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Bank-based financial intermediation for financial inclusion and inclusive growth

Abstract

Financial inclusion for inclusive growth is a topic of contemporary significance and relevance. This study besides, establishing the growth enhancing role of bank-based financial intermediation through empirical evidence, has also found that access to finance by the poor is a prerequisite for poverty reduction in order to achieve inclusive growth and sustainable economic development. The study has evaluated, using appropriate statistical techniques, the impact of financial inclusion efforts on the inclusive growth in the case of a developing economy like India by considering the most reliable data for the period from 1975 to 2007. The theoretical and empirical analysis leads us to conclude that bank led financial inclusion has definitive advantages for inclusive growth in developing economies.

Keywords: government policy and regulation, economic development and financial markets, financial inclusion, institutions and growth.

JEL Classification: G20, G21, G28, O16, O43, O53.

Introduction

Amartya Sen (2000) argued convincingly that poverty is not merely insufficient income, rather the absence of wide-ranging capabilities, including security and ability to contribute in economic and political systems. Franklin Roosevelt, the popular president of United States of America in 1932, mentioned the American poor as the forgotten man at the bottom of the economic pyramid. The term “bottom of the pyramid” today is referred to the global poor most of whom survive in the developing countries. These large numbers of poor are required to be provided with much needed financial assistance in order to sail them out of their conditions of poverty. Joseph E. Stiglitz opines that if economic growth is not shared throughout society then development has failed. Accordingly, there is felt a need for policy support in channeling the financial resources towards the economic upliftment of resource poor in any developing economy. This study is an attempt to comprehend and distinguish the significance of financial inclusion in the context of a developing country like India, wherein a large population is deprived of the financial services which are very much essential for overall economic growth of a country. Our understandings and analysis on the topic are presented here below in the following sections. The importance of “finance” for economic growth has been established with adequate literature review in Section 1. In Section 2, inclusive growth and its significance for achieving sustainable growth is discussed. Section 3 brings to fore the financial inclusion and its dimensions in detail. In Section 4, the importance of financial inclusion for achieving inclusive growth in India is detailed with a statistical analysis. Lastly, findings and conclusion is presented in the last Section.

1. Finance and growth

The earlier theories of development concentrated on labour, capital, institutions etc. as the factors for growth and development. The leading works hardly included finance as a factor for growth. Since then there has been ample research, analyzing how financial systems help in developing the economies. A broad agreement exists among economists that financial development prompts economic growth. Financial system development indeed has a say to economic growth (Rajan and Zingales, 2003). Time and again empirical evidence has emphasized the relationship between finance and growth. According to the works of King and Levine (1993a) and Levine and Zervos (1998), at the cross-country level, evidence suggests that measures of financial development are vigorously and confidently related to economic growth.

Other studies also establish affirmative association between financial development and growth. It is indeed irrefutable that considerable part of the differences in long run economic growth across countries can be elucidated by disparity in their financial development (Rajan and Zingales, 1998). Beck, Demirguc-Kunt and Levine (2006) use Rajan and Zingales (1998) approach, which provides supplementary evidence that financial development increasingly props up the growth of smaller firms which constitute largely the priority sector, lending in the case of Indian financial sector. Recent survey evidence suggests that access to finance has a direct nexus with that of innovation. Cross-country findings evidence that finance promotes growth through increase in productivity (Ayyagari, Demirguc-Kunt, and Maksimovic, 2007). Further, it has also been revealed that financial development plays a significant role in moderating the impact of external shocks on the domestic economy (Beck, Lundberg, and Majnoni, 2006).

Besides debate concerning the role of finance in economic development, economists have also debated the relative importance of bank-based and market-based financial systems for a long time (Demirguc-Kunt and Levine, 2001). Joseph Schumpeter argued that banks assume a crucial role in economic development. According to this perspective, the banking sector causes transformation in the path of economic progress by soothing the allocation of savings and, of course, not necessarily by altering the saving rate. Largely, the Schumpeterian view of finance and development highlights the impact of banks on productivity growth (Schumpeter, Joseph, 1934). Banking sector can wield a positive influence on the overall economy, and, hence, is of broad macroeconomic importance (Jaffe and Levonian, 2001; Rajan and Zingales, 1998). It is established that better developed banks and markets are closely associated with faster growth (Christopoulos and Tsionas, 2004). Improved functioning of banks can be able to boost resource allocation and hasten growth (Levine, and Zervous, 1998). Correspondingly, by aiding risk management, improving the liquidity of assets available to savers, and by lowering trading costs, banks can enliven investment in potential economic activities (Greenwood and Smith, 1997). Banks do exercise significant and causal impact on productivity and growth, which contributes to overall GDP growth. It is also ascertained by some researchers that the size of the banking sector can be safely considered a good predictor for future growth, especially when focusing on long term projects (Andrea Vaona, 2005). The research, so far, has not only looked at how finance facilitates economic activity but also social aspects like poverty, hunger, etc. The consensus is that finance promotes economic growth but the magnitude of impact differs.

2. Inclusive growth

Development economists and states have often been for a long time interested in the relationship between financial development and economic growth, especially in the period which is known as the era of the Washington Consensus. A growing GDP is an evidence of a society, getting its collective act together for progress. As its economy grows, a society becomes more strongly organised, more compactly interwoven. Growth is good, sustained high growth is better and sustained high growth with inclusiveness is best of all. Inclusive growth in the economy can only be achieved when all the weaker sections of the society, including agriculture and small scale industries, are nurtured and brought on par with other sections of the society in terms of economic development.

The major development challenge is to make the growth inclusive. Policies for inclusive growth are vital components of majority of government strategies for sustainable growth. Inclusiveness is an essential ingredient of any successful growth strategy (Commission on Growth and Development, 2008). Three pillars of inclusive growth are: (1) maximise economic opportunities; (2) ensure economic well-being; and (3) ensure equal opportunities to economic opportunities (Ifzal Ali, 2007). An inclusive growth strategy encompasses the key elements of an effective poverty reduction strategy and, more importantly, expands the development agenda. Developing inclusive financial systems which are financially and socially sustainable, as a poverty reduction strategy, should be given priority (Amit Bhandari, 2009). Beck, Demirguc-Kunt and Levine (2007) have noticed a positive effect of finance on poverty reduction. Economies with higher levels of financial development experience faster reduction of poverty. This has been explained by an extensive body of literature, including White and Anderson (2001) and Bourguignon (2003). In an often cited cross-country study, Kraay (2004) proves that growth in average incomes explains 70 percent of the variation in poverty reduction (as measured by the headcount ratio) in the short run, and as much as 97 percent in the long run. Lopez and Servén (2004) suggest that for a given inequality intensity, the poorer the country is, the more vital is the growth component in explaining poverty reduction. Thus, equitable growth is, indeed, an imperative for inclusive growth.

3. Financial inclusion

Importance of financial inclusion arises from the problem of financial exclusion of nearly 3 billion people from the formal financial services across the world. The review of literature appraises that the most functional definitions are context-specific and originate from country-specific problems of financial exclusion and related socio-economic conditions. Thus, over a period, various definitions of financial inclusion/exclusion have developed. However, there is no universally accepted definition on financial inclusion. Financial inclusion has commonly been well-defined in terms of financial exclusion as measuring, it is perceived to be difficult. Financial exclusion is a complex concept and the issues, needed to be pondered, include: distinction between the access and usage, degree of exclusion and whether individual or family that is excluded. According to World Bank (2005) financial exclusion includes four vital areas: savings, credit, transaction banking, and insurance. Broadly, financial exclusion can be broadly defined as the inability to access basic financial services owing to complica-

tions accompanying with access, conditions, prices, marketing or self-exclusion in response to unfavourable experiences or perceptions of individuals /entities. The sections that are generally excluded are: marginal farmers, landless labourers, unorganized sector, urban slum dwellers, migrants, ethnic minorities and women. Some of the reasons for exclusion are: lack of awareness, low income, social exclusion, illiteracy, sparse population in remote and hilly areas with poor infrastructure and lack of physical access, easy availability of informal credit, documenting procedures requiring proof of identity and address, high charges and penalties, generic products that are currently in the market do not satisfy the needs of the sections that are excluded financially. There is no single over-riding factor that could explain financial exclusion. It includes a variety of factors as stated above and probably much more.

Supply side barriers pose bigger impediments in the process of financial inclusion. Some of the significant causes of comparatively low expansion of institutional credit in the rural areas can be risk perception, high transaction costs, lack of infrastructure, and difficult terrains and low density of population. Another noticeable factor is the perception among bankers that large number of rural population is unbankable, as their capacity to save is limited small loan requirements, miniscule margin in handling small transactions. Also, non-availability of know your customer (KYC) requirements (documentary proof of identity and address) can be one amongst the barriers in having a bank account particularly for migrants and slum dwellers. Further, unsuitability of products and services that are offered to the rural people are not tailor-made. For example, most of their credit needs are in the form of small lump sums and banks are reluctant to give small amounts of loan at frequent intervals. Consequently, they resort to borrowing money from moneylenders at exorbitant rates. Poor market linkage or say penetration of service providers also constitutes the major factors of financial exclusion. And also one more unreasoned perception among the bankers is that the rural areas have poor repayment record.

Global literature explains financial exclusion also in the context of a larger issue of social exclusion of weaker sections of the society. While Leyshon and Thrift (1995) explain financial exclusion as such processes those aid to prevent some social groups and individuals from getting access to the formal financial system, Carbo et al. (2005) and Conroy (2005) opine that it is a state of inability of some poor and disadvantaged societal groups to access the financial system. Mohan (2006) reasons that financial exclusion implies the lack of access by some

segments of the society to suitable, low-cost, fair and secure financial products and services from mainstream providers. Ensuing the reasoning made above, it can be an indication that financial exclusion occurs mostly to people who are the disadvantaged sections of the society.

On the demand side, persons are dissuaded from accessing and utilising banking services for a variety of psychological and cultural reasons. Elderly people in rural areas, who are the part of a “cash only” generation, low income people and migrants perceive “banking is for the better off” than they are. They feel and fear as if losing control of their money if they cease to deal only in cash.

One more issue of interest is whether low level of financial inclusion is associated with high income inequality (Kempson et al., 2004). Beck et al. (2007) have examined financial sector outreach and its factors by employing cross country data. Even, in the developed economies too, studies have revealed that the exclusion from the financial system occurs to low-income groups, the ethnic minorities, immigrants and others (Barr, 2004; Kempson and Whyley, 1998; Connolly and Hajaj, 2001). Studies by Leyshon and Thrift (1995), and Kempson and Whyley (2001) highlight that the geographical factor that people living in rural areas and in locations that are remote from financial centres are more likely to be financially excluded. As such, countries with low levels of income inequality tend to have relatively high level of financial inclusion (Buckland et al., 2005; Kempson and Whyley, 1998). In other words, the levels of financial inclusion inevitably rise in response to both prosperity and declining inequalities. Another factor that can be related with financial exclusion is employment (Goodwin et al., 2000). Recent evidence also suggests that the continued payment of social security benefits and the state pension in cash is significantly related to financial exclusion (Kempson and Whyley, 1999). Informal sector accounts for a substantial share of employment in several less developed countries (ILO, 2002) which does not facilitate the process of financial inclusion. Formal employment also entails inclusion and, hence, the proportion of formal sector employment would be an vital indicator of the degree of financial inclusion.

In the Indian context, Committee on Financial Inclusion in India (Rangarajan Committee, 2008) defines it as the process of ensuring access to financial services and timely and adequate credit, where needed by vulnerable groups, such as weaker sections and low income groups, at an affordable cost. These financial services include the entire gamut – savings, loans, insurance, credit, payments, etc. The financial system has to provide

its function of transferring resources from surplus to deficit units but both deficit and surplus units are those with low incomes, poor background, etc. By providing these services, the aim is to help them come out of poverty. Measurement of financial inclusion is not universally the same. Different countries adopt different indicators to measure financial inclusion. Definitional aspects of financial inclusion/exclusion and their indicators as recommended by United Nations, World Bank, Committee on Financial Inclusion in India (Chairman: C. Rangarajan), Asian Development Bank (ADB) and Treasury Committee, House of Commons, UK are presented in Table 1 (see Appendix).

In the developed countries, the formal financial sector serves most of the population, whereas a large segment of the society, in developing countries, mainly the low-income group, has modest access to financial services, either formally or informally. According to Peachy and Roe (2004), developed countries have experienced good levels of inclusion. However, it is reported that (ADB, 2007), in the developing countries, formal financial sectors serve relatively a small segment, often not over 20-30 percent of the population. Recent data (see Table 2 in Appendix) illustrate that countries with large proportion of financial exclusion also show higher poverty ratios and higher levels of inequality. Table 3 (see Appendix) presents the financial inclusion initiatives in different countries. Further, the extent of financial inclusion in some select countries is illustrated in Table 4 (see Appendix).

4. Financial inclusion and inclusive growth in India

The importance of this study lies in the fact that India being a socialist, democratic republic, it is imperative on the policies of the government to ensure equitable growth of all sections of the economy. With only 34% of population, engaged in formal banking, India has 135 million financially excluded households, the second highest number after China. Further, the real rate of financial inclusion in India is also very low and about 40% of the bank account holders use their accounts not even once a month. It is universally opined that the resource poor need financial assistance at reasonable costs and that too with uninterrupted pace. However, the economic liberalization policies have tempted the financial institutions to look for more and more greener pastures of business, ignoring the weaker sections of the society. It is essential for any economy to aim at inclusive growth, involving each and every citizen in the economic development progression. In this context, a study has to be made to understand the importance of priority sector lending in ensuring the inclusive growth in the Indian context.

Select macro-economic and financial indicators of Indian economy are presented here below in Table 5 (see Appendix).

Based on the well accepted approaches for evaluation of the coverage of financial inclusion and to assess its impact on inclusive growth, the study endeavors to analyze the following.

4.1. Spatial distribution of banking services. In order to analyze the spatial distribution of banking services in the country, the available data for the periods of 1991 and 2005 has been verified. Further, bank offices in the country have been classified into rural and urban areas. This has been considered in order to get a clear understanding about how the spread of formal banking services has been affected in different parts of the country. In the case of credit accounts, the condition has deteriorated for rural households, while presenting considerable improvement in the urban areas (see Table 6, Appendix), corroborating the very substantial increase in retail credit.

4.2. Regional distribution of banking services. An effort has been made to analyse the extent of financial inclusion in different regions of the country, such as northern, north-eastern, eastern, central, western and southern regions apart from all India level. A purposeful analysis is made by comparing the data for the period of 1991-2005. Further, this data has been split into rural and urban areas in the country, in order to get an exact view about the distribution services in these areas. Further, the analysis is made in terms of population coverage per bank office, number of savings accounts per population of one hundred and number of credit (loan) accounts per population of one hundred. In terms of financial broadening, the scope for improvement remains. Table 7 (see Appendix) illustrates the level of financial inclusion in India with region wise statistics. It is discernible that southern and northern regions have population coverage below the national averages. All the other regions in the country have coverage well above the national average calling for urgent improvement in the population coverage. Again, in terms of rural and urban areas, there has been a distinct progress in the coverage of the population by the bank branch offices. Table 7 demonstrates further clarity by providing a break-up of the deposit accounts. Both the deposit and credit accounts are lower in rural households than urban households. Hence, despite the rural-push, the rural population has not come forward and avail even basic banking services.

4.3. Impact of financial inclusion on inclusive growth – an empirical analysis. In order to involve a comprehensive measure of financial inclu-

sion in the Indian context, we consider *priority sector lending* (PSL) as a significant measure of financial inclusion and its deepening. We are of the opinion that mere opening of bank account would not be a true indicator of financial inclusion, but availment of financial services, more importantly. The much needed credit for the excluded sections of the society would definitely depict the measure of financial inclusion. Further, this measure would meet the requirements of the definition for measurement of financial inclusion, provided by United Nations, wherein it is said that the indicator should measure the “access to credit, insurance, savings and payment services”. Priority sector lending, as an indicator in our study, addresses all the above aspects. In view of this, an attempt has been made to establish the relationship of priority sector lending (as a measure of financial inclusion) with the indicators of inclusive growth such as rural poverty. Rural poverty is considered to portray inclusive growth as more than 70 percent of India lives in rural areas.

The required data for the analysis is obtained largely from the most reliable and official sources, such as Reserve Bank of India website, National Bank for Agriculture and Rural Development (NABARD) website, India Development Report (2008) and other related sources. Economic reforms in Indian economy were initiated in the year 1991-1992. As such, to cover equal number of years of priority sector lending and inclusive growth during pre- and post-liberalisation period, data for the period from 1974-75 to 2007-08 have been analyzed for understanding the trends. For the purpose of analysis the most popular statistical measure, *Multiple Regression Analysis (OLS)*, is used (Andrea Vaona (2005), Andrea Vaona and Roberto Patuelli (2008) have also used the same kind of analysis for similar studies).

The objective of this Section of the paper is to identify the determinants of inclusive growth which can be captured in rural poverty (*RU_POV*) (measured in percentage against that of the total population in rural areas and these figures are provided by the Census of India data) in India and ascertain the impact of priority sector lending on rural poverty in India. Priority sector lending in the Indian context refers to the bank credit under the directed lending towards the private firms and individuals which is an important parameter that determines the measure of development that can significantly contribute to inclusive growth (Andrea Vaona, 2005). Domestic savings (*SAV*) (measured in crore Rupees) is included as a determinant in order to account for the argument that savings propels economic activity in the system at

large and helps in inclusive growth process (Beck, Levine and Loayza, 2000). Rural employment is one of the significant measures of economic development and, consequently, of inclusive growth. A greater level of rural employment can be taken as evidence of greater economic development (Cole Shawn, 2007). In recognition of this argument, employment in rural primary sector (*EMP_RP*) (expressed in million numbers) is included as one of determinants to study their impact on inclusive growth. Agricultural production is another important determinant that affects the inclusive growth process in rural India. As a large population of weaker sections of the society still depends, to a great extent, on agriculture, agricultural production (*AGRI_PRO*) (expressed in kilograms/hectare) determines their upward movement in the income ladder (Andrea Vaona, 2005) also considered production as an important variable in a similar study). Accordingly, agricultural production is also considered as a determinant in the analysis. There is also an indisputable argument that overall credit has profound impact on inclusive growth process (Andrea Vaona, 2005). In view of this, credit to gross domestic product (*CRED_GDP*) (measured as a ratio in percentage to GDP) is included as a determinant. If there is an increase in per capita income (*PCI*) (measured as per capita NNP at factor cost expressed in crores Rupees), there certainly will be an increase in inclusive growth process. As such, per capita income (which used as a determinant in a similar analysis by Andrea Vaona and Roberto Patuelli, 2008) is commonly accepted measure of standard of living of people and, consequently, is a major factor that enhances inclusive growth and, hence, it is included in the analysis.

The regression model can be:

$$Y = \alpha + \beta_1 X_1 + \dots + \beta_n X_n + \mu. \quad (1)$$

Accordingly, rural poverty can be better explained and estimated with the following version of equation:

$$RU_POV = f(PSL, SAV, EMP_RP, AGRI_PRO, CRED_GDP, PCI) + \mu, \quad (2)$$

In order to control for other factors associated with economic growth not linked to financial development, the regression results are presented by using a simple conditioning information set, including the constant, the logarithm of all explanatory variables. Due to potential nonlinearities, the natural logarithms of the regressors are considered (Levine, Loayza and Beck, 2000).

Accordingly, when we log-transform this model we obtain:

$$\log(RU_POV) = \alpha + \log(PSL, SAV, EMP_RP, AGRI_PRO, CRED_GDP, PCI) + \mu. \quad (3)$$

In equations 1, 2 and 3, α represents the *Y intercept*, Y represents the *RU_POV*, i.e. rural poverty and X_1, X_2, \dots, X_{14} represent the predictor variables and $\beta_1, \beta_2, \dots, \beta_n$ represent the partial regression coefficients of PSL i.e. priority sector lending, SAV are Savings, EMP_RP is employment in rural primary sector, AGRI_PRO is agricultural production, CRED_GDP is credit to gross domestic product and PCI is per capita income respectively. The results of analysis are presented in Table 8 for the period from the year 1977 to 2007.

Graphical presentation of the trend of priority sector lending in the pre-liberalisation period from 1974-75 to 1990-91 and post-liberalisation period from 1991-92 to 2006-07 is illustrated in Figure 1 (see Appendix). It is clearly evident from the figure that priority sector lending has taken a gradually upward moving curve indicating a steady rise in the post liberalisation era. Further, the nature and strength of the impact of the various determinants on inclusive growth are captured in Table 9 (see Appendix). A graphical presentation of the trend of the inclusive growth in India is presented in Figure 2 (see Appendix). It is orchestrated by the rhythmic forward movement trends of the above discussed determinants during the study period. Rural poverty is on a declining trend more pronouncedly during the post-liberalisation period.

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Results and conclusion

The study has found that priority sector lending has a very high significant impact on inclusive growth, which is in line with the findings of Kraay (2004) and Beck et al. (2007). Domestic savings (in line with the conclusions of Levine, Ross; Loayza, Norman, and Beck, Thorsten, 1999), credit to gross domestic product (as established by Ayyagari, Demirguc-Kunt, and Maksimovic, 2007; Greenwood and Smith, 1997) and per capita income (as stated by Levine, 1998; 1999) are found to have significant impact on reducing rural poverty in India. The model, developed in the study, explains the trend of rural poverty (Lopez and Servén, 2004) to the extent of 93.5 percent, involving the important determinants such as priority sector lending (Rajan and Zingales, 1998), savings, employment in rural primary sector, agricultural production (Andrea Vaona, 2005), credit to gross domestic product (Andrea Vaona, 2005) and per capita income (Andrea Vaona and Roberto Patuelli, 2008; Srinivasan 1994; Streeten, 1994; and Sugden, 1993). Further, it is also demonstrated (Figure 1) that financial sector reforms, indeed, had a positive impact on reduction of rural poverty and, hence, in achieving inclusive growth.

Financial inclusion has far reaching consequences, which can help many people come out of abject poverty conditions. Financial inclusion provides formal identity, access to payments system and deposit insurance. There is a need for coordinated action between the banks, the government and others to facilitate access to bank accounts amongst the financially excluded.

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Appendix

Table 1. Definitional aspects of financial inclusion/exclusion

Institution/author	Definition	Indicators
United Nations (2006b)	A financial sector that provides 'access' to credit for all 'bankable' people and firms, to insurance for all insurable people and firms and to savings and payments services for everyone. Inclusive finance does not require that everyone who is eligible to use each of the services, but they should be able to choose, to use them if desired.	Access to credit, insurance, savings and payment services.
World Bank (2008)	Broad access to financial services implies an absence of price and non-price barriers in the use of financial services; it is difficult to define and measure because access has many dimensions.	Access to financial services such as deposit, credit, payments, insurance.
Committee on Financial Inclusion in India (Chairman: C. Rangarajan) (2008)	The process of ensuring access to financial services and timely and adequate credit where needed by vulnerable groups such as weaker sections and low income groups at an affordable cost.	Access to financial services and timely and adequate credit.
ADB (2000)	Provision of a broad range of financial services, such as deposits, loans, payment services, money transfers and insurance to poor and low-income households and their micro-enterprises.	Deposits, loans, payment services, money transfer and insurance
Treasury Committee, House of Commons, UK (2004)	Ability of individuals to access appropriate financial products and services	Affordable credit and savings for all and access to financial advice

Table 2. Financial inclusion and development indicator

Country	Composite index of financial inclusion (per cent of population with access to financial services)	Poverty (per cent of population below poverty line)	Unemployment during 2000-04 (per cent)	Gini index
India	48	28.6 (1999-00)	4.3	32.5 (1999-00)
Bangladesh	32	49.8 (2000)	3.3	31.8 (2000)
Brazil	43	22.0 (1998)	9.7	58.0 (2003)
China	42	4.6 (1998)	4.0	44.7 (2001)
Indonesia	40	27.1 (1999)	9.9	34.3 (2002)
Korean Republic	63	-	3.5	31.6 (1998)
Malaysia	60	15.5 (1989)	3.5	49.2 (1997)
Philippines	26	36.8 (1997)	9.8	46.1 (2000)
Sri Lanka	59	25.0 (1995-96)	9.0	33.2 (1999-00)
Thailand	59	13.1 (1992)	1.5	42.0 (2002)

Source: World Bank (2006) and (2008).

Table 3. Financial inclusion initiatives in different countries

Country	Legislation instrument / policy scheme	Objectives
United Kingdom	Social Exclusion Unit (SEU), 1997	To reduce social exclusion of which financial inclusion is an integral part.
	Policy Action Teams	To look in an integrated way at the problems of poor neighborhoods.
	Financial Inclusion Task Force	1. Access to banking, access to affordable credit. 2. Access to face-to-face money advice.
	Financial Inclusion Fund	1. Access to banking services. 2. Access to affordable credit. 3. Access to money advice.
United States of America	The Community Reinvestment Act, 1977	1. Prohibits discrimination by banks against low and moderate income neighborhoods. 2. To make mortgage loans to lower-income households. 3. Banks are rated every three years on their efforts in meeting community credit needs.
	Matched Savings Scheme (MSS), 1997	1. Prohibits discrimination by banks against low and moderate income neighborhoods. 2. Matching money has to be spent on one of a range of prescribed uses, such as education, business or home purchase.
France	Banking Act, 1984	1. Any person with French nationality has the right to open an account with any bank. 2. If refused the aggrieved person can apply to the Banque de France to designate a bank that should open an account.
	French Banker's Association (Basic Banking Service Charter of 1992)	Committed to providing; affordable account, cash card, free access to a cash machine, distance payment facilities, bank statement and negotiable number of cheques.
Australia	Australian Bankers Association (ABA) Code of Practice, 1995	1. Generic account was introduced in 2002. 2. Staff to give information about suitable accounts to low-income customers. 3. Face-to-face banking services even after branch closure through alternative means such as franchising. 4. Three months written notice to customers before closing.
	Rural Transformation Centre Programme (RTCP)	1. To provide banking and other transaction services to communities without banking facilities. 2. Using existing stores and post offices or stand-alone centres. 3. Install Electric Point of Sale (EPOS) equipment in post offices.
Belgium	Charter of Basic Banking Services, 1996	1. Provide a basic bank account with no minimum balance and without overdraft facilities. 2. Credit transfers, direct debits, and deposit and withdrawal facilities. 3. If refused, customer must be informed the reasons, i.e. laundering, bad credit history, etc.
	Basic Banking Act, 2003	Sanctions if principles of Charter on Basic Banking Services (1996) are not applied.
Canada	Access to Basic Banking Services Regulations, 2003	1. Personal bank accounts to all Canadians regardless of employment or credit history and with minimum identification requirements. 2. Banks/FIs to encash government cheques at no charge.

Table 4. Extent of financial inclusion (some select countries)

Country	Percent of population with an account
USA	91
Denmark	99
Europe	89.6
Botswana	47
Brazil	43
South Africa	31.7

Table 4 (cont.). Extent of financial inclusion (some select countries)

Country	Percent of population with an account
Namibia	28.4
Mexico	21.3

Source: Rakesh Mohan (2006), Economic Growth, Financial Deepening and Financial Inclusion.

Table 5. Select macro-economic and financial indicators of Indian economy

Macro-economic indicators	1992-93	2008-09
1. Population (in mn)	872	1138
2. Per capita income* (in rupees)	7698	33299
3. GDP (constant prices) (in crores)	792150	4303654
5. Scheduled commercial banks	76	80
6. SCB branches	75821	64608
7. SCB rural & semi-urban branches	33025	36204
8. Number of ATMs	-NA-	43651
9. Bank assets (in Crores)	385778	52,41,330
10. SCB gross advances (in crores)	151982	30,00,906
11. SCB deposits (in crores)	268572	40,63,203
12. SCB net profit (in crores)	(-)4150	52,771
13. Priority sector lending (in crores)	59097	1,68,506
14. SCB Loans A/Cs under SBLP (in 000s)	0.255	2831
15. SCB Loans O/S under SBLP (in crores)	0.29	16,149
16. Number of RRBs	196	86 (after amalgamation)
17. RRBs assets (in crores)	9860	145824
18. RRB deposits (in crores)	6960	117984
19. RRB advances (in crores)	4474	69030
20. RRBs profit (in crores)	(-) 311	1830
21. Number of local area banks (LABs)	-	4
22. LAB assets	-	786.6
23. Number of cooperatives		97782
24. Number of Kisan credit cards issued (numbers in million)	-	84.6
25. Financial assistance sanctioned and disbursed by financial institutions (in crores)	-	88,973
26. Number of no-frill accounts	-	33,024,761

Source: Reserve bank of India publications.

Table 6. Spatial distribution of banking services (figures in percent)

	Offices			Deposits			Credit		
	1969	1996	2005	1969	1996	2005	1969	1996	2005
Rural	22.2	51.2	45.7	6.4	14.4	12.2	3.3	11.4	9.5
Semi-urban	40.4	21.3	22.3	21.8	19.5	16.9	13.1	13.1	11.3
Urban	19.2	15.2	17.6	26.5	22.4	21.5	21.8	17.7	16.4
Metropolitan	18.2	12.3	14.4	45.3	43.7	49.4	61.8	57.8	62.7
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Reserve bank of India publications.

Table 7. Financial inclusion: region wise

Region	Total		Rural		Urban	
	1991	2005	1991	2005	1991	2005
Population coverage per office						
Northern	11002	12257	10771	13043	11571	10941
North-eastern	16870	26227	16335	22158	21169	20318
Eastern	16441	19913	16402	21208	16614	15759
Central	15786	19518	15153	20264	18745	17297
Western	12771	14618	12579	15526	13108	13472
Southern	11932	12328	11276	12372	13811	12243
All-India	13711	15680	13462	16650	14484	13619

Table 7 (cont.). Financial inclusion: region wise

Region	Total		Rural		Urban	
	1991	2005	1991		1991	2005
Deposits: number of savings accounts per population of 100						
Northern	40	38.3	30.1	29.7	62.6	55.4
North-eastern	17.8	17.6	16.1	16.4	28.4	24.2
Eastern	21.8	20.5	17.7	16.9	40	36.1
Central	23.8	24.5	21	22.1	34.7	32.9
Western	35.5	32.5	24.7	23.8	53.8	42.7
Southern	37	38.7	34.6	35.5	42.7	41.8
All-India	29.9	29.2	24.5	24.4	45.6	41.6
Credit: number of credit accounts per population of 100						
Northern	6.4	5.7	6.6	5.1	5.9	6.7
North-eastern	4.4	3.3	4.4	3.2	4.4	3.9
Eastern	6.6	4.2	7.2	4.2	4.3	4.3
Central	5.5	4.3	5.8	4.2	4.8	4.5
Western	5.7	7.5	6.2	4.2	4.8	12.2
Southern	11.8	14.2	13.6	12.7	7.6	17.4
All-India	7.3	7	7.9	6	5.5	9.8

Sources: Reserve Bank of India; Census (2001).

Table 8. Results of regression analysis for understanding the impact of determinants of inclusive growth

Variable	Coefficient	Prob.
Constant	-2.213583	0.7656
LOG(<i>PSL</i>)	0.310230	0.0059*
LOG(<i>SAV</i>)	-0.804166	0.0001*
LOG(<i>EMP_RP</i>)	-0.502652	0.3759
LOG(<i>AGRI_PRO</i>)	-0.286433	0.3869
LOG(<i>CRED_GDP</i>)	-0.831765	0.0016*
LOG(<i>PCI</i>)	1.803471	0.0016*
R-squared	0.948572	
Adjusted R-squared	0.935715	
Durbin-Watson stat	1.923164	
F-statistic	73.77883	
Prob (F-statistic)	0.000000	
Dependent variable:	LOG(<i>RU_POV</i>)	

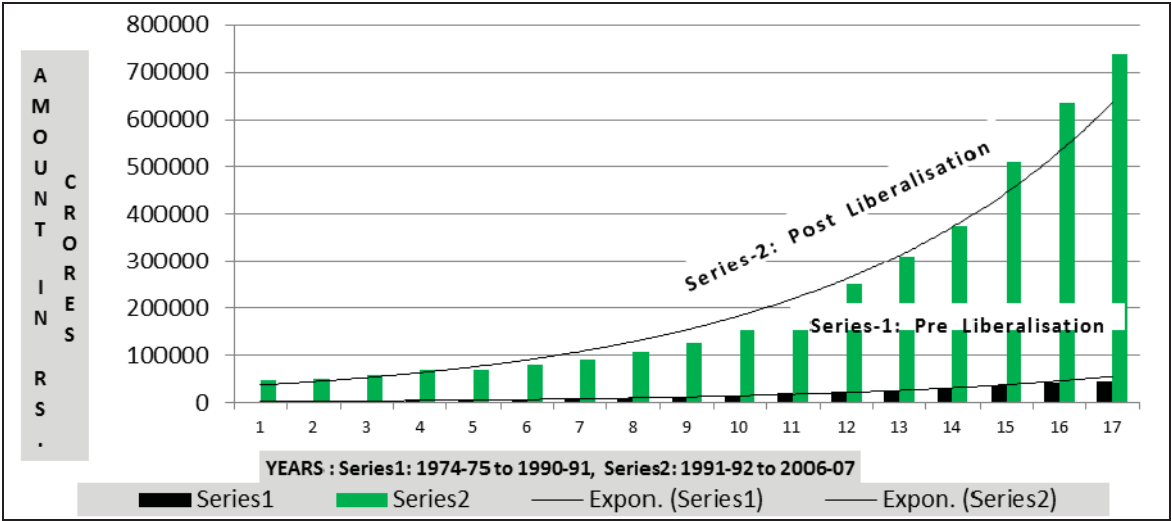
Note: * at 1% significance level; * at 5% significance level.

Source: Outcome of analysis of this study.

Table 9. Nature and strength of the impact of various determinants on inclusive growth

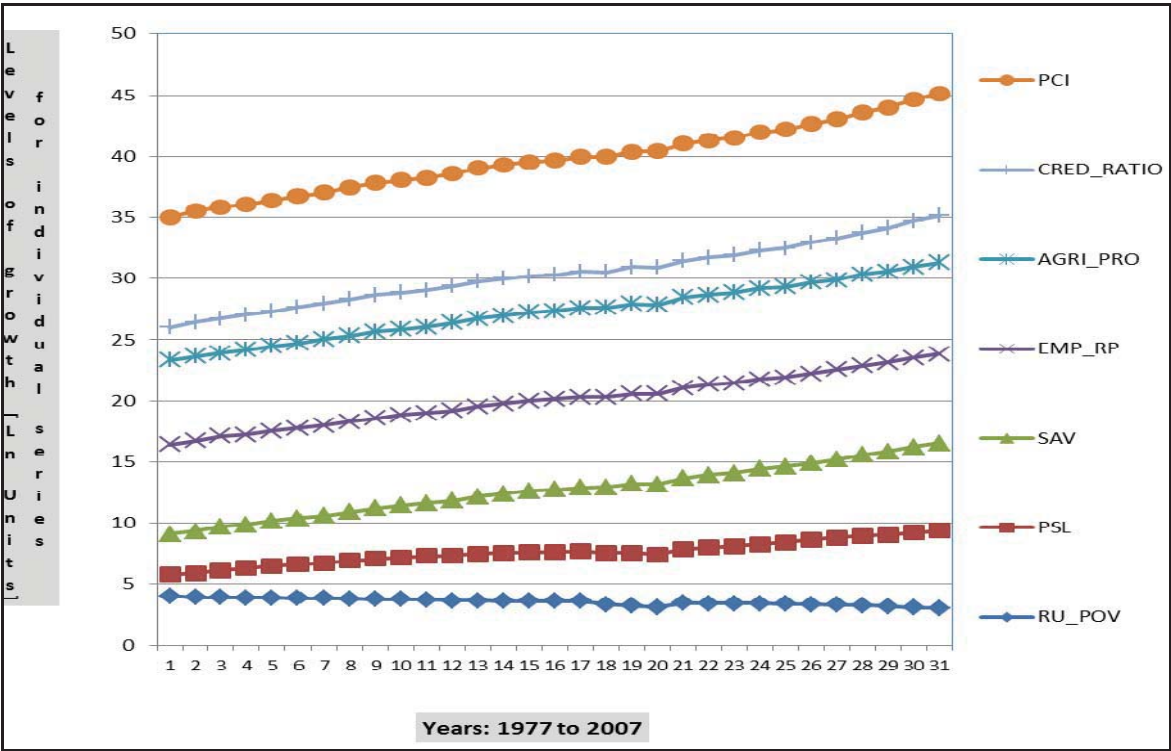
Explanatory variable	Correlation trend
Priority sector lending (<i>PSL</i>)	Positive and highly significant
Domestic savings (<i>SAV</i>)	Negative and highly significant
Employment in rural primary sector (<i>EMP_RP</i>)	Negative and insignificant
Agricultural production (<i>AGRI_PRO</i>)	Negative and insignificant
Credit to gross domestic product (<i>CRED_GDP</i>)	Negative and highly significant
Per capita income (<i>PCI</i>)	Positive and highly significant

Source: Outcome of analysis of this study.



Source: Outcome of analysis of this study.

Fig. 1. Priority sector lending in India – pre- and post-liberalisation



Source: Outcome of analysis of this study.

Fig. 2. Trend of inclusive growth in India