

# REALISING THE SIGNIFICANCE OF SOCIO-ECONOMIC TRIGGERS OF FINANCIAL INCLUSION IN INDIA

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*[Financial inclusion has moved up the global reform agenda and become a topic of great interest for policy makers, regulators, researchers, market practitioners and other stakeholders. It is a key enabler of economic and social development in developing countries like India. The process of financial inclusion is a function of number of variables. It is necessary to identify the determinants of financial inclusion so that appropriate policy measures can be undertaken to achieve the larger aim of financial inclusion. This paper attempts to examine the association between the extent of financial inclusion and socio-economic variables, using a panel data set for Indian states over the time period 2001-2012. For this analysis, five socio-economic variables viz. income, employment, literacy, urbanisation and caste have been considered. The findings indicate that all the variables are significant in explaining the extent of financial inclusion. This paper, therefore, calls for policy making bodies to put in place a financial inclusion framework in order to improve the level of financial inclusion.]*

**Keywords:** *Financial Inclusion, Socio-economic Indicators, Panel Data, India]*

## Introduction

The issue of financial inclusion has acquired substantial attention of policy makers, regulators, researchers, market practitioners and other stakeholders. In recent years, about 50 countries have set formal targets and goals for financial inclusion. The increased interest reflects the importance of financial inclusion for social and economic development. It indicates a growing recognition that

access to financial services has a critical role in reducing poverty, boosting shared prosperity, and supporting inclusive and sustainable development. The interest also derives from a growing recognition of the large gaps in financial inclusion. For example, as per the report of the World Bank Study in April, 2012, half of the world's adult population – about 2.9 billion people – do not have an account

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at a formal financial institution. Again, according to Financial Inclusion Advisory Committee (FIAC) set up by RBI in October 2012, in India only 35% have formal accounts versus an average of 41% in developing economies and the estimate of recently submitted report of the Committee on Comprehensive Financial Services for Small Businesses and Low Income Households (Headed by Dr. Nachiket Mor) suggests that in India 560 million people are excluded from formal source of finance and 60 % of population do not have a functional bank account whereas 650,000 villages does not have a single bank branch. The data clearly indicate a wider dispersion in financial inclusion around the world.

Financial inclusion is a vital component of the Government of India's agenda and also a priority for the Reserve Bank of India. There are various reasons of financial exclusion. The effectiveness of the financial inclusion agenda in India can be significantly enhanced if the reasons behind exclusion can be identified. That would help policy-makers, regulators and other market practitioners to design tailor-made initiatives for areas with low inclusion. Internationally also efforts are being made to study the causes of financial exclusion and designing strategies to ensure financial inclusion of the poor and disadvantaged. Given this backdrop, the present study is an attempt to examine the impact of socio-economic triggers of financial inclusion in India.

The paper is organised into 10 parts. In part II we present concept and measurement of financial inclusion and

part III explains the determinants of financial inclusion. Part IV contains a review of literature followed by objective of the study in part V. Parts VI and VII explain data and methodology respectively. Part VIII reports the results and provides a discussion of the results. Part IX concludes the paper with policy implications. The last part gives limitations of the study and future research direction.

### **Concept and Measurement of Financial Inclusion**

#### **Concept**

Financial exclusion signifies the lack of access by certain segments of the society to appropriate, low cost, fair and safe financial products and services from mainstream providers. Broadly, it is the inability of the individuals to access a range of basic financial services on the grounds that -

- (a) Financial access is either restricted or unavailable, or
- (b) The charges and prices of financial services are restrictive, or
- (c) The beneficiary apprehends denial.

Providing access to affordable banking services to a vast segment of hitherto unbanked people is the basic objective of financial inclusion. CRISIL defines financial inclusion as, "the extent of access by all sections of society to formal financial services such as credit, deposit, insurance and pension services." According to World Bank, "financial inclusion is the proportion of individuals and firms that use financial services."

Therefore, financial inclusion means the delivery of financial services by the financial system at an affordable cost to various sections of the people including disadvantaged and low income groups. Financial services mean provision of services such as savings, credit, remittances, insurance and other facilities by the financial system.

Financial inclusion is a key enabler of economic and social development. In developing countries like India, where large section of the population still lives outside the ambit of formal financial services, the access to banking services to the poor, underprivileged and low income groups is a prerequisite for poverty alleviation, social cohesion, and for achieving inclusive and sustainable growth in the country.

### **Measurement**

The literature on measuring financial inclusion is at nascent stage and is still growing. Several indicators have been used in the literature to measure the extent of financial inclusion. Some measures are based on supply side information from the perspective of credit providers like banks, financial institutions etc. whereas others based on demand side information from the perspective of users, such as individuals and households. Examples of commonly used indicators for measuring financial inclusion are: number of bank accounts (per 100000 adult population), number of bank branches and ATMs (per 100000 population/per 1000 sq. km.), amount of bank credit and deposit, credit-deposit

ratio as percentage of GDP etc. These indicators provide only partial information regarding inclusiveness of the financial system and thereby fail to reflect the overall extent of financial inclusion. To be precise, a measure of financial inclusion depends on the way financial inclusion is defined. National Sample Survey Organisation (NSSO) defines 'financial exclusion' as households not having a formal credit sources and thus it measures financial inclusion on the basis of no. of credit accounts. CRISIL has developed a comprehensive measure of financial inclusion in the form of an index by combining three very critical parameters of basic banking services – branch penetration, deposit penetration and credit penetration – together into one single metric. Some researchers like Mandira Sarma (2008) Sadhan Kumar Chattopadhyay (2011) and Kuri and Laha (2011) have developed an Index of Financial Inclusion (IFI) for measuring the extent of financial inclusion considering data on three dimensions namely (a) banking penetration, (b) availability of banking services and (c) usage of banking system. Their approaches are similar to that used by UNDP for computation of some well known development indices such as the Human Development Index (HDI), the Human Poverty Index (HPI) etc.

For the purpose of the present study, financial inclusion is considered as "the proportion of individuals and firms that use financial services". Financial inclusion and access to finance are different issues. While access refers to timely availability

of adequate financial services at affordable cost, use refers to actual consumption of financial services. The lack of use does not necessarily mean a lack of access. Some people may have access to financial services at affordable cost, but choose not to use certain financial services, while any other may lack access in the sense that the cost of these services are prohibitively high or that services are simply unavailable because of regulatory barriers, legal hurdles or an assortment of market and cultural phenomena. Needless to mention here that, unless formal financial service is available, one cannot use it. In other words, access to formal financial services is a necessary, but not sufficient condition for use of formal financial services. Thus, it is more appropriate to consider the data on use of formal financial services, not the mere access to finance, in order to measure the level of financial inclusion. Therefore, only those who use formal financial services are considered as financially included.

#### **Determinants of Financial Inclusion**

It is necessary to identify the drivers or determinants of financial inclusion so that appropriate policy measures can be undertaken to achieve the larger aim of financial inclusion. Financial inclusion is conditioned by a number of factors, some are economic, some are social and cultural, some are infrastructure related and again some are banking factors. These are broadly divided into two categories, one is demand side factors such as income, literacy, lack of awareness etc. and the other is supply side factors such as

distance from branch/ATM, cumbersome documentation and procedures, unsuitable products, etc. Though the supply side obstacles can be solved within a short span of time, the demand side problems are more acute and chronic in nature. It requires structural changes of the economy and society. Therefore, the demand side factors are more important and to be addressed judiciously.

#### **Review of Literature**

A large number of studies have been conducted to analyse the various aspects of financial inclusion. A review of some of these studies has been discussed below in order to understand the nature, methodology and findings that will help to compare and find the gap with the present study.

Chattopadhyay (2011) attempted to assess, by developing an index of financial inclusion (IFI), the extent of financial inclusion in the country in general and West Bengal in particular. It is observed from the study that although there had been an improvement in outreach activity in the banking sector, heterogeneity across states was widespread. Gap between rural and urban areas in respect of outreach was also prevalent and while significant improvement had taken place in respect of credit account in the urban households, the situation had become worse for the rural counterparts. Chitra and Selvam (2013) attempted to measure the inter-state variations in the access to finance, using a composite financial inclusion index developed by sarma (2008). The study also attempted to

identify and analyse the determinants of financial inclusion. The analysis revealed the fact that among socio-economic factors income, literacy and population found to have significant association with the level of financial inclusion. Again, among the banking variables, deposit and credit penetration recorded significant association with financial inclusion but credit- deposit ratio and investment ratio did not have significant association with financial inclusion. Gandhi (2013) critically addressed all concerned issues involved in achieving the complete financial inclusion in India. The study also evaluated the initiatives taken by banks in that respect and also the efforts made for IT enabled financial services. Kapoor and Singh (2014) highlighted the basic features of financial inclusion and its need for social and economic development of the society. The study focused the role of finance in strengthening the India's position and highlighting key factors necessary for financial inclusion. It concluded that financial inclusion was playing a catalytic role for the economic and social development of the society. Kumar (2011) examined the behaviour and determinants of the financial inclusion in India utilizing state-wise panel data spanning over a period from 1995 to 2008. The study concluded that increase in bank branch network was having a beneficial impact on deposit and credit penetration. It also concluded that income level had a positive impact on both credit and deposit penetrations. Kuri and Laha (2011) attempted to measure the inter-state variations in the access to finance using a composite index of

financial inclusion. Using binary probit regression model the study identified the underlying factors that were responsible for creating obstacles in the process of financial inclusion in rural West Bengal. The result established that greater degree of awareness of basic banking services, diversification of rural non-firm sector, literacy drive to rural households and an expansion of household level assets were some of the crucial factors which had significant bearings to create an enabling environment in reducing the obstacles in the process of financial inclusion. Kuri and Laha (2011) examined the association between the process of financial inclusion and the level of human development in the context of different states in India. Empirical evidences suggested that an all inclusive financial system would have facilitated the process of human development by addressing the basic distortions in the level of human development in the Indian economy. Pal and Pal (2012) analysed the income related inequality in financial inclusion in India using a representative household level survey data, linked to state-level factors. Result showed that the extent of financial inclusion was quite severe among households across all income groups and the income related inequality in financial inclusion varies widely across sub-national regions in India but was quite high in most of the cases. The study also provided estimates of the effect of various socio, economic and demographic characteristics of households on propensity of a household to use financial services, and compare that for rural and urban sectors.

The above review of literature indicates that most of the studies have been undertaken to measure the level of financial inclusion. However, quantitative analysis to understand the behaviour and its determinants are scant. There are limited studies that have investigated the causes of exclusion. Little attention has been given by the earlier researchers to examine the association between financial inclusion and socio-economic factors. Present study is a humble attempt to fill this gap.

### **Objective of the Study**

The objective of the study is to identify the socio-economic triggers of financial inclusion. The specific objective of the study is to examine the impact of socio-economic variables on the level of financial inclusion in India.

### **Data**

The study is based on secondary data obtained from various official sources. The universe of the study consists of 15 major states in India and the period spans over 12 years from 2001-2012.

### **Dependent Variable**

The extent or level of financial inclusion has been considered as the dependent variable for the purpose of empirical analysis of the study. Percentage of households utilizing formal financial services has been used as the basis for dependent variable. Household level data on use of formal financial services have been collated from the All India Debt and Investment Survey (AIDIS) for the years 2002-03 and 2011-12 which were

collected as a part of the National Sample Survey (NSS) conducted by the Central Statistical Organisation (CSO), Ministry of Statistics and Programme Implementation, Govt. of India. The data set contains information on household's borrowings from formal financial sources namely, government, co-operative society, commercial bank, insurance, provident fund, financial corporation, financial company and other institutional agencies to estimate utilization of formal credit services. Again, household's savings with any institutional agencies, namely, government or Reserve Bank of India certificates and bonds, deposit in post office, co-operative society/bank, commercial bank and Non-banking Company and insurance premium, annuity certificates and provident fund are considered as formal savings. If a household reports either borrowing from or savings with at least one of the sources mentioned above, that household is categorised as 'household utilizing formal financial services'. Now, for the purpose of the present analysis, 'households utilizing formal financial services' are considered as 'financially included'. In other words, a household is 'financially included' if that household uses at least one of the formal financial services; otherwise that household is 'financially excluded'.

### **Explanatory Variables**

#### **Income**

Among the explanatory variables, the foremost is the income. Income has been measured by per capita net state domestic

product (NSDP) at current prices as on 01-08-2013. The data on NSDP has been collected from the Handbook of Statistics on Indian Economy published by the Reserve Bank of India.

### **Employment**

Other than income, employment status of an individual might also affect the level of financial inclusion. The incidence of employment is defined as the percentage of persons employed in the age group of 15-59 years on the usual principal and subsidiary status to the total number of persons in the labour force. State-wise employment rates provided by NSSO (National Sample Survey Organisation) have been used in the present analysis. Missing data (that are unavailable) on unemployment have been generated through interpolation and extrapolation.

### **Literacy**

Adult literate persons as percentage of adult population have been taken as a measure of literacy rate. Effective literacy rates for overall male and female populations for the years 2001 and 2011 have been collected from the Census of India. The literacy rates for the intervening years have been worked out by interpolation.

### **Urbanisation**

Urban population as percentage of total population have been considered as a measure of urbanisation rate. The state-wise urban shares in total population are obtained from census data for 2001 and 2011. Data on these have

been collected from the Ministry of Human Resource Development, Government of India.

### **Caste**

Households belonging to socially disadvantageous communities are expected to have lower propensity to be financially included, because of possible unfair discrimination against them in the formal sector and/or due to societal culture. In India socially disadvantageous communities are identified on the basis of caste. These are – scheduled caste (SC); scheduled tribes (ST); and other backward classes (OBC). Rest are considered as general caste (General). We have used the percentage of SC and ST population as explanatory variable in the regression to assess the impact of caste. Therefore, SC and ST population as percentage of total population have been considered as a measure of caste. Data on these have been collected from the Census of India.

### **Theory and Methodology**

It is assumed that the marginal change in the financial inclusion in response to a given variation in a socio-economic trigger for given levels of other triggers changes continuously across a given ordered cohort.

However, this difference in utility functions is not the only factor driving the actual level of financial inclusion experienced. The actual past and present socio-economic experience might differ across individuals. Ex-ante, this experience is a random draw from a

probability distribution which has some mean for each of the socio-economic triggers. Ex-post, we can, however, note this mean in terms of the observed incidence (income, literacy etc) of socio-economic triggers.

Now note that any increase in the mean (average incidence) of any adverse trigger leaving the distribution of utility functions intact might push more people below the threshold utility level that they associate with financial exclusion—to be more exact, if the entire distribution in regard to the trigger is such that everybody is initially quite favorably placed then nothing might happen in terms of movement in rate of financial inclusion; but if some people are already unfavorably placed in regard to the triggers resulting in financial inclusion, then any increase in the incidence of a trigger might enhance the rate of financial inclusion.

In other words, it is expected that the financial inclusion to be related to the average regional incidence of socio-economic variables. Socio-economic variables which have a positive impact on utility might have a positive impact on the financial inclusion – what needs to be determined are the statistical and economic significance of such impact.

The empirical methodology proposed below is based on the above theoretical framework. In the present study, state specific financial inclusion for different states of India on different socio-economic indicators at the macro level such as income, employment rate, literacy rate,

urbanisation rate etc. have been regressed. Such regressions help to separate out the impacts on financial inclusion of (a) socio-economic drivers such as income, urbanisation etc; (b) unmodelled time and region variant random socio-economic influences; and (c) finally, the region specific fixed effects that are invariant across time periods and include the influence of region specific demographic and socio-environment related factors.

### Model

The baseline model takes the following form:

$$F_{it} = \alpha_i + \beta x_{it} + U_{it}$$

$$i = 1, \dots, 15 ; t = 2001, \dots, 2012$$

Here  $F_{it}$  is denoted as the financial inclusion in states  $i$  in time  $t$  or the corresponding posterior probability of getting financially included.  $X_{it}$  is the vector of levels of socio-economic explanatory variables which affect the financial inclusion for the  $i$ th state in the  $t^{\text{th}}$  time period.  $\alpha_i$  is the region/state specific fixed effect assumed to be constant over time.  $\beta$  is the vector of coefficient corresponding to the variables in vectors  $X$  and  $U_{it}$  is the time wise error term.

Thus, 12 time periods and 15 states there is a stacked system of 180 observations (12 X 15). It is this stacked system which is estimated. Stata 9.2 package programme have been used for arranging

**Table 1: Summary Statistics**

Variable	Number of Observation	Mean	Std. Deviation	Min	Max
<b>Financial Inclusion</b>	180	46.93	13.25	20.5	77.55
<b>Literacy</b>	180	70.71	8.94	47	94.31
<b>Urbanisation</b>	180	29.33	11.05	13.12	62.15
<b>Income</b>	180	33445	20779	5999	108345
<b>Employment</b>	180	27.40	14.91	8.81	66.42
<b>Caste</b>	180	24.20	7.35	10.46	40.14

the data and implementation of econometric analyses.

**Results and Discussion**

Summary statistics of the variables employed in the empirical analysis are displayed in Table 1. It is observed from the table that half of the people in India are not financially included. The average financial inclusion among the 15 major states over 12 years is 46.93. Over 180 observations the minimum financial inclusion is that exhibited in Assam in 2001 at 20.5 per 100 population and the maximum is that exhibited in Kerala in 2012 at 77.5 per 100 population – Assam being one of the poorest states in India, this result indeed indicates that the relationship between income and financial inclusion might be as expected positive one. Urbanization varies between

13.12% and 62.15% of state population implying that urban orientation varies considerably over space and time allowing us to find out the impact of this variable on the financial inclusion and demonstrating that as a country India has regions at very different levels of development which in turn would produce variation in the level of financial inclusion. Literacy exhibits a minimum of 47%, that by Bihar in 2001, and a maximum that almost approximates universal literacy at 94.31%, that by Kerala in 2012. The highest rate of literacy and financial inclusion in Kerala implies a preliminary dependence among these two factors. Economic status of an individual, as measured by income, which is proxied by per capita Net State Domestic Product (NSDP) ranges between Rs. 5999 in 2001 in Bihar and Rs. 108345

**Table 2: Partial correlation of financial inclusion with explanatory variables**

Variable	Correlation	Significance
<b>Literacy</b>	0.4277	0.000
<b>Urbanisation</b>	- 0.3697	0.000
<b>Income</b>	0.6650	0.000
<b>Employment</b>	0.4869	0.000
<b>Caste</b>	- 0.0704	0.353

in Haryana in 2012. Finally, households belonging to socially disadvantaged communities, as identified on the basis of caste, exhibit a minimum of 10.46% in Kerala in 2012 and maximum of 40.14% in Orissa in 2012. The point being made here is that each of the variables, whether dependent or explanatory, shows considerable variation across time and space thereby rendering the regression analysis fruitful and its results significant for policy making.

As far as partial correlation (Table 2) between financial inclusion and other variables are concerned such correlation can only serve as a very broad guide to causality as one cannot control for the effect of other variables. Still one can see that all the correlation coefficients, except caste, are quite significant in magnitude. The correlations of financial inclusion with income (0.67), literacy (0.42), urbanization (0.36) and employment (0.48) are statistically significant at 1% level. The directions of association between financial inclusion and these explanatory variables are also quite logical except urbanisation.

Pair wise correlations among the variables used in the empirical analysis are reported in Table 3. Table 3 lists the raw correlations between the dependent variable and other explanatory variables. All these correlations are significant at 95% level of confidence. Pair wise correlation among explanatory variables can serve as a warning regarding multicollinearity and against simultaneous inclusion of the heavily correlated variables in the same regression. The highest correlation is found between income and literacy (0.60). The correlations are relatively high between income and literacy (0.60), income and urbanisation (0.56) and urbanisation and literacy (0.5). As the simple correlation between independent variables should not be considered harmful until they exceed 0.80 and 0.9 as suggested by Judge et. al. (1985) and Bryman and Cramer (1997) respectively, the multicollinearity between explanatory variables possibly do not pose a serious problem in the interpretation of the results of the present panel data analysis.

**Table 3: Pair wise Correlation Matrix**

Variable	Financial Inclusion	Literacy	Urbanisation	Income	Employment	Caste
<b>Financial Inclusion</b>	1.0000					
<b>Literacy</b>	0.5795	1.0000				
<b>Urbanisation</b>	0.3430	0.5126	1.0000			
<b>Income</b>	0.7159	0.6054	0.5656	1.0000		
<b>Employment</b>	0.1234	- 0.2471	0.1384	- 0.1370	1.0000	
<b>Caste</b>	- 0.2375	- 0.3090	- 0.1304	- 0.1336	- 0.0591	1.0000

**Table 4: Results of Fixed Effect Panel Regression**

Variables	Model 1	Model 2	Model 3
Urbanisation	1.964*** ( 0.000)	-	0.926*** (0.000 )
Literacy	-	1.698*** ( 0.000)	2.187*** (0.000)
Employment	1.148** ( 0.055)		0.912*** (0.008)
Income	-	0.0002*** ( 0.000)	-
Caste	8.458*** ( 0.000)		1.687 ** (0.053)
Constant	-246.81*** ( 0.000)	-80.325*** (0.000)	-200.74*** (0.000)
Test statistics	F(3,162) = 65.63	F(2,163) = 647.67	F(4,161) = 236.65
Prob > F	0.0000	0.0000	0.0000
R-sq: within	0.5486	0.0266	0.0064
Between	0.8882	0.3259	0.4329
overall	0.8546	0.2013	0.2508
Observation	180	180	180

\*\*\* (1% significance level),

\*\* (5% significance level) Figures in brackets are p values

The results of fixed effect panel regressions are stated in Table 4. Following section briefly discusses the socio-economic variables that have been identified as statistically significant predictors of financial inclusion.

#### Urbanization

The present study documents a positive, large and statistically significant coefficient associated with the 'urbanization'. This indicates that urbanization has a much higher impact on financial inclusion. That is more in line with the modernization theory (Bradshaw, 1987) which generally views urbanization as a positive phenomenon

for economic development that leads to a higher degree of social as well as economic integration. The large absolute impact of urbanization on financial inclusion can also be explained by the fact that urbanization is a significant source of increasing economical and financial opportunities, attractive jobs, better education and modern lifestyle. Moreover, rural migrants and other urban citizens are caught up in a rat race to improve their standards of living which in turn increases the chance of greater financial inclusion. The rapid urbanisation and migration trends are creating a huge pool of urban financially excluded people.

## Literacy

India is characterized by population explosion and illiteracy, excessive poverty and dualism and here education is used as a tool for getting employment and raising income. Therefore, in the entire models where literacy rate has been incorporated as an explanatory variable, it is found that financial inclusion is positively associated with the literacy rate at 1% level of significance. This might be due to the fact that better-educated people respond in a more favourable fashion towards creating demand and increasing adoption of financial inclusion as literacy raises the financial literacy also. Model 2 and Model 3 shows the greater impact of literacy on financial inclusion which can be explained by the fact that opportunity of getting education empowers people to participate in the economic life of a city, carry out respectable job which, in turn, boost financial inclusion by increasing financial awareness, opportunity of creating the education loans, acquiring capability of using technology and livelihood.

## Employment

India is suffering from major degree of unemployment which leads to limited access to financial services. In this context, in the present paper, it is assumed that employment creation might be an improvement in the process of financial inclusion. So the model 1 and model 3 include employment rate as an explanatory variable. It is observed that rise in employment positively affects financial inclusion. The positive impact of

employment on financial inclusion can be explained by a number of incidents like - employment is an equipment used as an improved financial access; increase in employment generates income so that families can smooth out consumption and increase savings; creation of self employment opportunities through bank credit increases financial inclusion and thereby investment which, in turn, increases the business opportunities and further creates financial inclusion.

In connection with employment situation in India, it should be taken into consideration that a majority of labour in India is employed by unorganized sector such as family owned shops and street vendors and there still exist self-employed child labourer in the unorganized retail sector of India. The unorganized sector has low productivity and offers lower wages. It accounts for over 94 percent of workers, produces 57 percent of India's national domestic product. For most migrated workers in agriculture stable employment is unavailable. Therefore, creation of employment in low paying job, not having job security, does not result in financial inclusion. Until financial securities of the employees are ensured for the majority of workers in India, a system of compulsory savings through financial inclusion is not possible. Therefore, the policy formulation regarding employment for increasing financial inclusion in India will be difficult until overall employment status of various states are segregated between permanent employment and temporary employment or employment in unorganized sector and organized sector.

### **Income**

The model 2 shows that *ceteris paribus*, higher per capita income tends to increase financial inclusion. The coefficient is positive and very small, though statistically significant at 1% level. The result is quite inevitable in the sense that rise in income increases the saving propensity of the individuals which in turn increase the accessibility to the financial services directly and indirectly it increases the scope of getting education as well as financial literacy and lowering poverty. But there exist economic diversity in India in terms of regional discrimination and income inequality. Until the income gap among the rich and the poor reduces, the rise in aggregate income as well as per capita income of states will not result in improvement in financial inclusion in a proper sense by eliminating economic exclusion in the society.

### **Caste**

Model 1 and Model 3 show that increase in share of percentage of SC and ST population has a favourable impact on financial inclusion. The coefficients of the percentage of SC and ST population are 8.45 and 1.69 respectively and are also statistically significant. The findings of the present paper regarding the association of financial inclusion with disadvantaged sections in India, the positive association impel us to believe that the primary goal of financial inclusion i.e. tagging the poor people with low incomes into formal financial system in a gradual manner with focus on freeing the poor people from distress has been somewhat fulfilled.

This finding is quite surprising and may appear absurd in India. This is because of the general perception regarding the SC and ST that they remain backward in economic and social development. The share of Scheduled Tribes among the poor and illiterates is more than double their population share. The living conditions and access to basic amenities of life of SC are plaintive as they are mostly landless and asset less being largely agricultural labourer in rural areas. The special provisions to protect the interests of these groups in education as well as employment have helped only a small proportion of them.

### **Conclusion & Policy Implication**

This study aimed to empirically examine the impact of a number of socio-economic triggers on the level of financial inclusion in India using a panel data set for 15 major states covering a period of 12 years from 2001-2012. The fixed effects panel regressions revealed that all the socio economic variables viz. literacy, employment, income, urbanisation and caste are positively correlated and significant in explaining the extent of financial inclusion. Financial inclusion is one of the leading policy instruments of the Reserve Bank of India for expansion of financial services from corner to corner of India. It demands an integrated policy development by the government. The clear policy implication here is for giving a push to literacy and employment. The increase in the allocation of funds to basic education and access to training and technology can increase empowerment and economic opportunities which, in

turn, would raise the rate of employment and income and thereby the probability of financial inclusion. Therefore, financial Inclusion can be promoted by increasing literacy and job creation. Suitable policy measures regarding the planning of urbanization would be required to further enhance financial inclusion. Again, regarding caste, Government should take necessary steps in such a way that all the affirmative actions in favour of scheduled castes (SCs) and scheduled tribes (STs) provided in the constitution of India should be availed by them in the proper manner and they can gain economic freedom through financial accessibility to shape their destiny. Therefore, the results of the study justified that the state level socio-economic characteristics play a very important role in determining the level of financial inclusion which have an important bearing on the economic growth and development of a country.

#### **Limitations and Future Research Direction**

The present study has some limitations. First, we might have underestimated financial inclusion. The present paper considers that a household is financially included if it uses any of the financial services provided by institutional agencies. Here no distinction has been made between partial and complete financial inclusion. Financial inclusion can be said to be complete if it satisfies all the financial needs of a household, which is beyond the scope of the present paper. Second, the findings are based on one country i.e. India which may limit the generalization of the results to other

jurisdictions. Third, this paper does not control for potential factors that are expected to influence financial inclusion such as income inequality, supply side variables etc. Fourth, the data for only 15 major states have been considered; all the states in India have not been taken into account and data for many variables e.g. literacy, employment, urbanization are based on linear interpolation/extrapolation. Lastly, this paper uses aggregate (country) data and is subject to the common criticism of using macro data to study individual (micro) behavior. In order to overcome these shortcomings, studies can be undertaken in other developing countries also. Again, supply side explanatory variables such as infrastructure and banking variables can be considered in further studies. It might also be interesting to assess the implications of different policies on the dynamics of socio-economic inequality in financial inclusion. We leave these for future research.

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