there are other factors like culture, political, and religious background, which also affect the account holding patterns. Since the socioeconomic structure of each country varies, this study can be extended to other countries as well, and the results can be compared.

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## Appendix

**Table 1. Major Policy Initiatives for Financial Inclusion**

| Major policy Initiatives | Objectives |
|---|---|
| **1992- SHG-Bank Linkage Programme** | Strategy for delivering financial services to the poor in a sustainable manner. Pooling their savings and dispensing small and unsecured loans at varying costs to group members on the basis of need. |
| **1998- Kisan Credit Cards (KCCs)** | Credit card to provide affordable credit to farmers in India. Started by GOI, RBI, and NABARD. |
| **2005- 'Financial Inclusion' : A Major Policy Objective** | Introduced by K C CHAKRABORTHY, the chairman of Indian Bank in Mangalam village. Norms were relaxed for people intending to open accounts with annual deposits of less than ₹ 50,000. General Credit Cards issued to poor and disadvantaged with a view to help them access easy credit. |
| **2006- BF and BC model** | RBI permitted commercial banks to make use of the services of NGOs/SHGs, micro-finance institutions and other civil society organizations as intermediaries for providing financial and banking services. |
| **2008- Individuals appointed as BCs cannot appoint sub-agents.** | Banks were permitted to engage retired bank employees, ex-servicemen, and government employees as BCs and these individuals appointed as BCs cannot appoint sub-agents. |
| **2014- Pradhan Mantri Jan Dhan Yojana** | Aims to provide bank accounts to at least 75 million people by January 26, 2015. |

Note : The policies listed above are just indicative.