INDUSTRIAL FINANCE IN THE ERA OF FINANCIAL LIBERALIZATION IN INDIA: Exploring Some Structural Issues

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Industrial Finance in the Era of Financial Liberalisation in India: Exploring Some Structural Issues

Santosh Kumar Das*

[***Abstract***: *Lack of availability of adequate financial resources has been identified as one of the key factors blocking the path to industrial development in India. The underdeveloped financial sector was perceived to be the reason behind inadequate financing for industrial sector. It was argued that following financial liberalisation, the financial sector in India will be able to organise the much-needed finance for industry. It would not only address the issue of unavailability of finance for industry, but also remove the constraints on access to finance. While the present paper intends to explore the linkages between the industrial and financial sectors, it also examines the trend and structure of industrial finance in India, with greater focus on the period succeeding financial liberalisation. It explores the growing asymmetries between the above two sectors and its implication for industrial finance in India. The paper concludes by suggesting appropriate financial sector policies that will address the issue of financial constraints in terms of access to and availability of adequate finance for industrial sector in India.*]

Keywords: *Industrial Finance, Financial liberalisation, Financial Markets, Industrial- Financial Sector Linkages*

1. Introduction

The role of finance in development in general and industrial development in particular received wider recognition with the seminal work of Gerschenkron[1] (1962). Since then, financial policies have been designed and adopted as per the needs of countries to achieve rapid industrialisation. In India, lack of availability of adequate financial resources has been identified as one of the key factors blocking the path to industrial development (Bhattacharjee and Chakrabarti, 2013; Khanna, 2013). The underdeveloped financial sector was perceived to be the reason behind inadequate financial provisioning for industrial sector in India. It was argued that financial liberalisation would bring about structural

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[1] Gerschenkron in his influential work while explaining the process of industrialisation in Europe in a historical perspective highlighted the crucial role played by banks.

changes and transform the financial sector of India. The developed financial sector—with an expanded market and several new players and instruments—will be able to organise the much-needed finance for the industry. It would not only address the issue of unavailability of finance for industry, but also remove the constraints on access to finance in India.

Following financial liberalisation, the structure of the Indian financial system has undergone significant transformation, though it continues to be an intermediary based financial system (Das, 2011). From the industrial financing perspective, on the one hand, new sources of finance have emerged, but on the other hand, several public sector financial institutions like the Development Finance Institutions (DFIs) have been converted into universal banking systems owing to lack of government funding (Ray, 2015). While the deregulation of interest rate, dismantling of directed credit provision, reduced government control over banking operations and establishment of market regulatory mechanism, etc., had obvious implications for the transformation of financial sector itself, it brought in several new challenges for industrial finance in India.

The present paper intends to explore the linkages between the industrial and financial sectors as well as examine the trend and structure of industrial finance in India, with greater focus on the period succeeding financial liberalisation. It attempts to explore the growing asymmetries between the above two sectors and its implication for industrial finance in India. The paper concludes by suggesting appropriate financial sector policies that will be suitable for industrialisation in India. Section 1 lays out the background and broad objectives. Section 2 explains the analytical framework. Section 3 documents the broad changes in the institutional structure of the Indian financial sector in different phases since independence from the perspective of industrial financing. Section 4 provides a brief outline of the evolution of DFIs in India, including its downsizing and decline. Section 5 explores the linkages between the financial and industrial sectors on three board parameters: access to finance, availability of finance, and cost of capital. Section 6 concludes the paper.

2. Analytical Framework

The linkages between the financial and industrial sectors have been explored within the framework of the financial liberalisation argument. Financial liberalisation draws its argument from the "financial liberalisation hypotheses," as advocated by McKinnon (1973) and Shaw (1973). The financial liberalisation hypothesis draws its argument from the belief that the financial sector plays a crucial role by channelizing the savings to the entrepreneurs in the form of investment in the real economy (Khanna, 1998). Since saving is the source of investment and it can be increased by increasing the rate of interest, state intervention in the form of "financial repression" in the financial sector must be done away with. As argued by McKinnon and Shaw, state intervention in the form of "financial repression" must end and policies to free the financial sector from any kind of government intervention should be pursued. This is nothing but financial liberalisation. As advocated

by McKinnon and Shaw, financial repression in the form of high reserve requirements, interest rate controls, and directed credit programme (credit reserved for the priority sector) results in inefficient allocation of resources. Therefore, the financial system should be freed from government intervention and liberalisation policies must be pursued which will enhance the rate of saving, and thereby investment. And, a market determined allocation of resources will be more efficient and optimal. The liberalisation or freeing of the financial system from government intervention means deregulation of both the capital markets and the banking sector, and creation of new institutions to support the process of liberalisation (Khanna, 1998). Therefore, financial liberalisation will not only raise investible funds, but also will address the issue of access by developing market which is inherently efficient. The cost of capital (investible fund) will also come down as the volume of investible funds goes up due to an increase in the savings rate.

3. Industrial Finance in India: Institutional Structure since Independence

The evolution of the institutional structure of the Indian financial sector from industrial financing perspective can be divided into three distinct phases. These are, early post-independence years (1947 to1969), the period of bank nationalisation (1969 to 1991), and the period of financial liberalisation (1991 onward). During the first period, that is, the period between early post-independence years and bank nationalisation in 1969, several term lending institutions (classified as DFIs) were established at both the national and state levels to provide long-term finance for industrialisation. The second phase is the period of bank nationalisation and credit planning. This was the period of so-called financial repression. During this period, bank lending became the principal source of finance for industry and efforts towards purposeful credit planning were made from the vantage point of social justice. The DFIs consolidated their role as a source of industrial finance in India. The third phase is the period of financial liberalisation, which began with the submission of three influential reports by the Chakravarty Committee in 1985, the Vaghul Committee in 1987 and the Narasimham Committee in 1991. However, it was the Narasimham Committee recommendations that provided the blueprint of the reforms, especially with respect to banks and financial institutions (Sen andVaidya, 1997).

3.1 Early Post-independence Years

The early years of post-independence India witnessed the creation of several specialised term lending institutions for the purpose of industrial financing. During this period, majority of the specialised term lending institutions or DFIs were created at both the national and the state levels. The Industrial Financial Corporation of India (IFCI) which was set up in 1948 was the first financial institution of such a nature. During the initial years of its inception, the IFCI was empowered to disburse loans above Rs 10 lakh (Ray, 2015). In subsequent years, with the help of the central government, several states set up their own specialised financial institutions known as State Financial Corporation (SFC) to

meet long-term financial needs of the small- and medium-sized enterprises (Ray, 2015). In 1954, the National Industrial Development Corporation (NIDC) was set up by the central government to provide finance to the industrial sector. However, within a decade of its inception, it became dysfunctional. Several other financial institutions including the Industrial Credit and Investment Corporation of India (ICICI) and the Industrial Development Bank of India (IDBI) were set up in 1955 and 1964 respectively. The Industrial Credit and Investment Corporation of India (ICICI) was set up by the Government of India with support from the World Bank and the representatives of Indian Industry with the objective to meet the financial needs of the medium- and long-term business projects (Ray, 2015). Over time it emerged as a major source of foreign currency loans for the Indian industry. The IDBI emerged as the apex institution that provided medium- and long-term financing support to the industry by taking over the businesses of the Refinance Corporation for Industry (RCI). It also acquired control over IFCI from the central government. While the central government played a key role in the establishment and functioning of the ICICI, the IDBI became a wholly-owned subsidiary of the Reserve Bank of India (RBI).

The idea behind the establishment of several DFIs was to provide long term finance to facilitate initial investment to industries that found it extremely difficult to establish and sustain themselves during the initial years. Difficulty in accessing long-term finance is a problem that is typically associated with countries that are latecomers to the process of industrialisation. Given the fact that capital markets in these countries are relatively underdeveloped and often fail to provide the much-needed finance for industrialisation; during the initial phase, the DFIs play a key role in filling that gap. During the early phase or the learning period, new firms find it difficult to access finance to support initial investment and the losses incurred—it is called Learning Capital (Nayyar, 2015).

3.2 Era of Bank Nationalisation

The period of bank nationalisation is also known as the period of credit planning in India. The banking sector and monetary policy became instruments of credit planning. The four key features of credit planning in India were: (i) the emergence of an administrative interest rate based on social needs, (ii) emergence of "priority sector" wherein commercial banks were allowed to allocate a fixed portion of credit to sectors like agriculture and small scale industries (SSI), (iii) increase in the Statutory Liquidity Ratio (SLR), and (iv) establishing lending norms for working capital loans (Ray, 2015; RBI, 2008).

Nationalisation of banks was done in 1969 with the nationalisation of 14 commercial banks. One of the reasons for nationalisation was to mobilise resources for the implementation of the five year plans. The banks were asked to mobilise resources by means of branch expansion. On the other side, the directed credit programme was started during the Fourth Five Year Plan with major emphasis on agrarian development. In 1979, Priority Sector Lending Requirements (PSLR) was introduced. As per PSLR, about 33 per cent of the bank credit was reserved for the priority sectors (agriculture and SSIs) and a minimum of 16 per

cent was fixed for agriculture (Sen and Vaidya, 1997). Later, the PSLR was increased to 40 per cent of the total bank credit. Majority of the financial institutions during this period were publicly owned.

The post-nationalisation period also witnessed the creation of several refinancing and sector specific specialised financial institutions like the National Bank for Agriculture and Rural Development (NABARD) in 1981, the National Housing Bank (NHB) in 1988, the Small Industries Development Bank of India (SIDBI) in 1989, the Housing and Urban Development Corporation (HUDCO) in 1970, the Export-Import Bank (EXIM) in 1981, the Shipping Credit and Investment Corporation of India (SCICI) in 1986, the Power Finance Corporation (PFC) in 1987, and the Indian Railways Finance Corporation (IRFC) in 1989. The two key institutions that continue to serve in the post-reform era include NABARD and SIDBI. While NABARD was created to provide credit for agricultural activities, rural industrialisation, village industries and handicraft, etc., SIDBI was created as a subsidiary of IDBI to supply finance to small scale industries.

3.3 Era of Financial Liberalisation

Financial liberalisation as a part of the comprehensive reform programme was introduced in 1991 in India. The essence of the liberalisation programme was to ensure that the market plays a decisive role in allocating resources. The programme activities included de-controlling of interest rates, reduction in reserve requirements, deregulation of directed credit provision, and reduced government control on banking operations while establishing a market regulatory framework (Lawrence and Longjam, 2003). These reforms in the financial sector came in tandem with the reforms in trade and industrial policy and a set of fiscal reforms.

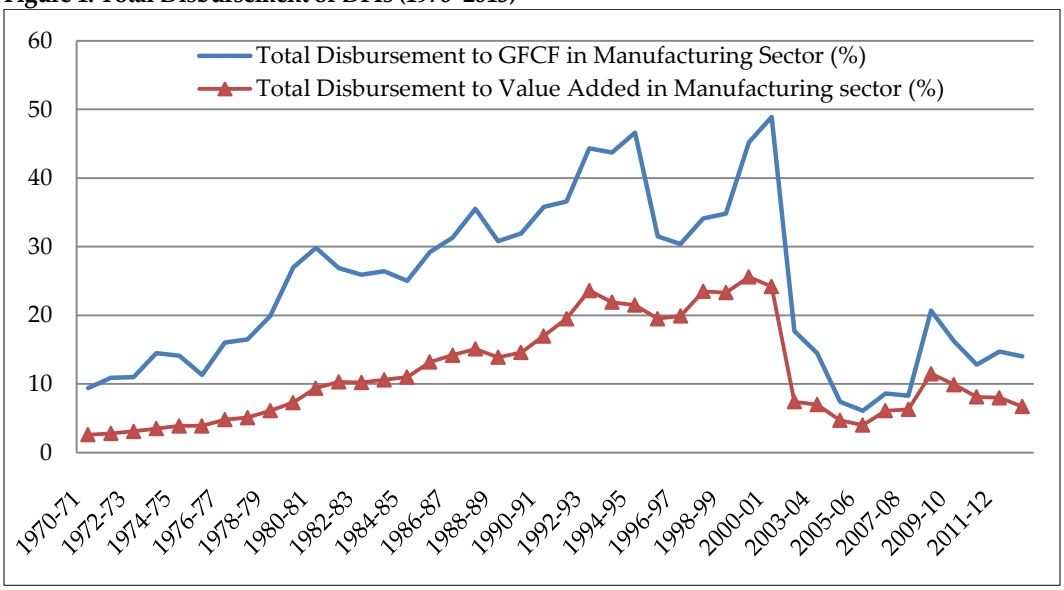
The major change that took place from industrial financing perspective was the gradual demise of development banking in India. The role of development banking as a source of long-term credit declined gradually after the recommendations of the Narasimham Committee II (1998) and the Khan Committee (1999). On the basis of the recommendations of the above two committees, the RBI took several steps to formally convert DFIs into Universal Banking Institutions (Ray, 2015). While majority of the DFIs were converted into universal banks, several other specialised financial institutions were allowed to operate until the development of the debt market in terms of liquidity and depth (Ray, 2015). Increasing share of non-performing loans was identified as the key reason behind this move and in view of the RBI doing way with the National Industrial Credit Fund, it was imperative to discontinue DFIs as it was perceived as an unsustainable financing model (Mathur, 2003).

4. Development Financial Institutions: Rise and Decline

Development Financial Institutions have played varied roles within different phases of economic and financial reform since India's independence. During the early years of

independence, despite the existence of a functioning capital market, the need for specialised financial institutions was felt because the market was unable to respond to the needs of the industrial sector (Ray, 2015). The idea behind establishing several specialised financial institutions was to build investment capabilities of the domestic industrial sector by providing long-term finance (Nayyar, 2015).

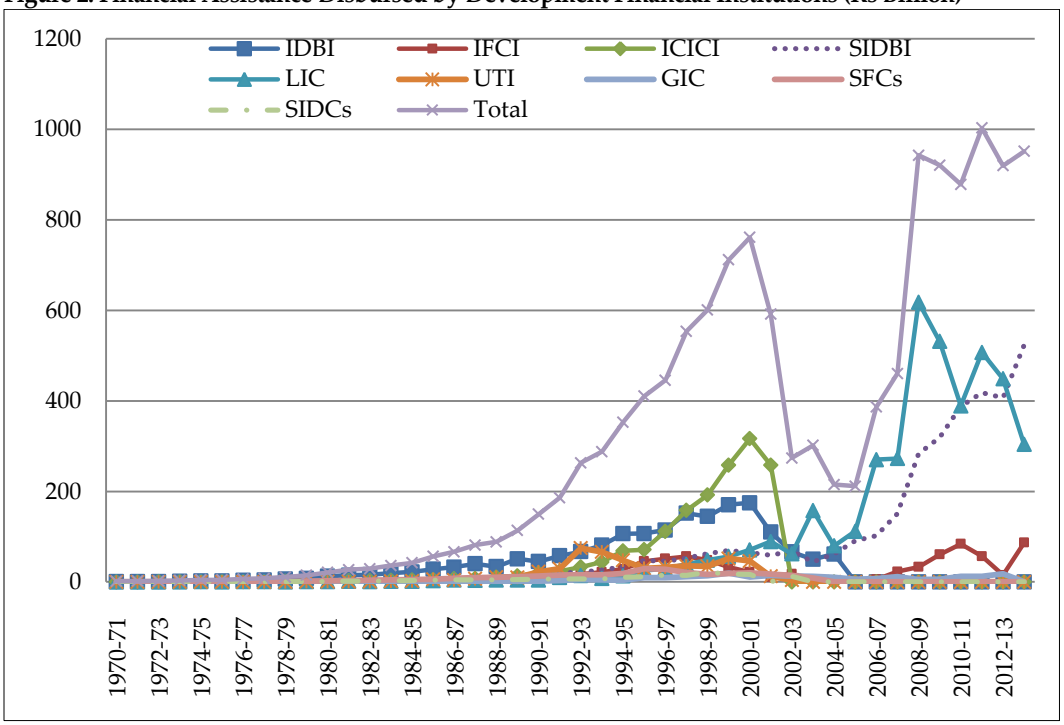
Figure 1: Total Disbursement of DFIs (1970–2013)



Source: Nayyar (2015).

The relative importance of DFIs has been visualised differently in different phases. During the early years after independence, DFIs played a very significant role in providing long-term finance at all-India level (Nayyar, 2015). During this phase several national level and state level term lending institutions were established. Specialised term lending institutions remained important through the period of bank nationalisation till the early years of liberalisation. As shown in the figure above (*Figure 1*), the share of total disbursement by DFIs in the Gross Fixed Capital Formation (GFCF) of the total manufacturing sector reached almost 50 per cent in 2000–01. Disbursements by DFIs increased rapidly over time between 1970–71 and 1994–95. Similarly, disbursement by DFIs as a percentage of value added in manufacturing sector went up from 2.6 per cent in 1970–71 to 25.6 per cent in 1999–00. However, during the 2000s, with the demise of development banking and several of the DFIs being converted into universal commercial banks, its share both in the Gross Fixed Capital Formation in total manufacturing and manufacturing value added declined significantly.

Figure 2: Financial Assistance Disbursed by Development Financial Institutions (Rs Billion)



Source: RBI: Handbook of Statistics on Indian Economy, 2015.

A similar trend can be seen in the lending behaviour of the individual financial institutions. It can be seen that most of the term lending institutions witnessed a sharp decline in their disbursements after 2000–01; several of them like the IDBI and the ICICI were converted into the universal commercial banks and few of them like the IFCI were allowed to continue but with limited function (*Figure 2*). Several investment institutions like the LIC, GIC and the UTI continued to function. On the other side, while SIDBI was allowed to continue its operations, the SFCs and SIDCs (State Industrial Development Corporation) were closed down in 2003–04. Though the total disbursement by DFIs reached Rs 1,000 billion in nominal terms in 2011–12, they are no more the principal agents of industrial credit in India. The share of Industrial Development Bank of India (IDBI), which was more than 50 per cent of the total disbursement to industry during 1980s, declined significantly to 27 per cent in 1990s before it finally ceased to exist as a development bank in 2004–05(*Table 1*). Similarly, the share of Industrial Credit and Investment Corporation of India (ICICI) in the total disbursement to industrial sector, which was about 13 per cent during 1970s, increased to about 21 per cent in 1990s. As shown in the table below, SIDBI and LIC (Life Insurance Corporation) continue to serve as the major sources of finance for industrial credit in India.

Table 1: Financial Assistance Disbursed: Share of Financial Institutions (in percent)

Period	*IDBI*	*IFCI*	*ICICI*	*SIDBI*	*IIBI*	*LIC*	*UTI*	*GIC*	*SFCs*	*SIDCs*
1970s	45.93	8.87	12.8	..	1.25	5.66	2.07		17	6.16
1980s	50.78	7.39	9.94	..	1.2	4.25	6.18	1.78	11.75	6.21
1990s	27.21	8.67	21.24	10.19	1.39	5.6	12.94	1.89	5.59	3.06
2000–01	22.95	2.83	41.59	8.46	2.25	9.32	6.04	1.44	2.6	2.19
2001–02	18.61	1.82	43.65	10	1.8	15.06	2.15	2.48	2.96	0
2002–03	24.17	6.5	0	24.8	3.99	22.67	1.52	4.68	5.31	4.57
2003–04	16.53	0.92	0	14.63	7.46	52.3	0	4	2.84	0
2004–05	28.75	0.42	0	28.77	0	36.99	0	4.73	0	0
2005–06	0	0.88	0	43.03	0	52.96	0	2.7	0	0
2006–07	0	1.42	0	26.45	0	69.9	0	1.91	0	0
2007–08	0	4.95	0	32.8	0	59.23	0	2.6	0	0
2008–09	0	3.51	0	30.04	0	65.57	0	0.58	0	0
2009–10	0	6.57	0	34.69	0	57.73	0	0.66	0	0
2010–11	0	9.56	0	44.16	0	44.29	0	1.41	0	0
2011–12	0	5.66	0	41.68	0	50.55	0	1.26	0	0
2012–13	0	1.64	0	44.23	0	48.8	0	1.92	0	0
2013–14	0	9.13	0	54.99	0	31.93	0	0	0	0

Note: IDBI ceased to be a term lending institution on its conversion into a banking entity effective October 11, 2004.
ICICI ceased to be a term lending institution after its merger with ICICI Bank.
IFCI has become a non-bank financial company.
IIBI is in the process of voluntary winding up.
Source: RBI: Handbook of Statistics on Indian Economy, 2015.

5. Linkages between the Financial Sector and the Industrial Sector

To understand industrial financing in the era of financial liberalisation, it becomes imperative to study the linkages between the financial sector and the industrial sector in India. Studying the linkage between the above two sectors will not only give an overview of the changing structure of industrial finance in India, but also help understand why India's financial sector has not been able to organise the required finance for industrialisation. As argued in the financial liberalization framework, from the perspective of industrial financing, liberalisation of the financial sector would not only remove financial constraints of the Indian industry in terms of availability and access, but also reduce the cost of capital. Therefore, the linkages between the above two sectors have been explored by examining three broad indicators: access to finance, availability of finance, and cost of capital.

5.1 Access to Finance

Access to finance through financial institutions plays a key role both at the time of establishment of a new firm and during the working period or life span of that firm. The nature of finance or capital may, however, vary. Typically, a firm at the time of its inception requires access to long-term finance and during the course of its life span may require working capital for its expansion and growth. Therefore, access to finance is key to start any project. While a few institutions still provide long-term financing services, working capital which is provided by commercial banks is no longer evenly distributed across locations, regions and size of the industry. Thus, with the deregulation of credit planning programme in the wake of financial liberalisation, the "unevenness" has become more predominant.

As shown in the table below (*Table 2*), the number of bank branch offices in rural areas as percentage of total branches came down to 38.5 per cent in 2015, which was about 55 per cent during the early phase of liberalisation and nearly 60 per cent prior to liberalisation. There has not been any branch expansion programme since the expiry of the branch expansion programme of 1990–95. As part of banking reform, many banks were either merged with another or closed down; some were even advised to convert their non-viable rural branches into satellite offices. The regional rural banks were allowed to relocate their loss making branches, with an option to move out of the rural areas (Shetty, 2005). The narrowing down of bank branch network in rural areas is definitely a cause of concern as it might leave a significant proportion of the population unbanked, thereby affecting the growth of the rural industry. The first Narasimham Committee Report (1991) had recommended that 'each public sector bank should set up one or more rural banking subsidiaries…to take over all its rural branches' and had also emphasised on the need for bringing the services of the regional rural banks at par with the commercial banks (Shetty, 2005). While there has been narrowing down of branches in rural areas, on the other side, the number of bank branches in the semi urban, urban and metropolitan areas has increased. It thus suggests that the industrial activities in rural areas are likely to be constrained due to restricted accesses in terms of limited banking coverage.

With the narrowing down of rural bank branch network, the share of rural credithasdeclined significantly. It has declined from about 15 per cent in 1990 to 9 per cent in 2014. Semi urban areas also witnessed a similar pattern as far as the share in total credit is concerned. Credit share declined from about 17 per cent in 1990 to about 9 per cent 2013 and 11.5 per cent in 2014 (*Table 3*). On the other side, the credit share of metropolitan areas has increased from about 45 per cent in 1990 to 69 per cent in 2013 but came down to 63 per cent in 2014. The concentration of credit in metropolitan areas suggests that economic activities tend to concentrate in highly urbanised areas, while depriving the rural and semi urban areas of economic activities. Thus, in terms of access to credit, financial liberalisation has definitely proved beneficial for the highly urbanised metropolitan and urban areas; however, it has eluded the rest of the pockets. The problem of access to finance has accentuated due to the falling share of priority sector advances in total non-food credit.

Table 2: Distribution of Commercial Bank Branches in India (in per cent)

Year	*Rural*	*Semi Urban*	*Urban*	*Metropolitan*	*Year*	*Rural*	*Semi Urban*	*Urban*	*Metropolitan*
1975	35.47	30.7	18.85	14.97	1998	49.9	21.5	15.7	12.9
1980	46.85	25.24	15.88	12.02	1999	49.3	21.5	16.1	13.2
1981	51.17	22.93	14.79	11.11	2000	48.7	21.7	16.2	13.4
1982	53.01	21.87	13.51	11.61	2001	48.3	21.8	16.3	13.6
1983	52.4	22.29	14.65	10.66	2002	47.8	21.9	16.6	13.7
1984	52.86	21.38	15.2	10.56	2003	47.4	22.1	16.8	13.7
1985	54.56	19.94	15.06	10.44	2004	46.8	22.2	17	14
1986	55.66	19.97	14.33	10.04	2005	46.9	22.6	16.9	13.6
1987	56.19	19.71	14.19	9.91	2006	43.09	22.56	17.46	16.89
1988	56.22	19.86	14.09	9.83	2007	41.86	22.86	18.09	17.19
1989	57.32	19.23	13.8	9.65	2008	40.35	23.3	18.8	17.55
1990	56.5	19	14.4	10.1	2009	39.21	23.76	19.17	17.87
1991	56.9	18.7	14.3	10	2010	37.97	24.3	19.66	18.07
1992	56.8	18.7	14.5	10	2011	37.2	25.29	19.47	18.04
1993	56.3	18.64	14.9	10.1	2012	36.95	26.12	19.25	17.69
1994	55.9	19	15	10.1	2013	37.2	26.73	18.86	17.22
1995	51.7	21.2	15	12.1	2014	38.5	26.8	18.3	16.39
1996	51.2	21.3	15.2	12.3	2015	38.58	26.83	18.3	16.29
1997	50.5	21.4	15.5	12.6					

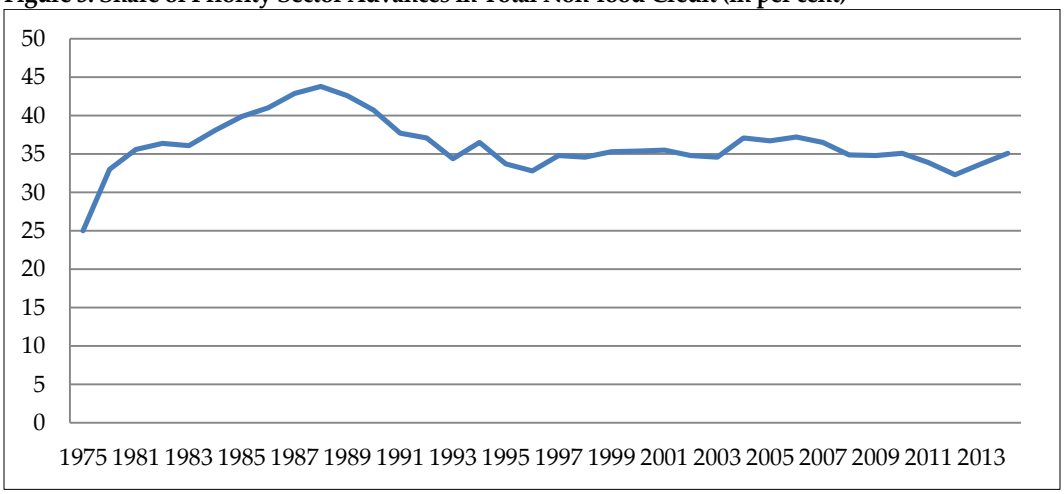
Source: RBI. Statistical Tables Relating to Banks in India, various issues.

Table 3: Population Group-wise Distribution of Bank Credit (in per cent)

Year	*Rural*	*Semi Urban*	*Urban*	*Metropolitan*	*Year*	*Rural*	*Semi Urban*	*Urban*	*Metropolitan*
1975	6.04	14.39	21.71	57.86	1997	11.4	13.1	17.6	57.9
1980	10.67	16.97	22.36	50.01	1998	11.4	12.8	17.6	58.2
1981	11.94	17.45	22.26	48.35	1999	11	12.7	17.8	58.5
1982	12.54	17.14	21.24	49.09	2000	10.6	12.2	17.2	60
1983	13.6	18.48	21.27	46.65	2001	10.1	11.5	17.4	61
1984	13.47	17.06	22.26	47.21	2002	10.2	11.2	16.5	62.1
1985	14.09	17.1	22.3	46.52	2003	10.2	11.3	16.4	62.1
1986	14.51	16.98	22.62	45.88	2004	9.7	11.4	17.1	61.9
1987	15.34	17.46	22.6	44.61	2005	9.2	11.3	16.4	63.1
1988	15.33	17.22	22.39	45.06	2006	12.86	9.96	16.35	65.29
1989	14.82	16.3	21.81	47.06	2007	12.01	9.73	16.22	66.11
1990	15.4	17.1	22.6	44.8	2008	11.46	9.63	16.02	66.7
1991	15	16.4	22.4	46.3	2009	10.87	9.33	16.16	67.2
1992	15.1	15.8	21.7	47.4	2010	11.27	9.58	16.72	66.24
1993	14.1	14.5	20.3	51.1	2011	10.83	9.4	16.8	66.59
1994	14	14	20.38	51.6	2012	11.99	9.55	16.33	66.18
1995	11.9	13.5	18.6	56	2013	10.69	8.91	14.55	69.15
1996	11.4	13.1	17.7	57.8	2014	9.02	11.43	16.9	62.66

Source: RBI: Statistical Tables Relating to Banks in India, various issues.

Figure 3: Share of Priority Sector Advances in Total Non-food Credit (in per cent)



Source: RBI: Handbook of Statistics on Indian Economy, 2015.

The priority sector, which includes SSIs, has witnessed a decline in its credit share since financial liberalisation in 1991. As shown in the figure above, the share of priority sector advances in total non-food credit had declined from more than 40 per cent in 1991 to about 35 per cent in 2013. The declining share of priority sector indicates that there was limited access to credit for SSIs in the post-liberalisation period. While on the one hand there has been a decline in the credit share of SSIs, on the other hand, over years, credit seems to have been concentrated in large-sized loans.

The distribution of credit by size shows that, over time, there has been a decline in small-sizedloans, and the decline is significantly sharp during the post-liberalisation period. The share of small-sized loans (Rs 25,000 and less) in total bank credit in India declined from about 18 per cent in 1981 to about six per cent in 2002 and to less than one per cent in 2014 (*Table 4*). Assuming that the value of money has changed during this period due to rising inflation and that loans between Rs 25,000 and Rs 2 lakh and between Rs 2 lakh and Rs 5 lakh are of similar value, it can be seen that there has been a decline in the credit share by above credit size. On the other side, the share of big-sized loans (Rs 10 crore and above) has gone up significantly. The share of loans of Rs 10 crore and above in total credit has gone up from 14 per cent in 1981 to about 21 per cent in 1995 and about 55 per cent in 2014. Thus, while it may be true that gradually borrowers are moving up the ladder by borrowing at a larger scale (credit size), it does, however, suggest that big-sized loans are preferred over small-sized loans and that smaller firms (borrowers) are finding it more difficult to access credit.

Table 4: Distribution of Credit as per Size (% of Total Credit)

Credit Size	*2014*	*2002*	*1995*	*1981*
Rs 25,000 and Less	0.59	5.87	16.2	17.8
Above Rs 25,000 and up to Rs 2 Lakh	7.79	13.28	11.4	11^
Above Rs 2 Lakh and up to Rs 5 Lakh	7.57	6.66	5.2	11.9&
Above Rs 5 Lakh and up to Rs 10 Lakh	4.5	3.47	3.3	5.1
Above Rs 10 Lakh and up to Rs 25 Lakh	6.15	3.77	4.9	7.8
Above Rs 25 Lakh and up to Rs 50 Lakh	3.89	3.2	5	7.2
Above Rs 50 Lakh and upto Rs 1 Crore	3.01	3.54	6.3	7.2
Above Rs 1 Crore and upto Rs 4 Crore	5.84	9.46	15.2	9.9
Above Rs 4 Crore and upto Rs 6 Crore	2.33	3.95	5.6	3.8
Above Rs 6 Crore and upto Rs 10 Crore	3.19	5.67	6.2	4.1
Above Rs 10 Crore and upto Rs 25 Crore	6.67	9.44	20.9#	14#
Above Rs 25 Crore	48.47	31.69		

Note: # – above Rs 10 Crore; ^ – above Rs 25,000 and up to Rs 1 Lakh; &– above Rs 1 Lakh & up to Rs 5 Lakh

Source: RBI: Basic Statistical Returns, various issues.

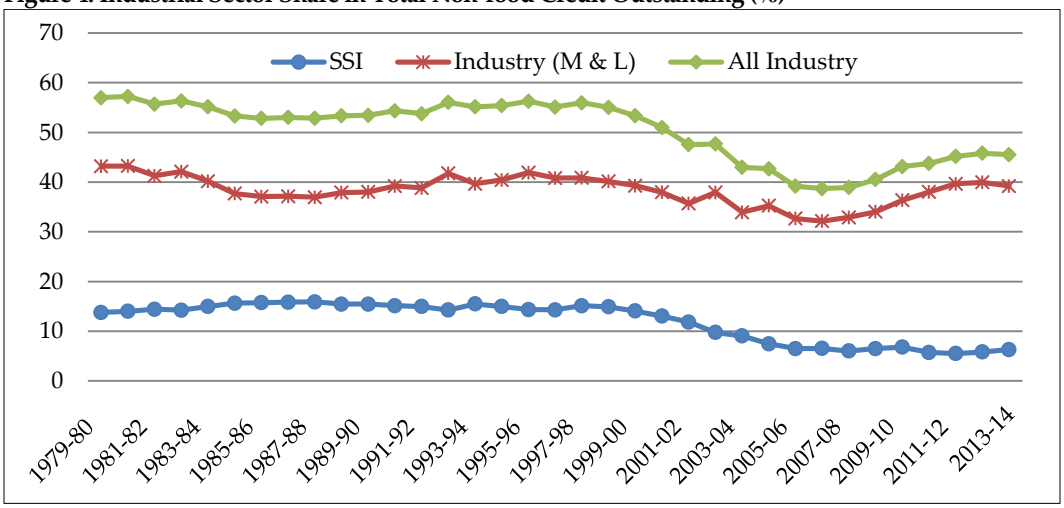
5.2 Availability of finance

Along with access, the availability of adequate finance to meet the needs of the industrial sector is crucial for successful industrialisation. As discussed earlier, the core argument in favour of financial liberalisation in India, like in several other developing countries, was to overcome financing or credit constraints on India's industrial sector. Therefore, it was expected that following financial liberalisation, the constraints would be reduced significantly by enhancing the volume of investible funds. However, contrary to the fact, financial liberalisation failed to ease financing constraints.

5.2.1 Bank Credit

The share of industrial credit in total bank credit declined during the later years of the financial liberalisation period. As shown in the figure below, the share of industrial credit declined from about 55 per cent during the early phase of reform to less than 40 per cent in 2007–08 and about 45 per cent in 2013–14 *(Figure 4)*. While the share of credit in medium and large sectors has been more or less stagnant since 1980s with a decline from 1999–00 to 2011–12, the share of SSI has been declining since 1997–98. The credit share of SSI in total bank credit declined from about 14 per cent in 1991–92 to about 8 per cent in 2013–14. The decline is sharp during the last decade. The declining credit flow to SSI sector vis-à-vis overall industry credit indicates that lesser volume (in terms of share) of credit is available for the industrial sector in India, and availability of credit has become increasingly difficult for SSIs during the post-reform period.

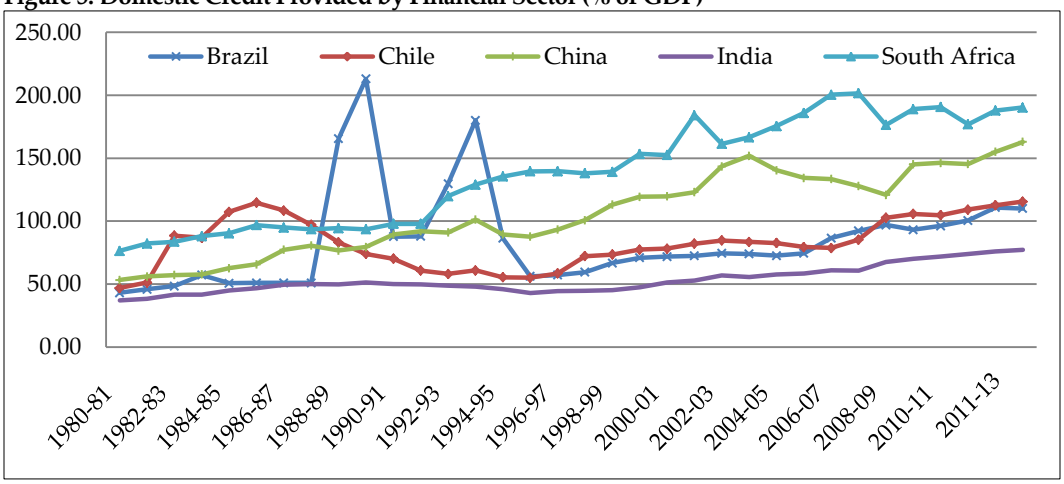
Figure 4: Industrial Sector Share in Total Non-food Credit Outstanding (%)



Source: RBI: Handbook of Statistics on Indian Economy, 2015.

This is quite evident from the fact that domestic credit provided by the financial sector as a percentage of GDP in India is quite low in comparison to several other developing economies with similar level of economic development. Domestic credit as percentage of GDP in India stands as low as 77 per cent in 2013, in comparison to 110 per cent in Brazil, 115 per cent in Chile, 163 per cent in China, and 190 per cent in South Africa (*Figure 5*). While domestic credit in India did not grow as expected during the early years of financial liberalisation, in later years (the 2000s), too, it did not show remarkable growth. Even credit expansion that took place during the later period was not substantial enough to respond to the growing demand.

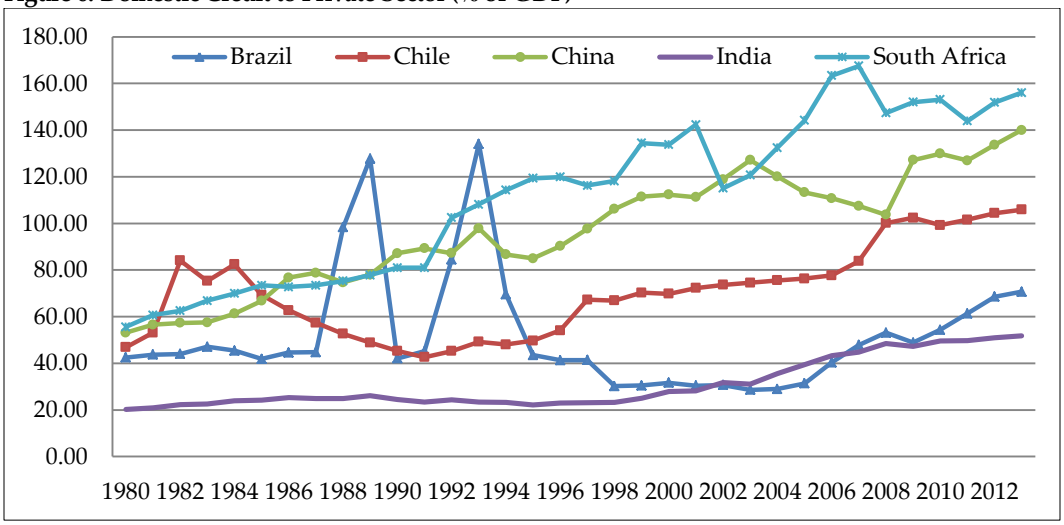
Figure 5: Domestic Credit Provided by Financial Sector (% of GDP)



Source: World Bank: World Development Indicators, 2015.

A cross-country comparison of India with several other developing countries with a similar level of economic development suggests that there is not enough credit available for the private sector in India. As shown in the figure below (*Figure 6*), the share of domestic credit to private sector as percentage of GDP in India is lower than in Brazil, Chile, China and South Africa. While credit to private sector remained stagnant during the early years of liberalisation, it picked up during the 2000s. The private sector credit as percentage of GDP in India stands at about 52 per cent in 2013, in comparison to about 71 per cent in Brazil, 106 per cent in Chile, 140 per cent in China and 156 per cent in South Africa. Credit to private sector did not expand as expected after financial liberalisation; in fact, it remained stagnant during the first decade of liberalisation (1990s) and in the later years (the 2000s) it was not sufficient enough to respond to the financial needs of the private sector.

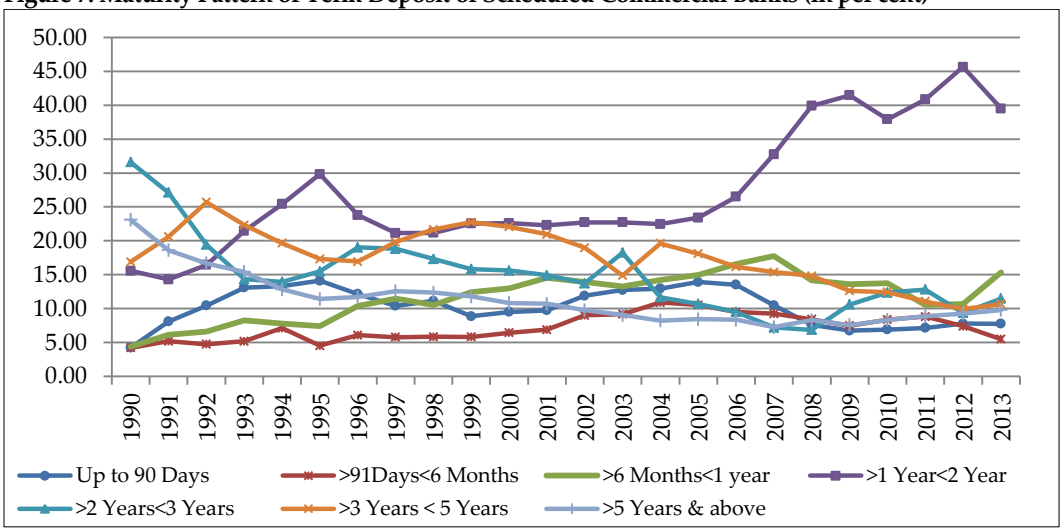
Figure 6: Domestic Credit to Private Sector (% of GDP)



Source: World Bank: World Development Indicators, 2015.

Inadequate working capital has been one of the core reasons that limit the expansion of a firm. The reason behind banks' unwillingness or inability to provide adequate credit is that in the post-reform period, there has been a growing mismatch between the asset and liability portfolios of commercial banks. While the share of long-term deposits in the total bank deposits has declined sharply in the post-reform period, the share of short-term deposits (one to two years) has gone up significantly, posing severe limits on the bank's ability to lend, including on its lending portfolio (*Figure 7*). It is not just banks that have not been able to meet the growing demand of the industry for finance; the equity market and the other financial institutions have also failed to meet the burgeoning demand for investment funds.

Figure 7: Maturity Pattern of Term Deposit of Scheduled Commercial Banks (in per cent)



Source: RBI: Handbook of Statistics on Indian Economy, 2015.

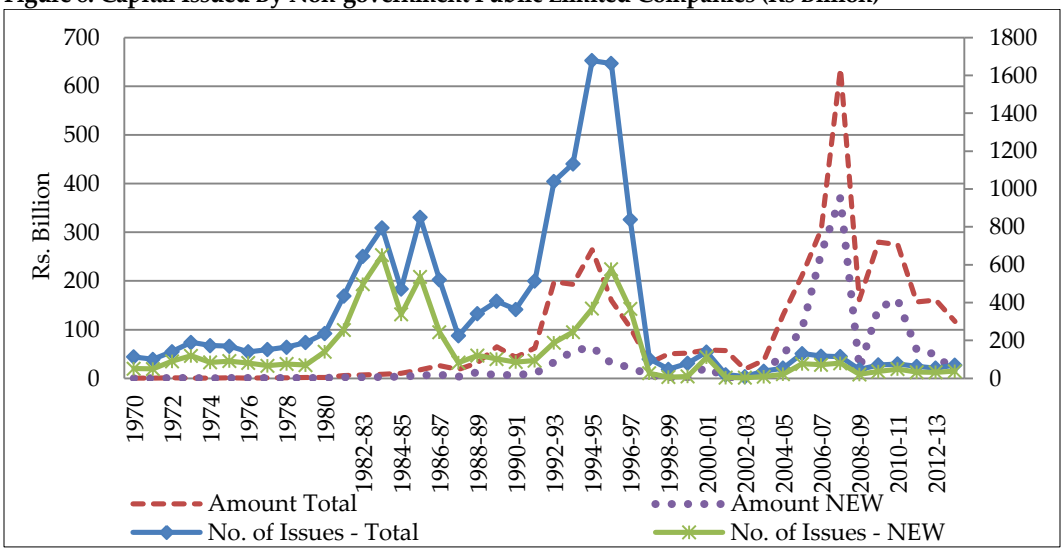
5.2.2 Stock Market

With financial liberalisation failing to mobilise sufficient volume of credit for the private sector, it was expected that the stock market would fill up this gap by mobilising financial resources. From the perspective of industrial development, a well-functioning stock market can contribute to the process of industrial growth via three possible means: mobilising savings, allocating resources for optimal investment and the optimal utilisation of existing resources (Singh, 1993). However, despite several policy measures to boost the performance of the equity market, the performance of the primary market has not been up to the desired level. As shown in the figure below (*Figure 8)*, after an initial growth of Initial Public Offerings (IPOs) during the early 1990s, the market declined significantly thereafter. The volume (number) of new IPOs declined significant in 1997, and since then its growth has not been quite encouraging. The gradual decline of the new issues market will have adverse impact on the Indian industrial sector, given the fact that a large number of registered IPOs are not able to reap the benefit as the stock market activities are mostly concentrated within the "A" and "B1/B" category of companies (Ray, 2015). Therefore, the equity market in many ways failed to address the issue of financial constraints.

The relatively dismal performance of the stock market in India in terms of the number of new issues is quite evident from the structure of the asset composition of the household sector. As shown in the table below (*Table 5*), the changing asset composition of the household sector shows that shares and debentures as instruments of household saving have not been very successful. During the early years of liberalisation, the share of shares and dentures as instruments of household saving went up to more than 10 per cent in 1992–93 but gradually started shrinking during the later years. Bank deposit, life insurance fund, provident fund and pension fund seem to be the preferred instruments of household

saving in India. The relatively lesser preference of households to save in the form of equity and debentures puts severe limitations on the growth and performance of the stock market as a resource mobiliser for the industrial sector.

Figure 8: Capital Issued By Non-government Public Limited Companies (Rs Billion)



Source: RBI: Handbook of Statistics on Indian Economy, 2015.

Table 5: Changing Asset Composition of the Household Sector in India (in per cent)

Year	*Currency*	*Bank deposits*	*Non- banking deposits*	*Life insurance fund*	*Provident and pension fund*	*Claims on Government*	*Shares & debentures*	*Units of UTI*	*Trade Debt(Net)*	*Total*
1970–71	16.82	35.73	3.18	9.81	23.22	4.98	3.22	0.66	2.37	100
1975–76	6.75	41.84	2.57	8.35	24.16	17.74	0.81	0.32	-2.53	100
1980–81	13.41	45.80	3.12	7.55	17.51	5.88	3.40	0.26	3.08	100
1985–86	8.68	41.48	5.57	6.96	16.38	13.35	5.45	2.29	-0.17	100
1990–91	10.61	31.88	2.18	9.50	18.94	13.38	8.44	5.84	-0.77	100
1991–92	11.99	26.23	3.26	10.29	18.37	7.12	9.99	13.35	-0.61	100
1992–93	8.17	36.73	7.51	8.85	18.44	4.83	10.22	6.98	-1.74	100
1993–94	12.19	33.06	10.63	8.71	16.72	6.30	9.18	4.29	-1.09	100
1994–95	10.94	38.37	7.94	7.81	14.72	9.06	9.26	2.69	-0.79	100
1995–96	13.29	32.12	10.61	11.17	17.97	7.71	7.11	0.21	-0.20	100
1996–97	8.61	32.11	16.39	10.17	19.17	7.43	4.18	2.38	-0.45	100
1997–98	7.44	43.15	3.92	11.30	18.79	12.90	2.60	0.35	-0.45	100
1998–99	10.54	38.35	3.70	11.31	22.41	13.63	2.46	0.91	-3.32	100
1999–00	8.82	35.09	1.63	12.13	22.82	12.27	6.90	0.77	-0.43	100
2000–01	6.32	38.27	1.21	13.68	20.55	15.76	4.50	-0.38	0.07	100
2001–02	9.84	39.52	-0.12	14.42	15.46	18.16	3.44	-0.65	-0.06	100
2002–03	8.85	37.94	3.86	16.08	14.21	17.34	2.20	-0.50	0.00	100
2003–04	10.96	40.04	0.50	13.41	12.57	22.43	2.33	-2.20	-0.04	100
2004–05	8.27	39.15	0.02	15.20	12.48	23.80	1.81	-0.70	-0.02	100
2005–06	8.93	45.48	0.09	14.29	10.60	14.92	5.80	-0.08	-0.04	100

Year	Currency	Bank deposits	Non- banking deposits	Life insurance fund	Provident and pension fund	Claims on Government	Shares & debentures	Units of UTI	Trade Debt(Net)	Total
2006–07	8.79	56.14	0.60	15.02	9.48	2.51	6.65	-0.04	0.85	100
2007–08	10.52	50.36	0.17	21.99	9.26	-3.67	9.62	-0.04	1.78	100
2008–09	12.68	57.48	2.03	21.03	10.10	-3.79	-0.32	-0.38	1.17	100
2009–10	9.79	40.22	1.87	26.25	13.12	4.39	4.53	0.00	-0.18	100
2010–11	12.70	50.77	0.47	19.46	13.07	2.74	0.16	0.00	0.63	100
2011–12	11.38	56.34	1.07	20.96	10.25	-2.35	1.86	0.00	0.48	100
2012–13	10.89	56.14	1.69	17.78	12.11	-0.70	4.27	0.00	0.31	100
2013–14	7.97	60.52	2.39	16.04	10.65	0.60	2.53	0.00	0.38	100
2014–15	10.66	46.88	2.22	19.00	16.25	-0.05	4.62	0.00	0.34	100

Source: RBI: Handbook of Statistics on Indian Economy, 2015.

5.2.3 Domestic Bond Market

Given the inability of commercial banks to provide the required long-term finance for investment owing to the mismatch between their assets and liabilities and with the declining role of DFIs as a source of long-term finance, the problem can be overcome by developing a vibrant corporate debt market. During the period of financial liberalisation, policies were devised such that the financial markets get to play a larger role in the process of financial intermediation in comparison to the bank driven lending system (Bhattacharjee and Chakrabarti, 2013). However, the size and depth of the corporate debt market in India continues to remain small in comparison to those in developing countries like Brazil and China. It is also small in comparison to several bank based financial systems like Germany and Japan (*Table 6*). The size of the Indian bond market is too small in comparison to several developing and developed countries. As of March 2015, the size of the Indian bond market stood at US$ 820 billion, in comparison to US$ 2097 billion in Brazil, US$ 5232 billion in China, US$ 3368 billion in Germany, US$ 1794 in South Korea and US$ 11205 billion in Japan.

Table 6: Status of Bond Market (Amount Outstanding) as of March 2015 (US$ Billion)

Country	Government	Financial Institutions	Corporate issues	Total
Brazil	1131.7	649.9	315.8	2097.4
Canada	1116.3	510.3	413.2	2039.8
China	1686.3	2272.8	1273	5232.3
France	1901.4	1510	587.5	3998.9
Germany	1756.3	1471.3	141	3368.6
India	..	..	..	820
Japan	8362.2	2202.1	640.6	11205
South Korea	504.5	678.1	611.9	1794.5
UK	2538.9	2739.4	594.4	5877.3
US	15614	14896.4	5232	35965

Source: Bank for International Settlement (BIS): Debt Securities Statistics, 2015.

The distribution of bond market capitalisation by security type demonstrates the dismal state of corporate debt market in India. As shown in the table below (*Table 7*), as of October 2015, it is largely the government securities which dominate the bond market in India. The share of central government securities is about 47 per cent of the total bond market, followed by state government loans (nearly 24 per cent). The size of corporate bond in India is even smaller than the PSU (Public Sector Undertaking) bond market.

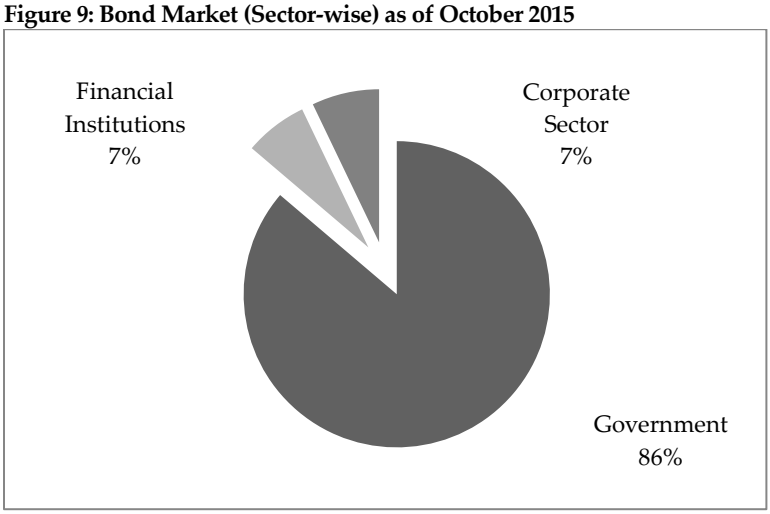
Table 7: Distribution of Bond Market Capitalisation by Security Type in India as of October2015 (Rs Billion)

Security Type	*No. of Securities*	*Market Capitalisation*	*% of Total - MCap*
Govt. Securities	115	27321.56	46.98
PSU Bonds	1136	4952.84	8.52
State Loans	1811	14015.35	24.1
Treasury Bills	51	3817.51	6.57
Local Bodies	17	29.86	0.05
Financial Institutions	240	1060.58	1.82
Bank Bonds	581	2801.08	4.82
Corporate Bonds	2924	4141.25	7.12
Supranational Bonds	10	3.39	0.01
Mutual funds	6	7.50	0.01
Preference share	1	1.50	0
Total	6892	58152.41	100

Source: SEBI: Handbook of Statistics on Indian Securities market, 2014.

A broad disaggregation of bond market capitalisation in India shows that the share of government bonds (all type) is 86 per cent of the market capitalisation in 2015. The size of both the corporate bond market and the financial institutions put together is seven per cent each of the total bond market in India (*Figure 9*).

Figure 9: Bond Market (Sector-wise) as of October 2015



Source: SEBI: Handbook of Statistics on Indian Securities market, 2014.

5.3 Distribution of Investible Funds

Another dimension of industrial finance in the post-liberalisation period is the unequal distribution of credit and investible funds across different sectors and regions. As discussed in the previous sections, there is low availability of funds for the SSI sector, credit migration from rural to urban to metropolitan areas, and concentration of credit in the northern, southern and western parts of India. During post-liberalisation period, the eastern, central and the north eastern regions were deprived of financial resources in comparison to the above preferred regions, thereby constraining the process of industrialisation in those regions. In 2015, bank credit disbursed to the western, southern and northern regions constituted about 83 per cent of the total bank credit in India (*Table 8*).The north eastern, eastern and central regions received about 17 per cent of the total bank credit during the same year.

Table 8: Region-wise Distribution of Bank Credit in India (in per cent)

Region	*2011*	*2012*	*2013*	*2014*	*2015*
Northern Region	23.42	23.39	23.28	23.17	23.94
Northeastern Region	0.77	0.77	0.76	0.75	0.80
Eastern Region	7.78	7.72	7.63	7.52	7.83
Central Region	7.04	7.10	7.39	7.67	8.49
Western Region	34.06	33.92	33.75	34.15	31.57
Southern Region	26.92	27.11	27.19	26.73	27.37
All India	100	100	100	100	100

Source: RBI: Basic Statistical Returns of Scheduled Commercial Banks in India, various issues.

Similarly, the population group-wise distribution of bank credit to industrial sector shows that in 2015, more than three-fourths (78.4 per cent) of the industrial credit disbursed by banks went to the metropolitan areas, followed by urban (14.7 per cent), semi urban (5.1 per cent) and rural (1.8 per cent) areas (*Table 9*).

Table 9: Population Group-wise Bank Credit to Industrial Sector in India (in per cent)

Population Group	*2011*	*2012*	*2013*	*2014*	*2015*
Rural	3.9	2.6	2.5	1.6	1.8
Semi Urban	6.4	5.8	6.8	4.9	5.1
Urban	18.9	16.9	16.5	14.8	14.7
Metropolitan	70.8	74.7	74.1	78.7	78.4
Total	100	100	100	100	100

Source: RBI: Basic Statistical Returns of Scheduled Commercial Banks in India, various issues.

The unequal distribution of investible funds across sectors can be seen from the table below (*Table 10*) which demonstrates the dominance of financial firms over non-financial firms. The industry-wise classification of capital raised from the primary market shows that bulk

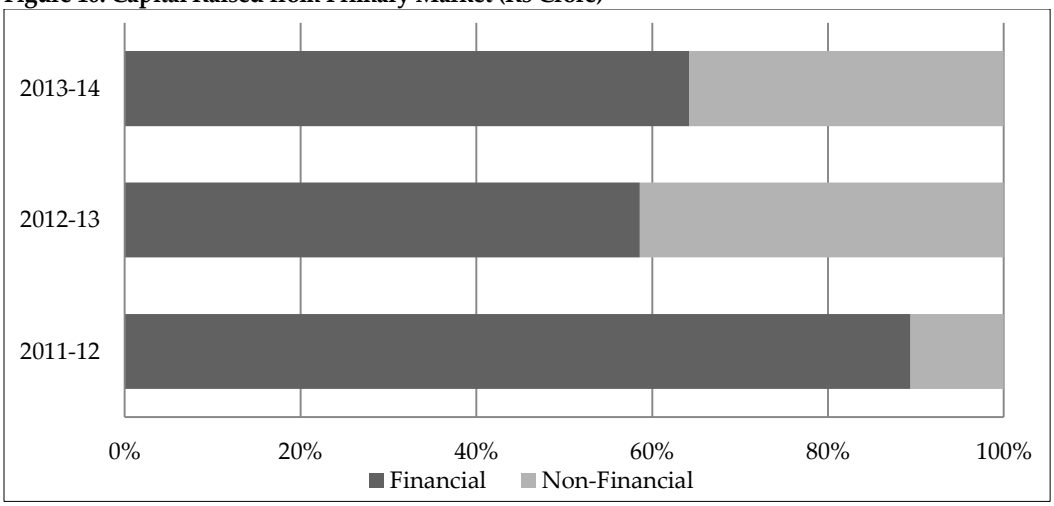
of the capital is going to the financial firms. Although the share of non-financial firms is increasing, it remains neglected (*Figure 10*).

Table 10: Industry-wise Classification of Capital Raised from the Primary Market (Rs Crore)

Industry	*2011-12*		*2012-13*		*2013-14*	
	No.	*Amount*	*No.*	*Amount*	*No.*	*Amount*
Banking/FIs	**20**	**35611**	**7**	**8273**	**14**	**29700**
Cement & Construction	2	187	1	9	4	731
Chemical	0	0	1	9	0	0
Electronics	1	121	0	0	0	0
Engineering	1	217	2	74	5	591
Entertainment	1	89	1	12	2	602
Finance	**10**	**7708**	**16**	**10739**	**26**	**6058**
Food Processing	0	0	2	19	0	0
Healthcare	1	65	2	210	0	0
Information Technology	2	138	1	4	1	19
Paper & Pulp	2	306	0	0	1	28
Plastic	1	11	0	0	3	18
Power	0	0	0	0	4	11702
Printing	2	71	0	0	0	0
Telecommunication	0	0	1	4173	1	5
Textile	0	0	4	582	3	14
Others	28	3943	31	8352	26	6184
Total	71	48468	69	32455	90	55652

Source: SEBI: Handbook of Statistics on Indian Securities Market, 2014.

Figure 10: Capital Raised from Primary Market (Rs Crore)

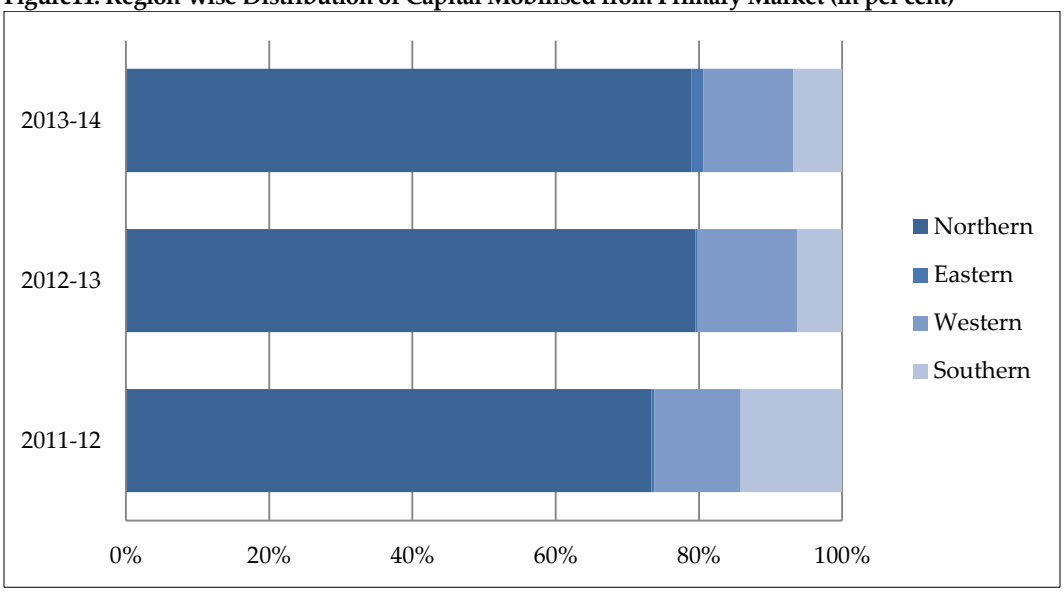


Source: SEBI: Handbook of Statistics on Indian Securities Market, 2014.

Region-wise distribution of capital mobilised from the primary market tends to concentrate in a few industrial pockets in India. As shown in the figure below (*Figure 11*), between 2011–12 and 2013–14, majority of the capital mobilised from the primary market went to

the northern region of India. It is largely the NCR region that seems to be the destination for capital investment. It is true for both the capital raised from the primary market and the credit disbursed by the commercial banks in India. Therefore, the unequal distribution of investible funds raised through different sources is likely to impact the process of industrialisation of the laggard regions adversely.

Figure11: Region-wise Distribution of Capital Mobilised from Primary Market (in per cent)



Source: SEBI: Handbook of Statistics on Indian Securities Market, 2014.

5.4 The Cost of Capital

The cost of capital plays a key role in the process of industrialisation; as unavailability of affordable capital has often been identified as a key factor that causes adverse impacts. The cost of capital affects both the large and the small firms in different ways. While high interest cost limits the expansion of large firms, it makes it difficult for the smaller firms to survive, especially for the start ups. It was argued that following financial liberalisation, the cost of capital would come down significantly as the volume of investible funds is likely to go up due to greater mobilisation of savings and also due to an efficient way of channelling saving into investment. However, quite opposite to the expectation, the cost of capital as reflected in the lending rate of the commercial banks did not witness such significant decline during the early years of post-liberalisation period (*Table 11*). During the decade of 1990s and 2000s, the real rate of interest (i.e. the nominal rate of interest minus the inflation rate) was high. It was during the initial years of the decade 2010 that the real rate of interest seems to have declined though in nominal terms it is still high. It is not only the rate of interest (lending rate) that continues to remain high, but also the structure of interest rates is such that small borrowers end up paying a high rate of interest in comparison to large borrowers.

Table 11: The Cost of Capital: Lending Rate (in percent)

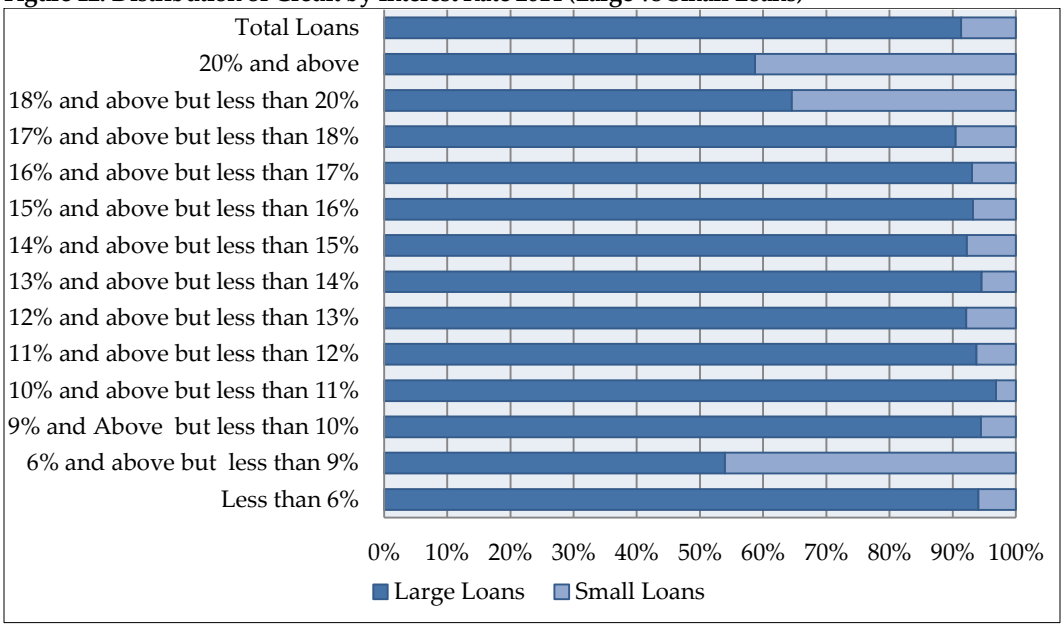
Year	*SBI*	*IDBI*	*Lending rate*	*Inflation (WPI)*
1970–71	7.00-8.50	8.50 (7.00-8.50)		5.50
1971–72	8.50	8.50 (7.50-8.00)		5.60
1972–73	8.50	8.50 (7.50-9.75)		10.04
1973–74	8.50-9.00	9.00 (7.50-10.50)		20.22
1974–75	9.00-13.50	10.25 (8.00-10.50)		25.20
1975–76	14.00	11.00 (8.00-11.00)		(1.09)
1976–77	14.00	11.00 (8.00-11.00)		2.08
1977–78	13.00	11.00 (8.00-11.00)		5.21
1978–79	13.00	11.00 (8.00-11.00)		0
1979–80	16.50	11.00 (8.00-11.00)		17.12
1980–81	16.50	14.00 (12.00-14.50)		18.24
1981–82	16.50	14.00 (12.50-14.00)		9.33
1982–83	16.50	14.00 (12.50-14.50)		4.90
1983–84	16.50	14.00 (11.50-16.50)		7.53
1984–85	16.50	14.00 (12.50-18.50)		6.47
1985–86	16.50	14.00 (11.50-16.50)		4.41
1986–87	16.50	14.00 (11.50-16.50)		5.82
1987–88	16.50	14.00 (11.50-16.50)		8.14
1988–89	16.50	14.00 (11.50-16.50)		7.46
1989–90	16.50	14.00 (11.50-16.50)		7.46
1990–91	16.50	14.00-15.00		10.26
1991–92	16.50	18.00-20.00		13.74
1992–93	19.00	17.00-19.00		10.06
1993–94	19.00	14.50-17.50		8.35
1994–95	15.00	15.00		12.60
1995–96	16.50	16.00-19.00		7.99
1996–97	14.50	16.20		4.61
1997–98	14.00	13.30		4.40
1998–99	12.00-14.00	13.50		5.95
1999–00	12.00	13.60-17.10		3.27
2000–01	11.50	14.00	11.5	7.16
2001–02	11.50	11.50	11.5	3.60
2002–03	10.75	10.20	11.125	3.41
2003–04	10.25	8.90	10.625	5.46
2004–05	10.25		10.625	6.48
2005–06	10.25		11.5	4.47
2006–07	12.25		13.5	6.59
2007–08	12.25		14	4.74
2008–09	12.25		14.125	8.05
2009–10	11.75		13.375	3.81
2010–11	8.25		8.875	9.56
2011–12	9.50		10.375	8.94
2012–13			9.975	7.35
2013–14			10.125	5.98
2014–15			10.125	2.01

Note: From 1994–95 onward, data on minimum general key lending rates prescribed by RBI refers to the prime lending rates of 5 major public sector banks; IDBI ceased to be a term lending institution upon its conversion into a banking entity effective October 11, 2004; Figures in parenthesis indicate lending rate charged to small scale industries.

Source: Calculated from RBI: Handbook of Statistics on Indian Economy, 2015.

The distribution of credit by interest rate shows that bulk of the small-sized loans is disbursed at a very high rate of interest. Out of total loans disbursed at 20 per cent rate of interest or above, more than 40 per cent are small-sized loans (*Figure 12*). Similarly, out of the total loans disbursed by commercial banks between 18 and 20 per cent rate of interest, more than 35 per cent are small-sized loans (*Table 12*). From the above analysis, it can be seen that bulk of the small-sized loans is disbursed at a relatively higher rate of interest, thereby suggesting that small potential borrowers will have to pay a high rate of interest.

Figure 12: Distribution of Credit by Interest Rate 2014 (Large vs Small Loans)



Source: RBI: Basic Statistical Returns, various issues.

Table 12: Distribution of Credit by Interest Rate (% of Total Credit)

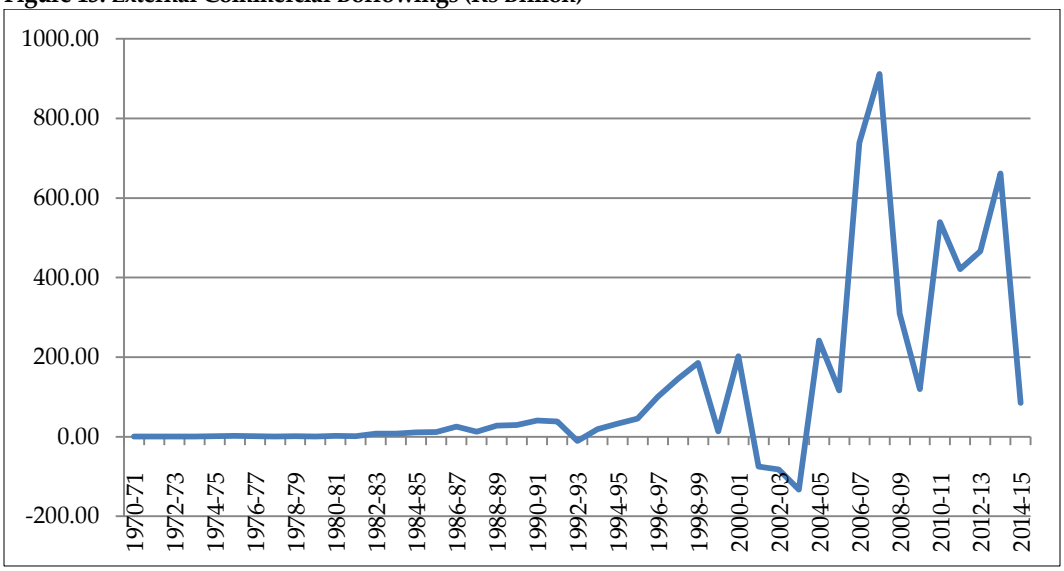
Interest Rate (%)	*1981*	*1995*	*2002*	*2014*
Less than 6%	2.19	2.28	0.15	1.59
6% and abovebut less than 10%	3.13	2.12	3.24	10.01
10% and abovebut less than 12%	15.65	2.3	24.45	39.89
12% and abovebut less than 14%	24.11	10.57	22.5	31.69
14% and abovebut less than 15%	7.21	6.74	14.14	8.91
15% and abovebut less than 16%	4.75	20.33	15.51	3.84
16% and abovebut less than 17%	5.82	17.34	12.53	1.37
17% and abovebut less than 18%	9.74	15.56	2.95	0.76
18% and abovebut less than 20%	26.91	14.5	3.16	0.9
20% and above	0.49	8.26	1.36	1.03

Source: RBI: Basic Statistical Returns, various issues.

5.5 External Source

In India, the unavailability of sufficient finance at an affordable cost has forced the private sector to rely on external sources of finance. It is quite evident from the figure below that during the later years of the liberalisation period, external commercial borrowings went up between 2003–04 and 2007–08 (*Figure 13*). In fact, many would argue that the high growth phase in India (2003–08) can be attributed to a significant growth in the flow of external commercial borrowings (Nagaraj, 2013). India's external commercial borrowings reached its peak level of about Rs 900 Billion in 2007–08 from a low of Rs 50 Billion in 1990–91.

Figure 13: External Commercial Borrowings (Rs Billion)



Source: RBI: Handbook of Statistics on Indian Economy, 2015.

6. Concluding Remarks

From the above discussion it is evident that financial liberalisation has failed to respond to the growing financial needs of the industrial sector in India. The pretext on which the financial liberalisation programme was pursued is found to be weak and discouraging from the industrial financing perspective. It was argued that financial liberalisation would result in greater access and availability of finance, and that the cost of capital would go down substantially. However, the outcome of the liberalisation programme is not in consonance with the argument presented. Therefore, it becomes imperative to understand the growing asymmetries between the above two sectors in order to devise policies that will respond to the needs of the industrial sector in India. The fault line with respect to understanding the linkages between the financial and industrial sectors in India lies in the misplaced priority of trying hard to become a market based financial system. The theoretical premise of developing a market based financial system stems from the "efficient market hypotheses," which advocates that with complete information, the asset market can

generate correct incentives for efficient resource allocation (Hermann, 2010). Any intervention in the market will produce less than optimal solutions; therefore, it rules out the necessity of DFIs. Though the above argument put forth in the efficient market hypothesis has been contested by Keynesian type approaches that attribute market failures to uncertainties in the financial markets, policies in India have been designed to facilitate the creation of a market based financial system. Thus, there seems to an asymmetry which is widening both in terms of the nature of financial requirements of the industrial sector and the financial institutions and agencies that emerged during the post-liberalisation period in India. It raises serious questions on the effectiveness of the financial sector policies that have been pursued.

In spite of the diversification of the sources of industrial financing in India (even if it is not sufficient), the size and location of the firm/industry play key role in determining access to adequate finance. Thus, while the current financial system excludes many firms from accessing finance, it is not adequate for many (industry as a whole). From industrial financing perspective, it becomes important to address the issue of long-term finance, given the importance of term loans, especially during the learning period. It is because during the initial years of investment, the losses are likely to be high and the learning period long (Nayyar, 2015). Therefore, the provision of long-term finance helps the new or infant firms to sustain and grow despite the likelihood of initial losses. Given the close linkage between industrial development and building up of infrastructure, the need for long-term finance assumes greater importance.

With a relatively underdeveloped capital market—both the equity and the private bond markets—removing financial constraint for industries will be a difficult task. There has not only been a failure to create market based financial institutions to respond to the financial requirements of the industrial sector, but also the possible alternate institutions have been neglected and downsized. The DFIs can possibly fill the gap created due to a weak domestic corporate bond market. The paper suggests that both the corporate bond market and the DFIs can co-exist, owing to the varied needs of the Indian industrial sector in terms of size, origin, location and nature of activities.

References

Bank for International Settlements (2015), 'Debt Securities Statistics.'

Bhattacharjee, S. and D. Chakrabarti (2013), 'Financial Liberalisation, Financing Constraint and India's Manufacturing Sector,' *Economic and Political Weekly*, Vol. 48, No. 6, Pp. 61–67.

Das, S.K. (2011), 'Financial Liberalisation and Banking Sector Efficiency in India: A Fourier Flexible Functional Form and Stochastic Frontier Approach,' *International Business and Management*, Vol. 2, No. 1, Pp. 42–58.

Gerschenkron, A. (1962), *Economic Backwardness in Historical Perspective*, Harvard: Harvard University Press.

Government of India (1998), Report of the Committee on Banking Sector Reforms (Narashimam Committee – II), New Delhi.

Hermann, J. (2010), 'Development Banks in the Financial-liberalisation Era: The Case of BNDES in Brazil,' *Capital Review100*, Pp. 189–203.

Khanna, S. (1999), 'Financial Reforms and Industrial Sector in India,' *Economic and Political Weekly*, Vol. 34, No. 45, Pp. 3231–3241.

Lawrence, P. and I. Longjam (2003), 'Financial Liberalisation in India: Measuring Relative Progress,' Keele Economics Research Paper No. 2003/8, Keele University.

Mathur, K.B.L. (2003), 'Development Financial Institutions at the Crossroads,' *Economic and Political Weekly*, Vol.38, No. 8, Pp. 799–806.

McKinnon, R.I. (1973), *Money and Capital in Economic Development*, Washington D.C.: The Brookings Institution.

Nayyar, D. (2015), 'Birth, Life and Death of Development Finance Institutions in India,' *Economic and Political Weekly*, Vol. 50, No. 33, Pp. 51–60.

Ray, P. (2015), 'Rise and Fall of Industrial Finance in India,' *Economic and Political Weekly*, Vol. 50, No. 5, Pp. 61–68.

Reserve Bank of India (1999), 'Harmonising the Role and Operations of Development Financial Institutions and Banks,' RBI Discussion paper.

Reserve Bank of India (2008), Report on Currency and Finance, Mumbai.

Reserve Bank of India (2015), Hand Book of Statistics on Indian Economy.

Reserve bank of India, Statistical Tables Relating to Banks in India, various issues.

Singh, A. (1993), 'The Stock Market and Economic Development: Should Developing Countries Encourage Stock-Markets?' *UNCTAD Review*, No. 4, Pp. 1–28.

Securities and Exchange Board of India (2014), Handbook of Statistics on Indian Securities Market.

Sen, K. and R.R. Vaidya (1997),*The Process of Financial Liberalisation in India*, Delhi: Oxford University Press.

Shaw, E.S. (1973), *Financial Deepening in Economic Development*, New York: Oxford University Press.

Shetty, S.L. (2005), 'Regional, Sectoral and Functional Distribution of Bank Credit,' in V.K Ramchandran and M Swaminathan (Eds.) *Financial Liberalisation and Rural Credit in India*, New Delhi: Tulika Books.

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