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# **Financial Sector Development and Economic Growth in India: Some Reflections**

Joshi, Seema

Kirori Mal College ,University of Delhi,Delhi

December 2016

Online at <https://mpra.ub.uni-muenchen.de/81201/>  
MPRA Paper No. 81201, posted 07 Sep 2017 08:44 UTC

# Financial Sector Development and Economic Growth in India: Some Reflections

(Dr.Seema Joshi)<sup>1</sup>

***Abstract:** Financial systems play a crucial role in the economic development of a country. There is sufficient economic literature which reveals that a well functioning financial system increases economic efficiency, investment and growth. This paper provides a snapshot of the evolution of Indian financial system along with its progress and performance by making use of various proxy variables of financial development. It also attempts to examine the relationship between the financial development and growth in Indian context. By using time series data from 1991-91 to 2012-13 period and using three proxy variables viz. GDP per capita for economic growth of India, M2 to GDP ratio and ratio of stock market capitalization to GDP for measuring the extent of financial deepening in India and utilizing regression technique, the empirical findings very clearly point towards the existence of strong relationship between financial deepening (FD) and EG. The paper also shows the extent of financial deepening of markets in India vis-a-vis other Asia Pacific economies. The analysis reveals that the Indian financial sector has undergone far reaching changes over three and half decades as a result of financial sector reforms. Consequently, the widening and deepening of financial system has allowed greater and more productive investment to occur. Financial intermediation has increased over time, which in turn is leading to a virtuous cycle of higher savings, improved investment efficiency and higher real economic growth. However, there are several challenges in the financial sector in the form of increasing non-performing assets (or bad loans) of the banks and underdeveloped corporate bond market. These challenges need attention and require policy intervention.*

**Keywords:** corporate bond market, financial system, financial widening and deepening, non-performing assets.

**JEL classifications:** G00, G1, G2

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<sup>1</sup> The author is presently working as Associate Professor of Economics, Department of Commerce, Kirori Mal College, University of Delhi, Delhi. INDIA. E-mail : [seemajoshi143@gmail.com](mailto:seemajoshi143@gmail.com). Mobile: 09717133077

## 1. Introduction

An integrated financial infrastructure is a prerequisite for stimulating and sustaining the growth of the country. A financial system mobilizes the savings (through networks of financial intermediaries), connects savings-surplus (ultimate lenders) and savings –deficit institutions (ultimate borrowers) and facilitates channelization of the resources for productive purpose, thereby accelerating the process of capital formation which in turn influences the pace and quality of economic development. There has been extensive analysis of relationship between financial development and economic growth carried out in literature (Bagehot 1873, Croituru,2012; Levine, 1997, 2005;Oks,2001; Wachtel, 2001)11,12, Caporale et al. 2009, Zhuang,J,et al.(2009), N. M. Odhiambo(2009),Barajas et al. ,2013a,b; Dabla-Norris et al.,2013 and Aye 2015). Schumpeter (1934) highlighted the role of financial intermediation in economic development. He looked upon the banking sector as an engine of economic growth through its funding of productive investment. Discussions at International Monetary Fund(IMF) and Group-20 ( G-20)focusing on the international monetary system have involved strengthening the system to achieve greater financial depth which in turn is associated with greater stability benefits. Along with other factors, economic stability of a country is dependent on its financial stability. The latter is defined as

***“a persistent state of robust functioning of various financial system components – markets, institutions, market infrastructure – endowing the system to face any endogenous or exogenous financial shock with minimal disruptive impact”(RBI,2015).***

Financial stability, inter alia, depends to a large extent on the robustness of the institutions, markets and infrastructures that make up the financial system which operate in conjunction with each other.

Undeniably, economic development is the process of securing higher level of productivity. But higher levels of productivity cannot be secured unless there is high rate of physical capital

formation in the country (along with human capital formation). The process of physical capital formation is completed when savings are mobilized through (financial institutions and non-bank financial intermediaries') first and invested later. Herein comes the importance of the well developed and integrated financial system to avoid any information asymmetry. Since financial system constitutes the backbone of the economy, therefore, there arises a need for strong financial system which is efficient and stable. Inter alia economic stability of a country is dependent on its financial stability which is further determined by the extent of development of its financial system. In this background, it would be highly appropriate and relevant if we try to find out how Indian financial system has evolved and performed over time. And also it would be highly relevant if we examine the relationship between financial system and economic development in Indian context. The paper has been divided into six sections. After introduction in Section 1 , Section 2 gives sources of data and explains methodology used in the present paper. Section 3 provides a glimpse into the Indian financial system. Section 4 focuses on progress and performance of IFS. Section 5 examines the relationship between financial system and economic growth and also tries to assess the extent of financial deepening in India vis-a vis other Asia Pacific economies. The final section concludes and gives policy implications.

**2. Data and Methodology:** The study makes use of secondary sources of data like books and publications of Reserve Bank of India (RBI) , Securities and Exchange Board of India (SEBI) and Asian Development Bank (ADB) .It has made use of statistical techniques like percentages, ratios and regression analysis. The performance of Indian financial system has been analyzed using few dimensions of the money market especially that of scheduled commercial banks (SCBs) like number of banks, number of bank offices, credit-deposit ratios , return on equity (ROE) and return on assets (ROA) of SCBs etc. The performance of capital market. has been gauged through various stock market indicators and the indicators of liquidity of the stock market like market capitalization, turnover ratio and traded value ratios. The study also makes use of 22 years time series data from 1991-91 to 2012-13 (pertaining to post economic reform period

in India) and regression technique to examine the relationship between financial sector development and economic growth.

### **3. A Snapshot of Indian Financial System: Evolution to Revolution**

Though the mention of banks in India has been made in Rigveda<sup>2</sup>, yet banking in India on western lines started from the beginning of the 19<sup>th</sup> Century. The first joint stock bank, named 'Bank of Hindoostan' was established in 1779, followed by the General Bank of India in 1786. Three more banks, known as the Presidency Banks viz the Bank of Bengal(1806), Bank of Bombay(1840) and Bank of Madras(1843) were formed. The amalgamation of these three banks resulted in the formation of Imperial Bank of India in 1921. The most significant development before partition of India was the passing of Reserve Bank of India (RBI) Act 1934 and the formation of RBI in 1935 which heralded a new era for banking sector evolution in India.

It is quite obvious that at the time of independence India did not have any strong network of financial institutions to mobilize the savings of the people or to cater to the requirements of agriculture and industrial sectors. The capital markets were in primitive or rudimentary stage. The indigenous bankers played a predominant role in India's economic life. However, after independence, the adoption of mixed economic system and subsequently the inclusion of the objective of planned economic growth as a major objective of economic planning in 1951, along with other factors- the emergence of RBI as the central bank of India, its nationalization and taking over of RBI by the Government of India, the passage of the Banking Regulation Act in 1949, the nationalization of top banks in two waves in 1969 (14 banks) and 1980 (6 banks), establishment of development banks, institutions for agricultural development, Regional Rural Banks (RRBs in 1976), Non Bank Financial Intermediaries and also the establishment of an institution for housing finance etc.- led to the rapid progress of Indian financial system. In the

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<sup>2</sup>Rigveda is one of the four canonical sacred texts of Hinduism known as the Vedas.

post 1991 era especially after introduction of New Economic Policy in India, several far reaching reforms were introduced in the banking sector on the recommendation of Narsimham Committee Reports (1991, 1998) and in the capital market on the recommendation of the Pherwani committee Report(1991) respectively and many other measures thereafter brought about a revolution in the financial system of India . Various measures have been initiated to strengthen the Indian financial system by making it more transparent, inclusive and technology friendly, efficient through supervision and regulatory framework, competitive through introduction of international best practices.

The banking sector reforms can be grouped into prudential measures, competition enhancing measures, measures enhancing role of market forces, institutional and legal measures, supervisory measures and technology related measures (Rakesh Mohan,2004).

It is important to point out that the concept of banking has widened over time. Commercial banks have become universal banks (moving away from their traditional roles to modern ones), development banks are becoming commercial banks, life insurance and general insurance is expanding in the private sector and many non banks financial intermediaries and companies are coming to the fore to supplement the efforts of commercial banks with regulatory framework in place. Besides,private and foreign banks have been allowed to set up shop. In addition to wide range of financial services like merchant banking, underwriting, leasing, hire purchase, venture capital, factoring services, credit rating and financial counseling are available to facilitate the mobilization and transformation of savings in to investment which is so essential for economic growth.

Besides money market reforms, several measures were initiated to reform the capital market too. These included among others, modernization of trading infrastructure (like the computerization of Bombay Stock Exchange, Delhi Stock Exchange and National Stock Exchange ,introduction of online trading), permission to Foreign Institutional Investors to invest in the stock markets of

India, the setting up of a statutory regulatory body in the form of Securities and Exchange Board of India (SEBI), issuance of guidelines through SEBI to bring about discipline in the capital market, passage of legislations to develop the capital market, strengthening of risk management measures and corporate governance practices, dematerialization of securities, integration of domestic capital market with the international capital market and introduction of derivative products.

Major reforms have been carried out in the government securities (G-Sec) debt market mainly focusing on three areas: enabling measures, institutional measures and increase in instruments on G-Sec market.

In addition to the above-mentioned reforms, some reforms have been introduced in the insurance sector. The life insurance sector was dominated by Life Insurance Corporation (LIC) since 1956. LIC has been opened up for competition by allowing foreign direct investment (FDI) up to 26% initially and 49 percent subsequently. The regulatory authorities like Insurance Regulatory and Development Authority (IRDA) and Pension Fund Regulatory and Development Authority (PFRDA) have also been set up for regulating and developing the insurance sector and the pension funds, respectively.

All these significant developments in Indian financial system point towards the movement of our financial system from rudimentary stage of development to relatively modern one. It is important to mention that in an attempt to honor our commitment to Basel convention, we are moving from bank nationalization to bank mergers now so as our domestic public sector banks can become large entities in the long term before the financial market is opened up to foreign banks. It is because of the healthy and robust financial institutions, markets and infrastructure along with robust regulatory and supervisory policies that India had been relatively less impacted by the global financial crisis. Swamy in his report titled “Basel III: Implications for Indian Banking System” points out that “Indian financial sector’s resilience lies in the fact that around

70% of it is domestically owned (March31,2011).In addition ,about 74% of the assets of the Indian Banking sector are held by the public sector banks. The relatively feeble presence of foreign banks helped the sector minimize its exposure to the global toxic assets thereby had a minimal impact of the devastative global financial crisis.”

Various reform measures in the financial sector have attributed to promote the process of both financial deepening (FD) and broadening in India. FD (which implies increasing financial assets as percentage of GDP) has been discussed in Section 4. Financial broadening (FB) implies building an increasing number of participants and instruments. The Indian FS comprises financial intermediaries (like banks and nonbank finance companies) , financial markets, financial instruments’ and financial service. The Indian banking system consists of scheduled commercial banks (SCBs) and non-SCBc. There were in all 89 Scheduled commercial banks operating in India, out of which 28 are public sector banks(PSBs), 20 private sector , 43 foreign banks and 56 RRBs as on 31<sup>st</sup> March,2015. Public sector banks have 20 nationalized banks, 6 State Bank of India (SBI) and associates, Industrial Development Bank of India (IDBI) and Bhartiya Mahila Bank<sup>3</sup>. It is important to mention that the government is considering the consolidation of public sector banks in India and might introduce three tier banking structure as was suggested by Narasimham Committee Report on banking sector reforms three decades sago. Scheduled co-operative bank are of two types urban one and state co-operative banks. Besides, there are Non-Bank Financial Intermediaries (NBFIS) also to complement the efforts of the banking institutions to provide finance to people. These are development banks like Industrial Finance Corporation of India (IFCI),IDBI, Industrial Credit and Investment Corporation of India (ICICI), National Bank for Agriculture and Rural Development (NABARD, Life Insurance Corporation of India (LIC),General Insurance Corporation of India (GIC),Unit Trust of India (UTI).

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<sup>3</sup> SBI approve the merger of its operations with 5 of its Associate Banks.State Bank of Travancore,Mysore,Bikaner and Jaipur, Patiala and Mahila Bank will stand merged with SBI.



Another component of financial system of India is financial markets which are of three types; money market, capital market and forex market. These markets facilitate the buying and selling of financial instruments. For example, the money market deals with financial instruments of short term nature having a maturity period up to one year such as Call loans, Commercial Bills, Certificates of deposits and Commercial papers. Capital market deals in long term securities of maturity period above one year, such as primary deals in new securities and secondary market deals in already existing securities and government bond market deals in gilt-edged securities. There is a host of financial services in India like fund based and fee based services. The former comprises of equipment; leasing, hire-purchase, venture capital, housing finance, factoring. The fee based services are like corporate counseling, portfolio management, issue management etc, The commercial financial services are largely bank based services e.g. advisory services ,custodian services, credit card services etc. The securities related services like mutual funds services, private placement, underwriting services etc. The availability of wide range of instruments and participants are an indication of financial widening of IFS.

Coming now to the progress and performance of IFS, let us take up developments in the banking sector first and in capital market subsequently in the next section. In the next two sections along with other indicators of financial sector development three important proxy variables for financial sector development like C-D ratio, stock market capitalization to GDP ratio and broad money to GDP ratio have been used.

#### **4. Progress and Performance of IFS**

Rapid economic development pre –supposes rapid expansion of banking system. The number of banks went up from 73 in June 1969 to 298 in March 2000– an increase of 308.2 per cent which was mainly because of ‘social banking objective’ introduced in 1970s with Differential Interest Rate(DIR) scheme and Integrated Rural Development Programme(IRDP) in 1980. Initially, the banks were conservative and that is why most of the bank branches were in metropolitan cities

and major cities. After the two waves of bank nationalization occurred, branch expansion gained momentum. There has been over 1101.7 % increase in number of branches, but the most spectacular progress was in rural and semi urban centres— the increase was from 5,172 to 62153 branches during 1969-2012 period. With the progress of branch expansion programmes, the national average of population per bank office has progressively declined from 64,000 in 1969 to 12.3 thousand in 2012.

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INSERT TABLE 1 ABOUT HERE  
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It is quite noticeable from the table (1) that there have been considerable increases in per capita deposits and credit which points towards an increase in the average business per bank branch. The viability of individual bank branches including those in the rural and semi-urban centers appears to have improved. The discernible increase in the proportion of bank deposits to national income from 15.5 to 81.1 reflects enhanced deepening of the Indian financial system during the period 1969-2012. The advances to priority sector as percentage of non-food credit increased from 15.5 per cent in June 1969 to 39.2 per cent in March 1991 then started declining. The rate of progress was quite rapid soon after nationalization but after that it became modest. It is important to mention that RBI has revamped Priority Sector Lending (PSL) norms. Now, loans to sectors such as social infrastructure, renewable energy and medium enterprises will be treated as PSL. (Business Standard, April 24, 2015).

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Coming now to Table 2 which shows that C-D ratios of SCBs declined in 2004 when compared with 1969 figure of 0.77. However, increase in C-D ratio in March 2012 is a positive development indicating higher profitability of banks.

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It is important to point out that the ROE, ROA and NIM are three key indicators of profitability of a bank and give a fair idea about how banks use their resources to generate profits. It can be observed from Table 3 (Figure 1a) that in case of SCBs, ROA registered a decline from 1.13 per cent in 2008-09 to 1.03 per cent in 2012-13. But ROA registered an increase from 1.05% to 1.08% from 2009-10 to 2011-12. The ROE too has registered a decline from 15.44 per cent in 2008-09 to 13.84 per cent in 2012-13 (See Figure 1b). It is important to point out here that ROE in case of SBI and its Associates and also in case of nationalized banks have declined but in case of private sector banks both old and new one increased. Similarly, ROA has declined for Public Sector Banks (PSBs) but increased for private sector banks. ROA was higher for new private sector banks than for old private sector banks. NIM has increased in case of SBI and Associates, nationalized banks, but declined in case of private sector banks both old and new ones and also in case of foreign banks<sup>4</sup> (Figure 1c).

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INSERT Figure 1a, 1b and 1c ABOUT HERE  
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The decline in profitability may be because of the higher wage cost. Wages as percentage of total expenses have increased for SBI and its associates but have declined for nationalized and old private banks. There is a need that PSBs should invest on skill development of their employees

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<sup>4</sup> Also see KPMG and Indian Chamber of Commerce study, *Indian Banking Sector : Taking the India Story Forward, Role of Changing Banking Landscape*, available on [https://assets.kpmg.com/content/dam/kpmg/pdf/2014/06/KPMG\\_Taking\\_the\\_India\\_story\\_forward.pdf](https://assets.kpmg.com/content/dam/kpmg/pdf/2014/06/KPMG_Taking_the_India_story_forward.pdf)

so that productivity can go up and profit per employee can increase further but currently it is lower for PSBs as compared to private sector and foreign banks.

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Having examined the performance of SCBs above, let us focus on the functioning of stock markets now. Undeniably, “Stock exchanges play a critical role in the growth of capital markets, with infrastructure platforms like clearing houses, depositories, stock exchanges and commodity exchanges standing as the pillars in the financial markets. It is through stock exchanges that capital markets are able to trade with efficiency, adopt adequate risk management measures, establish transparent communication channels to benefit all stakeholders” (The Associated Chambers of Commerce and Industry of India and Pricewaterhouse Coopers (ASSOCHAM and PWC Joint Report).

Since capital market is an important part of financial markets and financial system, therefore, its development is important for FS development as it supplements the efforts of the banking system and helps in boosting economic development by infusing liquidity into the system.

#### ***4.1 Select Stock Market Indicators in India***

It has been very rightly observed that , “Overall, stock markets provide market liquidity that enables implementation of long term projects with long term payoffs thereby promoting a country’s economic growth endeavour. Moreover, efficient capital markets not only avail resources to investors, they also facilitate inflow of foreign financial resources into the domestic economy.”(Ngugi et al., 2009)

The growth of capital markets requires stock exchanges with adequate infrastructure-clearing houses, depositories, commodity exchanges- to support financial markets. With reforms like dematerializing of share by depositories and extension of it to bonds and commercial papers, and initiation of online exchanges has helped to increase the accessibility of capital market to the average investor.

Coming now to stock market indicators, there has been a steady increase in the number of stock exchanges in India from 7 in 1961 to 23 in 2003 and companies listed on the stock exchanges of India from 1203 to 9413 during the period 1961 -2003 as shown in Table 4. The absolute size of the capital market in recent years has increased from Rs 12 billion to Rs 99,301.2 billion in case of NSE and toRs 101492.9 billion in case of BSE.

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INSERT TABLE 4 ABOUT HERE  
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Undeniably, the functioning of the financial markets depends on liquidity. It is liquidity which determines the efficient and effective allocation and reallocation of economic resources. The following factors influence the liquidity at any stock exchange<sup>5</sup>: a) No. of companies listed, b) Turnover, c) Market Capitalization, d) Average Trade Size, e) Average Daily Turnover and f) Proportion of Retail and Institutional traders using the trading platform.

At both Bombay Stock Exchange( BSE) and National Stock Exchange(NSE) the trading volumes has increased considerable during the phase of 1990s and early 2000. Table 5 documents all the three major measures of liquidity in the stock market of India, Mcap.-to-GDP ratio , the performance of BSE is better than that of NSE during period under consideration. Liquidity in the stock market measured in terms of traded value ratio and turnover as percentage of GDP

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<sup>5</sup> See (Madhasu,2016)

.This has declined significantly during the last five years. The turnover ratio (turnover as percentage of market capitalization), after declining in till 2013-14 however, improved in 2014-15, then declined next year again in 2015-16. Based on the turnover ratio and traded value ratios, NSE is performing much better than BSE. NSE has more liquidity than its peer BSE.

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Studies (Madhasu,2016) show that the Indian financial markets are also said to witness high and frequent price fluctuations. However, the recent effective and timely regulatory interventions made by SEBI have enhanced the investors' confidence,boosted competitive environment and improved liquidity in the markets. Measures like Liquidity Enhancement Schemes (LES) for brokers and intermediaries(2011amd2013) {to enhance liquidity in illiquid securities in equity cash segment and introduction of similar scheme for equity derivative segment} and publication of the list of Illiquid Stocks' by NSE and BSE on the recommendations of the market regulator need special mention.

Capital market developments in India have led to financial deepening by enabling the savers to diversify their financial asset basket and by making alternative sources of financing accessible to firms.However,further deepening of capital market can be secured in India only when regional exchanges are integrated with the national ones. Consequently, yield will improve, risk diversification will take place and efficiency will also improve as has been suggested by ASSOCHAM andPWC joint report on Indian capital market.

Needless to mention, the financial deepening (FD) implies the availability of more liquidity in the system which means more opportunity for continued growth. It is also believed to confer

financial stability benefits as the sectors and agents are able to use a range of financial markets for savings and investment decisions.. Studies (Rangrajan) highlight the importance of financial deepening for sustaining economic growth of India. Literature is abound with studies( Khalil,2004;Anthony and Tajudeen,2010; Calderonand Liu,2003 and Ghildiyal et al. (2015) which show that financial deepening impacts growth. FD in the following section has been defined as the ratio of M2 to GDP. Though another proxy variable used in literature<sup>6</sup> to capture the extent of financial deepening viz. market capitalization to GDP ratio too has been used in the model. The sub-section 5.1 also tries to exhibit India's position in FD vis-vis certain selected other advanced and emerging markets.

## 5. Indian Financial System Development and Economic Growth

An attempt was made in this paper to understand the relationship between FD and growth. We used three proxy variables for this purpose. GDP per capita (GDPPC)is proxy for economic growth of India, M2 to GDP ratio and ratio of stock market capitalisation to GDP are two proxy variables used for measuring the extent of financial deepening in India. The time series data on these variables was taken from the RBI publication viz. Handbook of Statistics from1991-92to 2012-13. All the variables are in log form.  $b_0$  is intercept and  $b_1$  and  $b_2$  are coefficients of explanatory variables. The following model was estimated.

$$\ln \text{GDPPC}_t = b_0 + b_1 \ln \text{M2}_t + b_2 \ln \text{MC}_t + u_t$$

The regression results for the above equation is shown as below:

$$\ln \text{GDPPC}_t = 4.525 + .469^* \ln \text{M2}_t + .064^{**} \ln \text{MC}_t + u_t$$

(.041)                      (.032)

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<sup>6</sup> See Ghildiyal et al. (2015)

where ‘\*’ is significant at the 1% level and\*\* at 10% level and where the figures in brackets are standard errors of the estimates.

From the above equation, it is quite evident that when lnGDPPC is regressed on FD proxies namely M2 to GDP ratio( $\ln M2_t$ ) and Market capitalization to GDP ratio( $\ln MC_t$ ), the value of R2 turned out to be 97.8% implying, on the whole, that 98% of the movements in the dependent variable were explained by the independent variables. Elasticity estimates for the average value indicate that a 1% change in M2 to GDP ratio and MCAP to GDP ratio leads to a 0.46% and 0.064% change in GDPPC, respectively. The crucial points to be observed here are the signs and significance of M2 to GDP ratio and Market capitalization to GDP ratio. The coefficients of both the explanatory variables are positive implying a positive impact of these two variables on GDP and they turned out to be significant at 1% and 10% levels of significance.

The empirical findings very clearly point towards the existence of strong relationship between FD and EG. This is consistent with the long held view of economist that financial deepening and economic growth are intertwined. The next sub-section examines the extent of financial deepening in India vis-a-vis Selected Advanced and Emerging Economies

### ***5.1. Financial Deepening of India’s Economy vis-a-vis Selected Advanced and Emerging Economies***

Financial deepening is the ratio of money i.e currency in circulation, demand, saving and time deposits to GDP ( $M2/GDP$ ). With 7 % growth rate in 2016-17, India at present is the fastest growing major economy in the world and is having huge potential for growth in near future. To scale bigger heights in growth trajectory, there is a need to deepen the financial sector in India. It can be observed from the table that it has been increasing in most of the countries with the exception of one country i.e. Indonesia. Amongst South Asian Countries, it is highest in India. But the South Asian Countries are far behind East Asian Countries like Hongkong, Taipei, China



and Republic of Korea in the degree of financial development. It can also be noticed from Table 6 that the countries with higher level of FD are having higher savings, higher rates of capital formation and real economic growth rates.

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INSERT TABLE 6 ABOUT HERE  
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Both advanced and emerging markets have deepened their financial sectors over the past two decades. Table 7 given below clearly shows that some of the emerging markets like Hongkong SAR in 1989 and Singapore in 2009 are exhibiting that their financial depth is comparable to AMs. Some EMs are lagging far behind.

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INSERT TABLE 7 ABOUT HERE  
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AMs and EMs have deepened their financial sectors over the past two decades (Figure 1). Reflecting the growth of financial centers such as Hong Kong SAR (Special Administrative Region) and Singapore, some EMs exhibit levels of depth comparable to AMs. Some other EMs, on the other hand, experienced virtually no deepening. Overall, depth in AMs has grown far more rapidly than in EMs, especially in the last decade, therefore, one can notice divergence in the financial depth of AMs and EMs and this pin points towards the scope for catch up. It is admirable that China and India are among the top five contributors to global financial depth.

## **6. Conclusions and Implications**

The foregoing ,empirical findings very clearly point towards the existence of strong relationship between financial deepening(FD) and EG. As has been mentioned in Section 3 that the Indian financial system has acquired a wide reach through the expansion of bank branches under social banking scheme in 1970s and 1980 which led to the substitution of financial for non-financial flows of savings. Greater availability of facilities (in terms of banking facilities and branches in rural areas and more choice of financial instruments over the past few decades) there is a powerful stimulus for increased savings. Some of the changes which are noticeable in Indian financial system are

- i) the spread of commercial bank branches, establishment of private and foreign banks, development banks,NBFCs,RRBs,
- 2) an increase in the volume and variety of financial assets available to savers’
- 3)a rise in the degree of monetization of the rural economy associated with the spread of commercial agriculture, and 4) greater access to credit from the formal sector institutions.

The widening and deepening of financial system of India has allowed greater and more productive investment to occur. Financial intermediation increased over time which in turn is leading to a virtuous cycle of higher savings, improved investment efficiency and higher real economic growth. Indian Financial sector has undergone far reaching changes over the past three and half decades as a result of financial sector reforms. India financial system has emerged sound, improved resilience, became tech friendly, transparent and inclusive in the post reform period. In the capital market too, improvement foreign direct investment(in liquidity was noticed in 2014-15 due to certain effective regulatory interventions made by SEBI. However, there are several challenges in the financial sector which need attention and policy intervention.

Despite the financial broadening and deepening of IFS, the increasing non-performing assets (NPAs or bad loans) of the banks are of grave concern for the IFS which stood at 4.3 % of total gross loans (as against 1.1% in China)has impacted credit delivery of banks to a great extent.. NPAs impact profitability of banks on the one hand and reduce /block the flow of funds in the system. The decline of liquidity in the system further discourages availability of funds for infrastructure projects which generate employment and contribute to overall growth of the nation. In addition, increase in stressed assets send a negative signal to foreign direct investment(FDI) which is an important source of external finance for bridging up saving investment gap , export-import gap and foreign exchange (forex) gap which we are currently noticing in the economy. NPAs ,if not reduced can lower down the growth rate and lead to high inflationary pressures by making cost of funds dearer. Therefore, the major challenge for the Indian authorities lies in bringing down the NPAs and intermediation cost of the banking system, while at the same time maintaining its profitability.In addition, deregulation, financial integration and advancement in information technology have exposed the financial system to new challenges which merit attention (Jhadav and Raj,2005).

In spite of a well-developed regulatory and financial system in place in India, the corporate bond market constitutes just 3.3% of GDP whereas the share of corporate bonds to GDP is 10.6% in China, 41.7% in Japan & 49.3% in Korea. In contrast to a mature equity market, the bond market in India, despite its huge potential, is relatively under-developed as compared to other Asian economies and developed nations. But studies (Chaudhari et al.2014) highlight that “Vibrant, deep and robust corporate bond markets are essential to enhance stability of financial system of a country, mitigate financial crises and support the credit needs of corporate sector, which is vital for the growth of an economy”.

In view of the above challenges in IFS, there is a need to pay increasing attention to financial stability in India when the country is likely to be exposed to the forces of globalization as new Basel-III norms will kick in from March 2019 which may have implications for financial

stability-the PSBs will require substantial capital to meet regulatory requirements with respect to additional capital buffers. There is an urgent need to strengthen the ecosystem for financial deepening.

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**Table 1: Progress of Commercial banks in India**

<b>Indicators</b>	<b>June - 1969</b>	<b>Mar- 91</b>	<b>Mar- 12</b>
No. of commercial Banks	73	272	169
No. of Bank Offices	8262	60570	98330
Of which Rural and Semi- Rural urban bank offices	5172	46550	86513
Population per office('000s)	64	14	12.3
Per Capita Deposit	88	2368	48732
Per Capita Credit(rs)	68	1434	38033
Priority sector Advances	15	39.2	32.9
Deposits(% of national income)	15.5	48.1	81.1

Source: Rakesh Mohan (2004) and RBI publications.

**Table 2: Credit Deposit Ratios Of SCBs**

	<b>June - 1969</b>	<b>Mar-91</b>	<b>Mar-12</b>
Deposit of SCBs(in billions)	46.66	15422.84	59090.82
Credits Of SCBs(in billions)	35.99	8655.94	46118.52
CD ratio	0.77	0.56	0.78

Source: RBI Publications

**Table 3: Performance Of Scheduled Commercial banks(SCBs)**

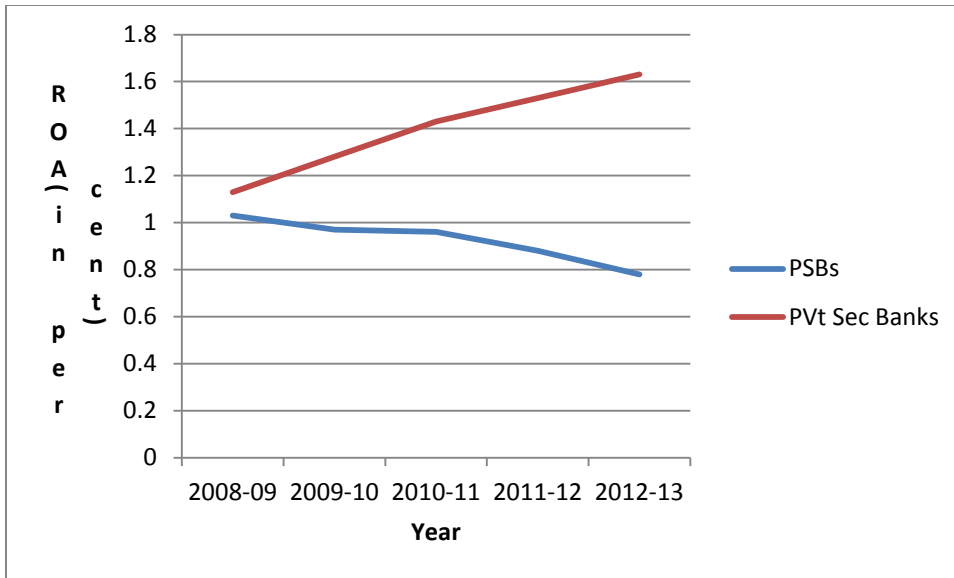
<b>Items</b>	<b>2008-09</b>	<b>2009-10</b>	<b>2010-11</b>	<b>2011-12</b>	<b>2012-13</b>
No.of banks	80	81	81	87	89
no of offices	67562	72906	78215	85262	92114
no of Employees	954684	955990	1001096	1048520	1096984

Bussiness per employees	73.98	86.23	99.03	109.95	121.33
Profit per Employees	0.55	0.6	0.7	0.78	0.83
Capital&Resreves&Surplus(in crores)	3679473	430613	5099192	6085618	7089300
Deposits( in crores)	40632011	47469196	56158743	64535485	74295324
Investments (in crores)	14495506	17290059	19236333	22339033	26132752
Advances(in crores)	29999239	34967	42974875	50739952	58737025
Interest income (in crores)	3884816	4151786	4913407	6552839	7636115
Other incomes (in crores)	752204	792676	798501	863437	977866
Interest expenses (in crores)	2632232	2720863	2989248	4303557	5138027
Operating expenses (in crores)	895814	100279	1231403	1375720	1565855
Net Interest Margin (%)	2.62	2.54	2.91	2.9	2.79
Costs of funds(%)	5.99	5.1	4.75	5.9	6.12
Returns on Advances adjusted to COF(%)	4.56	4.19	4.47	4.51	4.21
Wages as % to total Expenses(%)	13.6	14.85	17.22	13.73	13.02
Return on Equity (%)	15.44	14.31	14.96%	14.6	13.84
Return on Assets (%)	1.13	1.05	1.1	1.08	1.03
CRAR (%)	13.97	14.54	14.19	14.24	13.88
Net NPA Ratio (%)	1.05	1.12	0.97	1.28	1.68

Source: RBI Publications

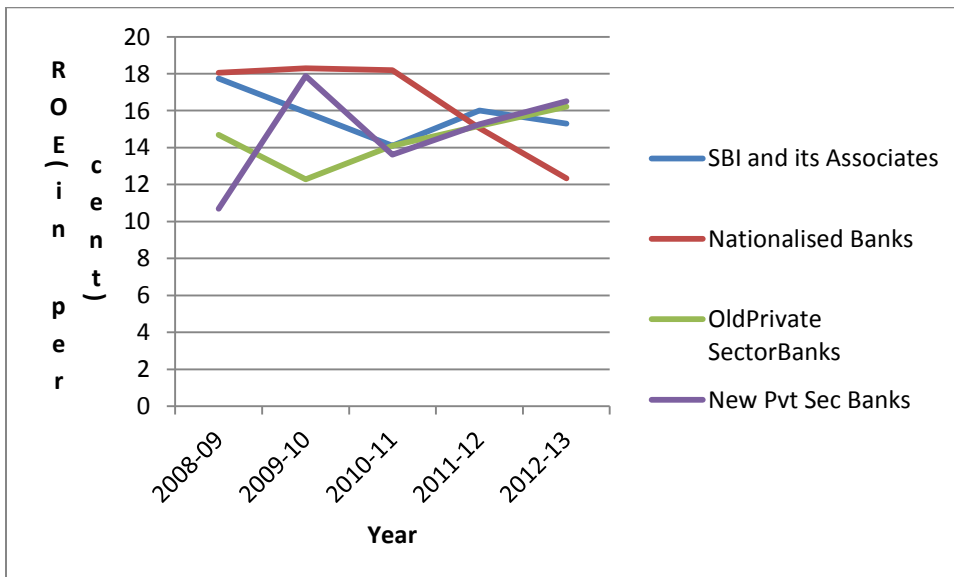
**Figures 1a:** Return on Assets of SCBs (in percent)





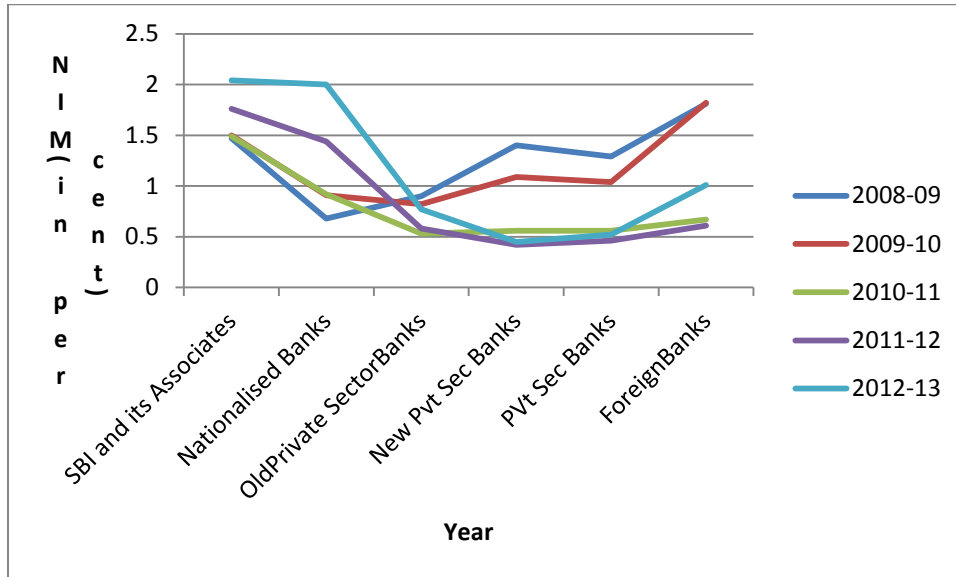
Source: RBI (2012-13).

**Figures 1b:** Return on Equity of SCBs(in percent)



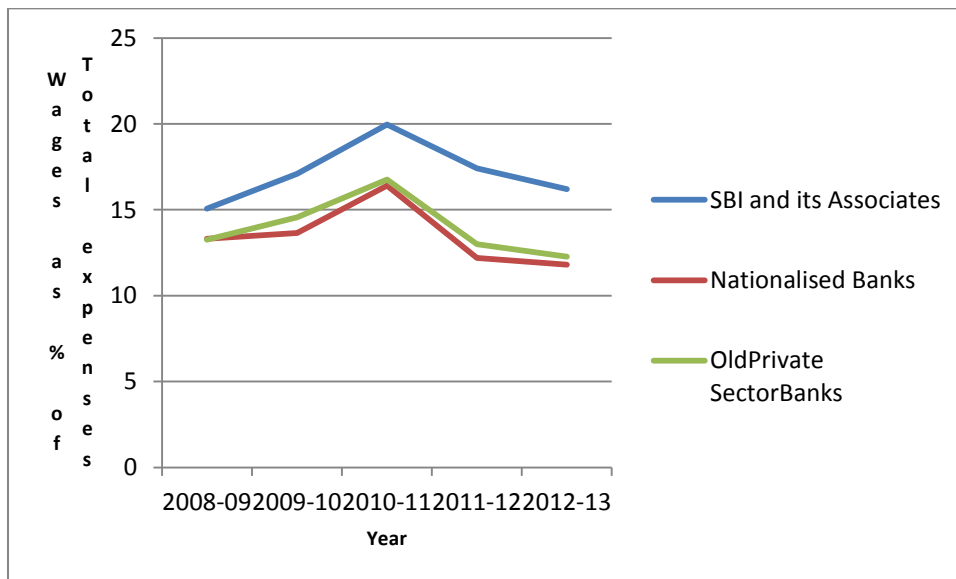
Source: RBI (2012-13).

**Figures 1c:** Net Interest Margins of SCBs(in percent)



Source: RBI (2012-13).

**Figure 1d :** Wages as % of Total Expenses



Source: RBI (2012-13).

**Table 4:** Selected Indicators of Stock Market Growth

Year	1961	1971	1980	1991	2000	2002	2003	2012
No of Stock Exchanges	7	8	9	22	23	23	23	21**
No. of Listed Companies	1,203	1,599	2,265	6,229	9,871	9,644	9,413	N.A
Market Capitalisation (Rs. Billion)	12	27	68	1,103	11,926	7,493	6,319	101,492.9(BSE) 99,30,1.22(NSE)

Note: \* End-December, the Stock Exchange, Mumbai only.

\*\* This is sum total of stock exchanges

Source: Rakesh Mohan (2004), RBI Publications and SEBI (2015).

**Table 5:** Indicators of Liquidity of Stock Market (percent)

Year	BSEMCa p/GDP	NSEMCa p/GDP	Turnover ratio-BSE	Turnover ratio-NSE	Traded Value ratio-BSE	Traded Value ratio-BSE2
2010-11	94.1	92.2	16.2	53.4	15.2	49.2
2011-12	71.1	69.8	10.7	46.1	7.6	32.2
2012-13	69.2	67.6	8.6	43.4	5.9	29.4
2013-14	75.4	74	7	38.6	5.3	28.5
2014-15	96.2	94.1	8.4	43.6	8.1	41
2015-16	88.4	86.6	5.6	32.4	4.9	28

Note: Turnover ratio=Turnover/Market capitalization

Traded Value=Turnover/GDP

Source: SEBI(2015)

**Table 6: Financial Deepening (M2/GDP)**

(Percentage)

<b>Country</b>	<b>1990</b>	<b>2014</b>	<b>Direction of Change</b>	<b>Ave(2005-14)</b>	<b>GDS(% of GDP)</b>	<b>GDI(% of GDP)</b>	<b>GDP GR</b>
<b>South Asia</b>							
Bangladesh	0.22	0.52	increased	0.44	38.8	29	6
<b>India</b>	<b>0.46</b>	<b>0.84</b>	increased	<b>0.81</b>	<b>31.8</b>	<b>32</b>	<b>6.9</b>
Nepal	0.28	0.81	increased	0.63	43.1	39	3.8
Sri Lanka	0.28	0.35	increased	0.34	25.7	30	7.3
<b>East Asia</b>							
China, People's Rep of	0.82	1.93	increased	1.71	21	46	7.7
Hongkong, China	2.02	4.88	increased	4	25.6	22	2.9
Korea, Rep of	0.76	1.39	increased	1.28	34.6	28	3
Taipei, China	1.4	2.34	increased	2.18	N.A.	N.A.	N.A.
<b>Southeast Asia</b>							
Indonesia	0.39	0.4	Unchanged	0.4	29	35	6.9
Malaysia	0.97	1.4	Increased	1.32	30.4	25	4.7
Philippines	0.28	0.58	Increased	0.48	43.2	21	7.2
Singapore	0.88	1.31	Increased	1.22	47.4	26	3.9
Thailand	0.68	1.27	Increased	1.11	28.5	24	1.8
Vietnam	0.27	1.31	Increased	1.1	32	28	5.4

Source:i)Based onAsian Development Bank (2015).

ii) \*<http://data.worldbank.org/indicator/NE.GDI.TOTL.ZS>

Table 7: Ranking Of Countries By Depth And Contribution To Total Depth

<b>Top 5 FD economies ( in % of own GDP)</b>				<b>Top 5 contributors to total depth ( in % of all countries' GDP)</b>			
<b>Advanced Countries</b>				<b>Advanced Countries</b>			
<b>Country</b>	<b>Year 1989</b>	<b>Country</b>	<b>Year 2009</b>	<b>Country</b>	<b>Year 1989</b>	<b>Country</b>	<b>Year 2009</b>
Japan	7.25	Ireland	21.61	US	1.38	US	1.96
Switzerland	6.48	UK	12.64	Japan	1.2	Japan	0.88
Belgium	5.45	Switzerland	11.48	UK	0.24	UK	0.52
UK	5.03	Netherlands	10.63	Germany	0.23	Germany	0.41
USA	4.51	Japan	9.31	France	0.19	France	0.36
<b>Emerging Markets</b>				<b>Emerging Markets</b>			
Lebanon	8.94	Hongkong SAR	26.67	Brazil	0.08	China	0.48
Hongkong SAR	7.44	Singapore	10.47	China	0.04	Brazil	0.11
Malaysia	4.92	Lebanon	7.44	Hongkong SAR	0.03	Hongkong	0.1
Singapore	4.76	South Africa	6.47	Korea	0.03	Korea	0.08
South Africa	3.96	Malaysa	6.3	India	0.02	India	0.08

Source: Goyal,Rishi et.al.(2011)