Bank-based Financial Intermediation for Financial Inclusion and Inclusive Growth

Swamy, Vighneswara

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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*

Dr. Vighneswara Swamy, Faculty Member, IBS-Hyderabad, INDIA,
www.ibshyderabad.org
E-mail: vighneswar@ibsindia.org, Phone: +91-09705096919

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I. 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.Stilglitz 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. In Section-II, the importance of `finance' for economic growth has been established with adequate literature review. In section III, inclusive growth and its significance for achieving sustainable growth is discussed. Section-IV brings to fore the financial inclusion and its dimensions in detail. In Section-V, the importance of financial inclusion for achieving inclusive growth in India is detailed with a statistical analysis. Lastly, findings and conclusion is presented in Section-VI.

II. 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, like the one by Rajan and Zingales (1998). Since the groundbreaking contributions of King and Levine (1993a, b), economists have shown renewed interest in the finance-growth nexus. 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 (King and Levine, 1993a; Levine and Zervos, 1998, Demirguc-Kunt and Maksimovic (1998) and 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, M., Demirgüç-Kunt, A. and Maksimovic, V, 2007, Levine, 1998, 1999). 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, T., Lundberg, M. and Majnoni, G, 2006 and Raddatz, C, 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 (Golsdmith, 1969; Boot and Thakor, 1997; Allen and Gale, 2000; Demirguc-Kunt and Levine, 2001). Joseph Schumpeter (1911) 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 A, 1934). Banking sector can wield a positive influence on the overall economy, and hence is of broad macroeconomic importance (Bonin and Wachtel, 1999, Jaffe and Levonian, 2001, Rajan and Zingales, 1998). It is established that better developed banks and markets are closely associated with faster growth (Levine, Loazya and Beck, 2000; Loayza and Ranciere (2002); Christopoulos and Tsionas, 2004). Improved functioning of banks can be able to boost resource allocation and hasten growth (Boyd and Prescott 1986; Greenwood and Jovanovic 1990; King and Levine 1993a; Levine, R. and S. 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 (Obstfeld 1994; Bencivenga and Smith 1991; 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.

III. 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; (i) Maximise economic opportunities (ii) Ensure economic well being and (iii) 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 K. Bhandari, 2009). Levine, (1998), (1999) and 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 Deininger and Squire (1998), White and Anderson (2001), Ravallion (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.

IV. 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 apprises 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. In the Indian context, Committee on Financial Inclusion in India (Chairman: Dr. C. Rangarajan, 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." The 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.

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 per cent of the population. Recent data (Table-2) illustrate that countries with large proportion of financial exclusion also show higher poverty ratios and higher levels of inequality. Table-3 presents the financial inclusion initiatives in different countries. Further, the extent of financial inclusion in some select countries is illustrated in Table-4.

V. 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. It is in this context that 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.

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 analyse the following:

1. *Spatial Distribution of Banking Services*
2. *Regional Distribution of Banking Services*
3. *Impact of Financial Inclusion on Inclusive Growth*

1. Spatial Distribution of banking Services

In order to analyse the spatial distribution of banking services in the country, the available data for the periods 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 (Table-6), corroborating the very substantial increase in retail credit.

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 from 1991 to 2005. Further, this data has been further 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 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 of the population. 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 provides 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

3. Impact of Financial Inclusion on Inclusive Growth – An Empirical Analysis

In order to involve a comprehensive measure of financial inclusion in the Indian context, we consider *Priority Sector Lending* 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, NABARD website, India Development Report 2008 and other related sources. Economic reforms in Indian economy were initiated in the year 1991-92. 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 has been analysed for understanding the trends. For the purpose of analysis the most popular statistical measure *Multiple Regression (OLS) Analysis* 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 (PSL) 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 Rupees in Crores) 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 large 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 in Rupees) there certainly will be an increase in inclusive growth process. As such, Per Capita Income (as used as a determinant in a similar analysis by Andrea Vaona and Roberto Patuelli, 2008, Srinivasan 1994, Streeten 1994, and Sugden 1993) 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;

$$\mathbf{Y = \alpha + \beta_1 X_1 + \ldots\ldots\ldots\ldots\ldots + \beta_n X_n + \mu} \text{ ------->} \quad (1)$$

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) + μ ------> 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, Loazya and Beck, 2000).

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

Log (RU_POV) = α + log (PSL, SAV, EMP_RP, AGRI_PRO, CRED_GDP, PCI) + μ -----> 3

'α' represents the *'Y intercept'*, β_{1},………B_n represent the respective regression coefficients for explanatory variables $X_{1 \ldots\ldots} X_n$ and 'μ' represents the error term. Where, 'Y' represents the 'RU_POV' , i.e, Rural Poverty and 'X_1', 'X_2' , …….., 'X_{14}' represent the predictor variables and 'β_1' , 'β_2', ……………, 'β_n' represent the partial regression coefficients of 'PSL' i.e, 'Priority Sector Lending', 'SAV'-Savings, 'EMP_RP'-Employment in Rural Primary sector, 'AGRI_PRO'-Agricultural production, 'CRED_GDP'-Credit to Gross Domestic Product and 'PCI'-Per Capita Income respectively. 'μ' represents the 'error term'. The results of analysis are presented in Table-8 for the period from the year 1977 to 2007.

Inferring from the results of this analysis, it can be concluded that Priority sector lending has significant impact on rural poverty.

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. 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. A graphical presentation of the trend of the inclusive growth in India is presented in Figure-2. 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.

VI. FINDINGS 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 all (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, M., Demirgüç-Kunt, A. and Maksimovic, V, 2007, Narasimham, 2002, Obstfeld 1994; Bencivenga and Smith 1991; 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 have 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 & 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.

REFERENCES

ADB, (2007): "Low-Income Households' Access to Financial Services", International Experience, Measures for Improvement and the Future; Asian Development Bank

Allen, F. and Gale, D (2000): "*Comparing Financial Systems*". Cambridge, MA: MIT Press.

Amit K. Bhandari (2009): "*Access to Banking Services and Poverty Reduction: A State-wise Assessment in India*", IZA Discussion Paper No. 4132, Indian Institute of Social Welfare and Business Management and IZA, IZA Bonn, Germany

Andrea Vaona, (2005): "*Regional Evidence on the Finance-Growth Nexus*", working paper –#30, University of Verona, Department of Economic Sciences, Polo Zanotto, Viale dell.Università 4, 37129, Verona, Italy.

Andrea Vaona and Roberto Patuelli, (2008): "*New empirical evidence on local financial development and growth*", Working paper -# 08-05, Decanato Della Facoltà di Scienze economiche, Via G. Buffi, 13 CH-6900 Lugano, *Switzerland*

Ayyagari, M., Demirgüç-Kunt, A. and Maksimovic, V (2007): "*Firm Innovation in Emerging Markets: Role of Finance*", World Bank Mimeo

Beck, T., Demirgüç-Kunt, A. and Levine, R (2006): "*Bank Supervision and Corruption in Lending*", Journal of Monetary Economics, 53(8), 2131-2163

Beck, T., Lundberg, M. and Majnoni, G (2006): "*Financial intermediary development and Growth Volatility: Do intermediaries dampen or magnify shocks?*", Journal of International Money and Finance, 25(7), 1146-1167.

Beck, T., Demirgüç-Kunt, A. and Levine, R (2007): "*Finance, inequality and the poor*", Journal of Economic Growth, 12(1), 27-49.

Beck, T., R. Levine and N. Loayza (2000): "*Finance and the Sources of Growth*", Journal of Financial Economics, 58, pp. 261.300.]

Bencivenga, Valerie R., and Smith, Bruce D (1991): "*Financial Intermediation and Endogenous Growth*," Review of Economics Studies, 58(2), pp. 195-209.

Bonin, John P and Wachtel, Paul, (1999): "*Toward Market-Oriented Banking in the Economies in Transition*", in Blejer, Mario/ Skreb, Marko (ed.): Financial Sector Transformation: Lessons from Economies in Transition, Cambridge UK, pp. 19-92.

Boot, A.W.A. and Thakor, A, (1997): "*Financial System Architecture*", Review of Financial Studies, 693-733.

Bourguignon, F, (2003) "*The Growth Elasticity of Poverty Reduction; Explaining Heterogeneity across Countries and Time Periods*", in *Inequality and Growth: Theory and Policy Implications,* ed. T. Eicher and S. Turnovsky. Cambridge, MA: MIT Press.

Boyd, John H. and Prescott, Edward C, (1986): "*Financial Intermediary Coalitions*," Journal of Economic Theory, April 1986, 3 8(2), pp. 211-232.

Cole, Shawn, (2007): "*Financial Development, Bank Ownership and Growth. Does Quantity Imply Quality?*", Harvard Business School, Working Paper

Christopoulos, D.K. and Tsionas, E.G (2004): "*Financial development and economic growth: Evidence from panel unit root and co integration tests*", Journal of Development Economics, 73, 55–74

Demirgüç-Kunt, A. and Maksimovic, V (1998): "*Law, finance, and firm growth*", Journal of Finance, 53, 2107–2137.

Demirgüç-Kunt, A. and Levine, R (2001): "*Financial Structure and Economic Growth: A Cross- Country Comparison of Banks,* Markets, and Development", Cambridge, MA: MIT Press.

Deininger, K., and L. Squire (1998) "*New Perspectives on Old Issues: Inequality and Growth*", *Journal of Development Economics*

Goldsmith, R.W (1969): "*Financial Structure and Development*", New Haven, CT: Yale University Press

Greenwood, Jeremy and Jovanovic, Boyan (1990): "*Financial Development, Growth, and the Distribution of Income,*" Journal of Political Economy, 98(5, Pt.1), pp. 1076-1107.

Greenwood, Jeremy and Smith, Bruce (1997): "*Financial Markets in Development and the Development of Financial Markets*," Journal of Economic Dynamics and Control, 21(1), pp. 145-186.

Ifzal Ali, (2007): "*Inequality and the Imperative for Inclusive Growth in Asia*", Asian Development Review, vol. 24, no. 2, pp.1−16, Asian Development Bank

Jaffe, Dwight and Levonian, Mark, (2001): "*The Structure of Banking Systems in Developed and Transition Economies*", European Financial Management, 7 (2), pp. 161-181.

King RG and Levine R, (1993a): "*Finance and Growth: Schumpeter Might Be Right"*, Quarterly Journal of Economics 108: 717-737.

King RG and Levine R, (1993b): "*Finance, Entrepreneurship, and Growth"*, Journal of Monetary Economics, 32: 513-542.

Kraay, A, (2004): "*When Is Growth Pro-Poor? Cross-Country Evidence*", IMF *Working Paper* 4-47, International Monetary Fund, Washington, DC

Levine, R. and S. Zervous, (1998): "*Stock Markets, Banks and Economic Growth*", American Economic Review, Vol.88, pp 537-58

Levine, R, (1998): "*The Legal Environment, Banks, and Long-Run Economic Growth*", Journal of Money, Credit, and Banking, 30, pp. 596-613.

Levine, R, (1999): "*Law, Finance, and Economic Growth"*, Journal of Financial Intermediation, 8, pp. 36-67

Levine, Ross, Loayza, Norman and Beck, Thorsten (1999): "*Financial Intermediation and Growth: Causality and Causes*", mimeo, World Bank

Levine, Ross; Loayza, Norman; and Beck, Thorsten, (2000): "*Financial Intermediation and Growth: Causality and Causes*", mimeo, World Bank, 2000

Lopez, H. and L. Servén, (2004) "*The Mechanics of Growth-Poverty-Inequality Relationship*", Mimeo, World Bank

Loayza, N. and Ranciere, R, (2002): "*Financial Fragility, Financial Development, and Growth*", Mimeo, World Bank

Narasihmam, M, (2002): "*Economic Reforms: Development and Finance*", UBS Publishers' Distributors Ltd., New Delhi

Obstfeld, Maurice, (1994): "*Risk-taking, Global Diversification, and Growth*", American Economic Review, 84(5), pp.1310 -29

Peachy, S. and A. Roe, (2004): "Access to Finance - What Does it Mean and How Do Savings Bank Foster Access?", Brussels: World Savings Bank Institute.

Raddatz, C, (2006): "*Liquidity needs and vulnerability to financial underdevelopment*", Journal of Financial Economics, 80(3), 677-722.

Rajan, R.G. and L. Zingales (1998): 'Financial Dependence and Growth', *American*

Economic Review 88, 559-86

Rajan, R.G. and L. Zingales (2003): *Saving Capitalism from Capitalists*, Crown Business, New York.

Ravallion, M, (2001): "*Growth, Inequality and Poverty: Looking Beyond Averages*", World Development 29(11), pp 1803-1815

Report of the Committee on Financial Inclusion in India (Chairman: C. Rangarajan) (2008), Government of India

Schumpeter, Joseph A, (1934): "*The Theory of Economic Development*", 1912, translated by Redvers Opie, Cambridge, MA: Harvard University Press.

Sen, Amartya, (2000): '*Development as Freedom*', Anchor Books, New York, 2000.

Srinivasan, T. N, (1994): "*Human Development: A New Paradigm or Reinvention of the Wheel*?", American Economic Review, Papers and Proceedings 84(2): 238-243.

Streeten, Paul, (1994): "*Human Development: Means and Ends*", American Economic Review, Papers and Proceedings 84(2): 232-237.

Sugden, Robert, (1993): "*Welfare, Resources, and Capabilities: A Review of Inequality Reexamined by Amartya Sen*", Journal of Economic Literature

White H. and E. Anderson, (2001): "*Growth vs. Redistribution: Does the Pattern of Growth Matter*?", Development Policy Review 19(3), pp 167-289.

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 id 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.
Report of the Committee on Financial Inclusion	The process of ensuring access to financial services and timely and adequate credit where needed by vulnerable groups such as weaker	Access to financial services and timely and adequate credit.

in India (Chairman: C. Rangarajan) (2008)	sections and low income groups at an affordable cost.	
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
1	**2**	**3**	**4**	**5**
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 (PATs)	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 any Branch
	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
	Financial Consumer Agency of Canada (FCAC), 2001	

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
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.No. 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. No. 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. No. of Local Area Banks (LABs)	-	4
22. LAB Assets	-	786.6
23. No. of Cooperatives		97782
24. No. of Kisan Credit Cards Issued (Numbers in million)	-	84.6
25. Financial Assistance Sanctioned and Disbursed by Financial Institutions (in Crores)	-	88,973

26. No. 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
Deposits: No. 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: No. 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: 1.Reserve Bank of India. 2. 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(PSL)	0.310230	0.0059*
LOG(SAV)	-0.804166	0.0001*
LOG(EMP_RP)	-0.502652	0.3759
LOG(AGRI_PRO)	-0.286433	0.3869
LOG(CRED_GDP)	-0.831765	0.0016*
LOG(PCI)	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(RU_POV)	

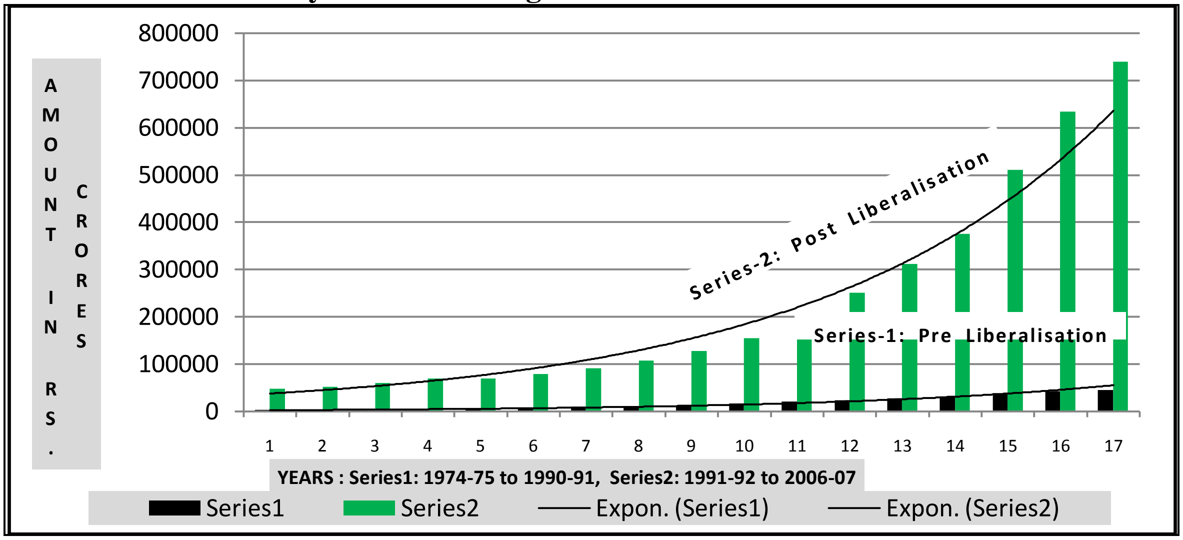
Note: * at 1% significance level   * at 5% significance level
Source: Outcome of analysis of this study

Table-9:
Nature and Strength of the Impact of Various Determinants on Inclusive Growth

Explanatory Variable	Correlation Trend
Priority Sector Lending(PSL)	Positive and highly significant
Domestic Savings (SAV)	Negative and highly Significant
Employment in Rural Primary sector (EMP_RP)	Negative and insignificant
Agricultural Production (AGRI_PRO)	Negative and insignificant
Credit to Gross Domestic Product (CRED_GDP)	Negative and highly Significant
Per Capita Income (PCI)	Positive and highly Significant

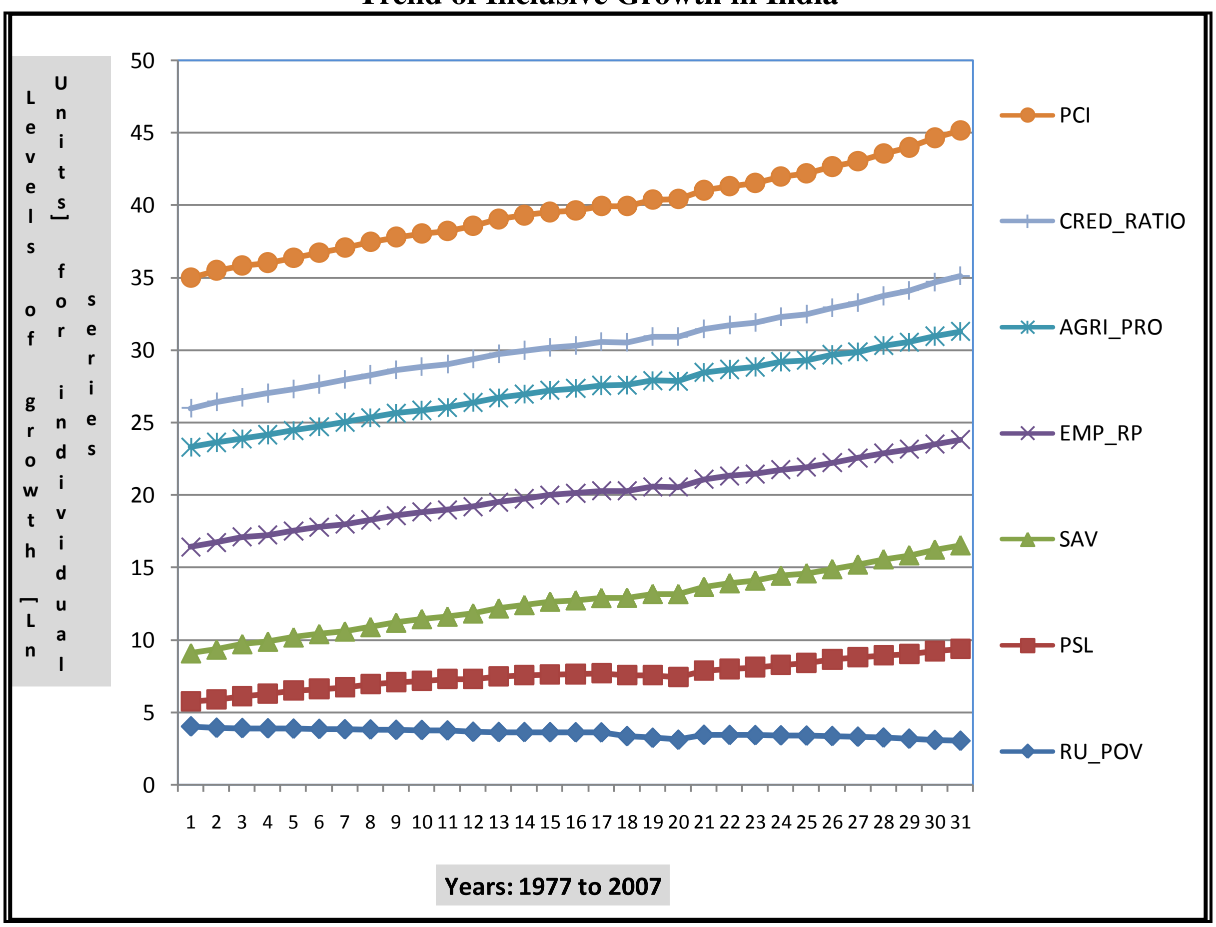
Source: Outcome of analysis of this study

Figure-1:
Priority Sector Lending In India - Pre and Post Liberalisation



Source: Outcome of analysis of this study

Figure-2:
Trend of Inclusive Growth in India



Source: Outcome of analysis of this study