

Industrial Structure, Financial Liberalisation and Industrial Finance in India

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Industrial Structure, Financial Liberalisation and Industrial Finance in India

*Santosh Kumar Das**

[Abstract: The study explores the impact of financial liberalization on industrial development in India by analyzing the emerging relationship between the industrial and financial structures; and what it implies for industrial finance. The dynamic interaction between the above two sectors has been examined by analyzing the following questions with respect to industrial finance. These are, first, has financial liberalisation succeeded in removing financial constraints on industrial sector, and second, are DFIs relevant in a liberalised regime from the perspective of industrial financing? We found that not only financial liberalization has not succeeded in removing financial constraints for industrial development in India, but also it underlines growing asymmetries between the financial and industrial structures. The financial structure that emerged in the post reform period is not aligned as per the needs of the industrial sector, which is diverse in terms of its financial requirements. We also found that there has been a failure to create a market based approach to the long term financial needs of the industry. In the absence of a robust corporate debt market, it is prudent to allow DFIs play a greater role rather letting banks being burdened up with long term lending which is not their mandate.]

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1. Introduction

The critical role that finance plays in the process of industrial development received considerable attention with the seminal work of Greschenkron (1962). Greschenkron in his influential work while explaining the process of industrialization in Europe in a historical context, highlighted that the banks did play critical role in the process of industrialization. Since then, financial policy as an instrument of industrialization has been designed world over to achieve faster rates of industrialization.

Absence of availability and access to affordable finance has been identified as one of the key holding blocks in the path of industrial development in India ((Bhattacharjee and Chakrabarti 2013; Khanna 2013; Das 2015). It was perceived that the underdeveloped

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financial sector due to state control was the primary reason behind unavailability of adequate financial resources for industrial sector. Financial liberalisation was argued to be appropriate policy measure which will be instrumental to India's industrialisation. It was expected that following reforms in the financial sector, a developed financial sector will be able to fulfil the financial needs of the industrial sector.

While the deregulation of interest rate, dismantling of directed credit provision, reduced government control over banking operations and establishment of market regulatory mechanism was likely to have obvious implication for the transformation of financial sector; it will however have brought in new challenges for industrial finance in India. Following financial reforms, the structure of the Indian financial system has undergone significant transformation. Though it still continues to be primarily a bank driven financial system, there has been however attempts to establish a vibrant mechanism for resource mobilisation and allocation. This change in approach had serious implications for industrial finance. While, with liberalisation and opening up new sources of finance emerged; however, the earlier existing public financial institutions like the Development Finance Institutions (DFIs) were converted into universal banking due to insufficient government funding (Ray 2015). While the universal banking (commercial banks) system provided only working capital, the term loans that was earlier recognized as key in reducing the financial constraints of the firm significantly went down. Even the working capital provided by the universal banking system is not sufficient enough to meet the growing credit demand of the Indian industries.

With the deregulation of directed credit programme, the structure of flow of bank credit to industrial sector went through restructuring with dilution of the priority sector lending programme. The structure of the newly emerged financial system following financial liberalization while brought new opportunities in terms of access to finance for few industries, which are large in nature and registered with the stock exchanges; on other side reduced the access to finance to several Small and Medium Enterprises (SMEs). The SMEs were highly dependent on the DFIs as one of the key accessible source of finance, which is no longer available to them (currently there are few operational DFIs). While the large firms now could borrow from both internal and external sources with low interest cost, the SMEs are increasingly financially constrained. While there has been diversification of the sources of industrial financing in India (even if it is not sufficient), still the size and the location of the firm/industry play a determining role when it comes to accessing adequate finance. Therefore, as the current financial system while excludes many firms from accessing finance, is not adequate for many (industry as a whole). In this scenario, few firms/industry have access to different sources of finance both internally and externally; on the other hand, a large number of firms (including new firms) do not have access to any form of finance.

Against this backdrop, the paper has attempted to study the impact of financial liberalization on industrial development in India by analysing the relationship between the structures of

the financial and industrial sector. It has been studied by analysing the following questions: whether financial liberalization has succeeded in removing credit constraint on the Indian industry, and what is the relevance of Term Lending Institutions like the Development Finance Institutions (DFIs) for industrial development in the post reform period. The paper spreads over eight sections. Section 1 has provided the background and objective of the study. A brief review of literature has been presented in Section 2. Section 3 briefly discusses an alternate framework to understand the relationship between financial liberalization and industrial development in India. Section 4 elaborates on the structure of industrial sector in India. The structure of India's financial sector after liberalization has been elaborated in Section 6. Section 7 of the paper discusses about the potential role of DFIs in India. Finally, Section 8 has provided summary conclusion of the paper.

2. Financial Liberalization and Industrial Development: Brief Review of Literature

Broadly there exist two different strands of literature that explains the relationship between financial liberalization and industrial structure at a conceptual level. The first strand of literature which originates from the seminal work of Rajan and Zingales (1998) states that as the industrial sector as a whole is not homogenous, financial development is likely to have varied impact depending on the character of the industry. Their study conducted in 41 developed and developing countries suggests that financial development is likely to benefit firms those depend more on external finance. Therefore, financial liberalization benefits firms those are external finance dependent through greater financial development.

The second strand of literature analyses financial liberalization and industrial development relationship by examining the impact of financial deepening on financing constraints of firms from different perspective. Using the above analytical framework, different studies have suggested different findings. A study conducted by Love (2003) concluded that while financial development did relax financing constraints on firm's investment in her sample of 36 developed and developing countries, it disproportionately benefited the smaller firms in comparison to the large ones. Another study by Laeven (2003) concluded that financial liberalization did not reduce financing constraints of all firms. Based on the estimation from his sample of 13 developing countries undergoing the process of financial liberalization, suggested while the small firms did benefit from liberalization in terms of reduction in financing constraint, the large firm on the other side did experience increasing financing constraints after liberalization. The argument provided for this finding was that after liberalization the large firms lost access to preferential direct credit. However, contrary to the above findings, Bhaduri (2005), in case of India concluded that financial constraints increased considerably for small and young firms during the post liberalization period. This is largely due to the fact that with financial liberalization, Government control over resource allocation gradually came down which led to loss of preferential access to credit by the small and young firms. Similarly studies

by Jaramillo, Schiantarelli and Weiss (1996) and Hermes and Lensink (1998) concluded that financial liberalization did not improve small firms' access to external finance in case of Ecuador and Chile respectively.

The above two strands of literature studied the relationship between financial development and industrial growth, with the understanding that financial liberalization would result in greater financial development which might lead to industrial growth. However, the present study seeks to understand and explore the relationship between financial liberalization and industrial development through a different framework which is somewhat original in nature. The study proposes to understand the relationship between financial liberalization and industrial development within the framework of interaction between the financial structure and industrial structure in India.

3. Understanding Financial Liberalization and Industrial Development Relationship: An Alternate Framework

As discussed in the previous section, the relationship between financial liberalization and industrial growth has been studied empirically by examining the question if financial development has succeeded in removing credit constraints on the industrial sector. The argument derived from this framework suggests that financial liberalization plays a catalyst role in industrial growth through financial development. However, the above framework does not provide a holistic view of the success or failure of financial liberalization with respect to its impact on industrial development. The concept of financial development itself may not be sufficient to explain the process of financial liberalization and its potential implication for industrialization. It tends to overlook 'financial structure' of a country. Logically the financial sector of a country should be able to address the needs of the industrial sector for greater industrial development. In other words, the financial structure of a country should be developed in a way so that it is able to meet the financial requirements of the industrial sector which is heterogeneous in nature. Therefore, the financial structure should be designed as per the existence of the given industrial structure which is diverse in terms of its size, location, and other characteristics. The present study proposes to examine the success or failure of financial liberalization from the perspective of industrial development within the framework of the linkages between the financial structure and industrial structure in India. The above framework is justified on the fact that the financial needs of firms are not similar. It tends to vary according to the age, size, nature of production activity, location of the firm etc. Given the heterogeneity in demand for financial resources from the industrial sector, the financial sector policies should be such that they are able to produce a financial system or structure that corresponds to the needs of the industry. In this context the role of financial liberalization becomes very critical. In this study we have explored the kind of financial system that financial liberalization has produced in India and to what extent the financial system has been able to meet the needs of the industrial sector in the post liberalization period.

4. Structure of Industrial Sector in India

The industrial sector in India is diverse in terms of location, size and the type of ownership. In this section, the paper is largely focusing on the structure of the manufacturing sector in India. The manufacturing sector is diverse in terms of regional spread, economic activity, location, size and type of ownership. As per the Sixth All India Economic Census, in terms of number of establishments by broad economic activity, the total number of establishments in the manufacturing sector was 10329822 which is 17.66 per cent of the total number of establishments in the country (Report of the Sixth All India Economic Census). Out of the total 10329822 number of establishments, 5442870 (52.69%) establishments are located in the rural areas and the rest 4886952 (47.31%) are located in the urban areas (Table 1).

Table 1: Region and Location-wise Spread of Establishments in Manufacturing Sector: 2013-14

State/UT	Rural		Urban		Total	
	Number	% share in Total Number of Establishments	Number	% share in Total Number of Establishments	Number	Share (%)
J & K	81071	0.78	37814	0.37	118885	1.15
Himachal Prad	63089	0.61	9007	0.09	72096	0.70
Punjab	140926	1.36	164343	1.59	305269	2.96
Chandigarh	155	0.00	6377	0.06	6532	0.06
Uttarakhand	32636	0.32	23307	0.23	55943	0.54
Haryana	80790	0.78	95991	0.93	176781	1.71
Delhi	1397	0.01	154553	1.50	155950	1.51
Rajasthan	264718	2.56	211231	2.04	475949	4.61
Uttar Pradesh	597306	5.78	544097	5.27	1141403	11.05
Bihar	230698	2.23	81964	0.79	312662	3.03
Sikkim	917	0.01	474	0.00	1391	0.01
Arunachal Prad	1420	0.01	1009	0.01	2429	0.02
Nagaland	7773	0.08	2231	0.02	10004	0.10
Manipur	45483	0.44	24145	0.23	69628	0.67
Mizoram	1784	0.02	3118	0.03	4902	0.05
Tripura	24884	0.24	12163	0.12	37047	0.36
Meghalaya	7212	0.07	2701	0.03	9913	0.10
Assam	155959	1.51	55210	0.53	211169	2.04
West Bengal	865186	8.38	599658	5.81	1464844	14.18
Jharkhand	64359	0.62	66243	0.64	130602	1.26
Odisha	327016	3.17	61690	0.60	388706	3.76
Chhattisgarh	50411	0.49	39970	0.39	90381	0.87
Madhya Prad	264124	2.56	214305	2.07	478429	4.63

State/UT	Rural		Urban		Total	
	Number	% share in Total Number of Establishments	Number	% share in Total Number of Establishments	Number	Share (%)
Gujarat	138112	1.34	366396	3.55	504508	4.88
Daman & Diu	318	0.00	1811	0.02	2129	0.02
D & N Haveli	696	0.01	1586	0.02	2282	0.02
Maharashtra	373584	3.62	546888	5.29	920472	8.91
Karnataka	322876	3.13	271721	2.63	594597	5.76
Goa	4249	0.04	6919	0.07	11168	0.11
Lakshadweep	142	0.00	514	0.00	656	0.01
Kerala	263491	2.55	268316	2.60	531807	5.15
Tamil Nadu	357961	3.47	576246	5.58	934207	9.04
Puducherry	2374	0.02	6136	0.06	8510	0.08
A & N islands	985	0.01	799	0.01	1784	0.02
Telangana	256249	2.48	177673	1.72	433922	4.20
Andhra Prad	412519	3.99	250346	2.42	662865	6.42
Total	5442870	52.69	4886952	47.31	10329822	100

Source: Calculation based on Sixth All India Economic Census data.

Region wise spread of manufacturing establishments shows that West Bengal is home to more than 14 per cent of the total manufacturing establishments, of which 8.38 per cent of the establishments are located in the rural areas and the rest 5.81 per cent are located in the urban areas (Table 1). The regions with substantial presence of manufacturing establishments include Uttar Pradesh (11.05%), Tamil Nadu (6.04%), Maharashtra (8.91%), Andhra Pradesh (6.42%), Karnataka (5.76%), Kerala (5.15%), Gujarat (4.88%), Madhya Pradesh (4.63%), Rajasthan (4.61%), Telangana (4.02%), Odisha (3.76%), Bihar (3.03%), Punjab (2.96%), and Assam (2.04%). The share of manufacturing establishments located in urban areas are higher in Punjab (1.59%), Gujarat (3.55%), Maharashtra (5.29%), Kerala (2.6%), and Tamil Nadu (5.58%). In rest of the major states, manufacturing establishments located in Rural areas are higher than establishments located in the urban areas. At all India level too more than 52 per cent of the total manufacturing establishments are located in the rural areas.

Employment size wise distribution of manufacturing establishments show that more than 93 per cent of the total manufacturing establishments are small in size (Table 2). About 5 per cent of the manufacturing establishments are employing more than 6 people and not more than 9 people. The number of large establishments are relatively less in the manufacturing sector. The share of establishments employing more than 100 workers does not even add up to 1 per cent of the total manufacturing establishments. Employment size wise location of establishments shows that establishments employing more than 5 workers tend to locate in the urban areas, where as small establishments, having 1-5 workers are predominantly located in the rural areas. More than 50 per cent of the establishments, having employment

size between 1 and 5 are located in rural areas, and 42.65 per cent of the small establishments are located in the urban areas. With the increase in the size of the establishments in terms of employment size, for relatively large proportion of the manufacturing establishments, the urban areas are the preferred locations of their operation.

Table 2: Distribution of Establishments by Size of Employment in Manufacturing Sector: 2013-14

Employment Size	Rural		Urban		Total	
	Number of Establishments	% share of Total Number of Establishments	Number of Establishments	% share of Total Number of Establishments	Number of Establishments	% share
1-5	5208109	50.42	4405891	42.65	9614000	93.07
6-9	152709	1.48	356359	3.45	509068	4.93
10-14	30292	0.29	45583	0.44	75875	0.73
15-19	10157	0.10	20724	0.20	30881	0.30
20-24	8023	0.08	12477	0.12	20500	0.20
25-29	4074	0.04	7958	0.08	12032	0.12
30-99	20979	0.20	29071	0.28	50050	0.48
100-199	4869	0.05	4941	0.05	9810	0.09
200-499	2582	0.02	2742	0.03	5324	0.05
500 or more	1076	0.01	1206	0.01	2282	0.02
All Classes	5442870	52.69	4886952	47.31	10329822	100

Source: Calculation based on Sixth All India Economic Census data.

The distribution of establishments in the manufacturing sector by type of ownership suggests that about 95 per cent of the establishments are owned by private proprietors (Table 3). While less than 1 per cent of the total manufacturing establishments are owned by the Government, the rest of the establishments are owned by private entities in different form. These private entities included Private Partnership (0.88%), Private Company (0.41%), private Self Help Group (0.13%), Private Co-Operative (0.08%), and private Not-Profit Institutions (0.09%).

Table 3: Distribution of Establishments in Manufacturing Sector by Type of Ownership: 2013-14

Type of Ownership	Number of Establishments	% share
Govt./PSUs	83483	0.81
Private-Proprietary	9774315	94.62
Private-Partnership	91076	0.88
Private -Company	42809	0.41
Private-Self Help Group	13632	0.13
Private-Cooperative	8432	0.08
Private-Non- Profit Institution	9764	0.09
Private - Others	306311	2.97
Total	10329822	100.00

Source: Calculation based on Sixth All India Economic Census data.

5. Financial Structure in Post Liberalisation Period

The financial system of a country comprises the structure and composition of financial markets and institutions. Prior to financial liberalization, the financial sector policies in India was inspired by the neo-Keynesian perspective. During this period, the Indian financial sector was characterized by nationalization of banks, directed credit and administered interest rates (Lawrence & Longjam, 2003). Several term lending institutions (DFIs) were also established during this period both at the sphere of Centre and States to provide term lending to the industrial sector. In 1991, the government of India initiated a comprehensive financial sector liberalization programme. The liberalization programme included de-controlling of interest rates, reduced reserve ratios, deregulation of directed credit provision and reduced government control on banking operations, while establishing a market regulatory framework (Lawrence & Longjam, 2003). The essence of the reform was to ensure increasing role of market in mobilising and allocating resources.

The financial liberalization brought several major changes in the institutional structure of the financial sector in India. These include increased share of private and foreign banks even the public sector banks continue to dominate, increasing importance of the financial markets, and the entry of the private companies in the insurance sector (Basu, 2005). It also brought greater integration with the global financial markets. From industrial financing perspective, in one side, the primacy of the earlier existed financial institutions like Developmental Financial Institutions (DFIs) declined substantially; on the other, market based financing gained importance with greater envisaged role of capital market as provider of finance for industry. The current section will elaborate on the major outcome of financial liberalisation from the perspective of industrial financing in India.

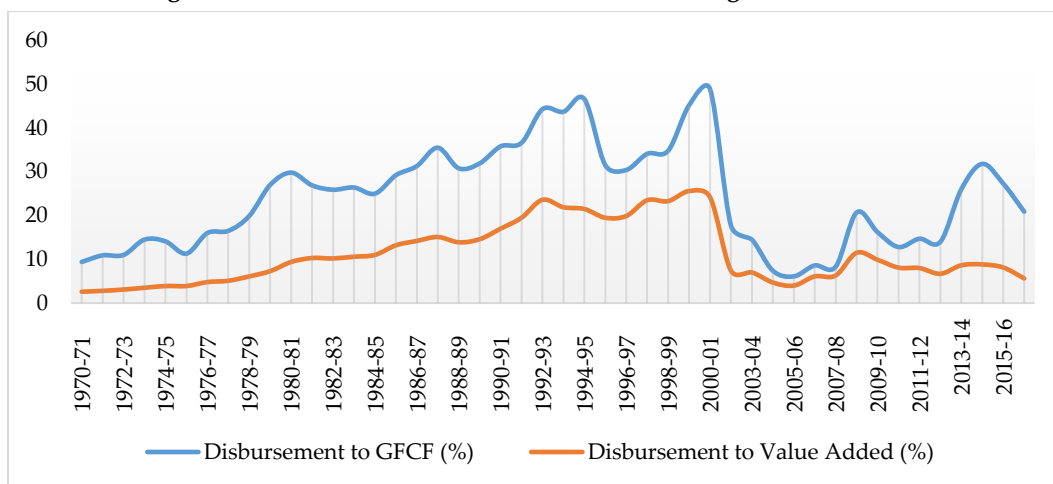
5.1 Decline of Development Financial Institutions (DFIs)

In the past, the Development Financial Institutions (DFIs) have performed specific roles in different phases of economic development in India. Despite having a relatively well functioning capital market during the early years of independence; the need for specialized financial institutions was felt as it was inadequate in responding to the financial needs of the industrial sector (Ray 2015). These specialised financial institutions were also required to create investment capabilities of the domestic industrial sector by providing long term finance for investment in the industrial sector (Nayyar 2015). However, with change in policies, these specialised institutions lost their primacy especially during the post reform years.

During the early years of independence, the DFIs played a critical role as providers of long term finance at all India level, and also term lending institutions of the states operating within the states (Nayyar 2015). During this period several term lending institutions, at national and regional (state) level were established. The importance of these specialized term lending institutions remained intact through the period of bank nationalization till the first decade into the post liberalization period (Figure 1). The share of total disbursement by DFIs in the Gross Fixed Capital Formation (GFCF) of the manufacturing

sector reached almost 50 per cent in 2000-01. Between 1970-71 and 1994-95, disbursement by the DFIs increased from 10 per cent to close to 50 per cent. The important role that the DFIs played between the above period is evident from another indicator, which is disbursement by the DFIs as a percentage of value added in manufacturing sector. Data shows that the ratio of DFIs disbursement to value added in the manufacturing sector in percentage term went up rapidly from 2.6 per cent in 1970-71 to 25.6 per cent in 1999-00. Subsequently, it declined substantially in the later years with the demise of development banking. Several DFIs were converted into universal commercial banks.

Figure 1: Total Disbursement of DFIs in Manufacturing Sector: 1970-2017



Source: Nayyar (2015) & estimated from ASI Annual Results.

5.2 Declining Presence of Government Owned Banks

One of the critical outcomes of the liberalisation policy was the decline of Govt. owned banks in India. As discussed earlier, during the period from bank nationalisation till liberalisation, the Public Sector Banks played critical role in encouraging local entrepreneurship by disbursing verities of loans. Not only these banks did provide working capital to the industrial sector, they also provided financial support to Small Scale Industries, rural industrialisation, handicraft sector etc. With liberalisation, the basic objective of the PSBs also went through a revision that had far reaching implications. Profitability became the primary criteria of evaluating the performance of a bank. With change in objectivity, the PSBs abandoned their developmental role. The decline of public sector banking and the emergence of private banking can be seen from the following two key indicators – decline in the branches or offices of the PSBs and decline in the asset share of the PSBs. Not only the PSBs witnessed relative decline in their role as providers of finance, subsequently, Government ownership in these banks also declined substantially. Though, PSBs still continue to constitute largest share in terms of geographical reach and asset, there has however been paradigm shift in terms of nature of banking in India.

With the liberalisation, the presence of Private Banks increased. There has been a corresponding increase in the number of bank branches or offices as well. Foreign Banks have not been able to expand the way Private Banks have expanded their offices or branches (Table 4). Though it is still the PSBs which dominate the banking operation with their vast branch network, the Private Banks have expanded substantially. As of March 2019, out of total number of functioning offices of the SCBs, the PSBs accounted for 73.6 per cent of the offices, followed by Private Banks (26%) and Foreign Banks (0.21%). There has been a decline in the branch share of PSBs from about 90 per cent in 1989 to 73.6 per cent in 2019. On the other side, the Private Banks have been able to expand their operations substantially from about 9.4 per cent in 1989 to about 26 per cent in 2019.

A very similar story emerges from the analysis of asset distribution among different bank groups (Table 5). The asset shares of PSBs declined from 91 per cent in 1980 to 65.8 per cent in 2019. On the other side, the asset shares of the Private Banks increased substantially from 5 per cent to 28.1 per cent during the above time period. While the private banks did expand their asset share considerably, their foreign counterparts however did not expand the way private banks did. There was a dip in the asset share of foreign banks from peak of 8.5 per cent in 2009 to 5.7 per cent in 2019.

Another significant outcome of the liberalisation process is the declining ownership of Public Sector Banks (PSBs) in India. While the number of public sector banks remained almost stagnant after reforms; however, the ownership structure of the PSBs have under gone significant changes during the post liberalisation period. Private shareholding in the public sector banks has increased. Private shareholding in the PSBs has increased and simultaneously there has been a decline in the shareholding of the Government and RBI. As of March 2017, private shareholding in two PSBs was more than 40 per cent and in seven PSBs it was more than 30 per cent (Table 6). There is only one PSB which has 100 per cent shareholding by the Government or RBI. Private shareholding constituted more than 20 per cent holding in eight public sector banks, while in four banks private shareholding constituted more than 10 per cent.

Table 4: Bank Group-wise Distribution of Functioning Offices of Commercial Banks (in per cent)

<i>Year</i>	<i>PSBs</i>	<i>Private Banks</i>	<i>Foreign Banks</i>	<i>Year</i>	<i>PSBs</i>	<i>Private Banks</i>	<i>Foreign Banks</i>
1989	90.35	9.34	0.31	2010	85.12	14.45	0.43
2000	89.33	10.23	0.45	2011	84.14	15.44	0.41
2001	89.40	10.13	0.47	2012	83.25	16.37	0.38
2002	89.05	10.48	0.47	2013	82.29	17.35	0.36
2003	89.20	10.40	0.39	2014	81.68	18.01	0.31
2004	88.72	10.87	0.41	2015	81.22	18.49	0.3
2005	87.99	11.58	0.43	2016	79.8	19.92	0.28
2006	87.59	11.94	0.46	2017	79.01	20.74	0.25
2007	87.09	12.44	0.47	2018	76.32	23.44	0.20
2008	86.43	13.13	0.45	2019	73.60	26.15	0.21
2009	85.77	13.78	0.45				

Source: Calculation based on RBI data.

Table 5: Bank Group-wise Asset Share of Indian Scheduled Commercial Banks (in per cent)

Year	PSBs	Private Banks	Foreign Banks	Year	PSBs	Private Banks	Foreign Banks
1980	91.1	4.98	3.91	2000	80.24	12.3	7.46
1981	91.44	4.89	3.67	2001	79.52	12.62	7.86
1982	91.41	4.84	3.75	2002	75.27	17.43	7.3
1983	91.48	4.89	3.63	2003	75.75	17.39	6.86
1984	91.26	4.86	3.88	2004	74.5	18.6	6.9
1985	91.52	4.36	4.11	2005	75.31	18.17	6.52
1986	91.17	4.27	4.56	2006	72.32	20.52	7.16
1987	91.83	3.71	4.45	2007	70.45	21.52	8.03
1988	91.91	3.3	4.79	2008	69.85	21.73	8.42
1990	90.95	3.45	5.6	2009	71.88	19.62	8.5
1991	90.05	3.64	6.31	2010	73.68	19.09	7.22
1992	88.44	4.18	7.39	2011	73.7	19.46	6.84
1993	87.17	4.62	8.21	2012	72.75	20.22	7.03
1994	87.08	5.24	7.68	2013	72.60	20.75	6.65
1995	85.22	7.44	7.35	2014	72.60	20.58	6.82
1996	84.42	7.62	7.96	2015	72.10	21.63	6.27
1997	82.69	9	8.31	2016	69.92	23.79	6.29
1998	81.61	10.19	8.21	2017	68.82	25.46	5.72
1999	81.04	10.9	8.06	2018	65.79	28.18	5.69

Source: Calculation based on RBI data.

Table 6: Ownership Structure: Government and RBI Shareholding in PSBs, 2017

Shareholding (%)	Number of Banks	Name of the Bank
More than 90 & up to 100	1	Bharatiya Mahila Bank Ltd. (100%)
More than 80 & up to 90	4	United Bank of India (85.2%); Indian Bank (82.1%); Bank of Maharashtra (81.6%); Central Bank of India (81.3%)
More than 70 & up to 80	8	Indian Overseas Bank (79.6%); Punjab and Sind Bank (79.6%); UCO Bank (76.7%); IDBI Bank Ltd. (74%); Bank of India (73.7%); Syndicate Bank (72.9%); Corporation Bank (70.8%); Vijay Bank (70.3%)
More than 60 & up to 70	7	Dena Bank (68.6%); Canara Bank (66.3%); Allahabad Bank (65.9%); Punjab National Bank (65%); Union Bank of India (63.4%); Andhra Bank (61.3%); State Bank of India (61.2%)
More than 50 & up to 60	2	Bank of Baroda (59.2%); Oriental Bank of Commerce (58.4%)

Source: RBI: Report on Trend and Progress of Banking in India, 2016-17.

5.3 Declining Rural Bank Branches

In the post reform period, the share of rural bank branches has declined substantially from about 58.5 per cent in 1991 to about 35.6 per cent in 2018. On the other side, the share of semi urban, urban and metropolitan areas has increased during the same time period (Table 7). With growing presence of Private Banks and entry of foreign banks in the post liberalisation period, there has been increase in the number of bank branches or offices in the Urban and Metropolitan areas as it has been their preferred area of operation. With changed framework of banking and its operation, where profitability is supposedly the primary objective; banks prefer to locate considering their business assessment. This however is likely to adversely impact the less developed regions in terms of access to bank credit for starting any new economic activity.

Table 7: Number of Bank Branches in India

<i>Year</i>	<i>Rural</i>	<i>Semi-Urban</i>	<i>Urban</i>	<i>Metropolitan</i>	<i>Total</i>
1971	35.63	33.63	16.22	14.52	100
1980	46.59	25.05	15.97	12.38	100
1981	49.45	23.72	15.27	11.56	100
1982	52.07	22.49	14.53	10.91	100
1983	53.91	21.58	14.06	10.44	100
1984	55.99	20.57	13.49	9.95	100
1985	58.74	19.10	12.80	9.35	100
1986	55.74	19.86	13.53	10.87	100
1987	56.09	19.75	13.40	10.76	100
1988	56.15	20.09	13.21	10.54	100
1989	57.22	19.35	13.04	10.39	100
1990	58.23	18.95	13.46	9.36	100
1991	58.46	18.84	13.36	9.34	100
1992	58.23	18.75	13.67	9.35	100
1993	57.85	18.74	14.00	9.41	100
1994	57.16	19.24	14.15	9.45	100
1995	52.92	21.39	14.22	11.47	100
1996	52.35	21.52	14.42	11.72	100
1997	51.79	21.66	14.70	11.85	100
1998	51.20	21.77	14.94	12.09	100
1999	50.60	21.82	15.24	12.34	100
2000	50.04	22.03	15.37	12.56	100
2001	49.40	22.14	15.61	12.84	100
2002	48.92	22.28	15.83	12.97	100
2003	48.55	22.33	16.07	13.05	100
2004	47.81	22.46	16.37	13.36	100

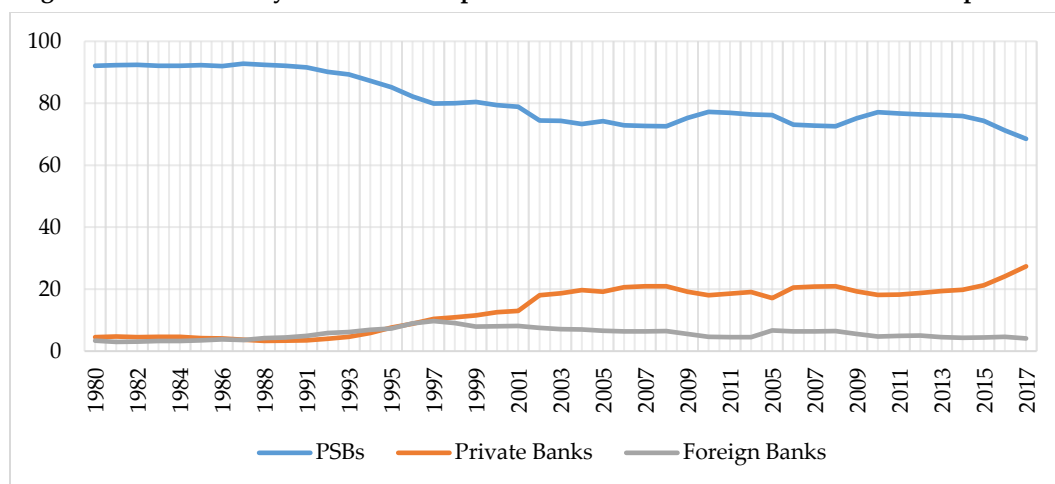
Year	Rural	Semi-Urban	Urban	Metropolitan	Total
2005	46.93	22.53	16.82	13.71	100
2006	42.42	23.25	17.48	16.85	100
2007	41.20	23.57	18.07	17.16	100
2008	39.72	24.02	18.73	17.53	100
2009	38.57	24.49	19.08	17.87	100
2010	37.39	25.02	19.52	18.07	100
2011	36.64	25.99	19.33	18.04	100
2012	36.44	26.76	19.08	17.72	100
2013	36.78	27.36	18.65	17.21	100
2014	37.86	27.30	18.23	16.60	100
2015	38.01	27.26	18.24	16.49	100
2016	37.87	27.31	18.27	16.55	100
2017	35.48	27.81	17.76	18.95	100
2018	35.58	27.83	17.77	18.82	100

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

5.4 Changing Structure of Bank Lending

The decline of the public sector banking and credit planning has resulted in decline in credit share of the PSBs, as well as restructuring of the composition of bank lending in India. The distribution of disbursement of credit among different bank groups shows that the credit share of PSBs has declined from about more than 90 per cent in 1980 to 68.5 per cent in 2017. On the other side, the Private Banks have gained substantially during the same period (Figure 2). It increased from 2 to 27.4 percent between 1980 and 2017.

Figure 2: Credit Share by Bank Ownership of Scheduled Commercial Banks in India (in per cent)



Source: Calculation based on RBI data.

The increase in private bank lending and reduction in the share of PSBs in total bank lending has resulted in restructuring in the composition of the bank lending both at broad sectoral and sub sector level. The biggest loser in terms of distribution of bank credit has been the industrial sector (Table 8). The credit share of industrial sector (large, medium and small) in total bank credit has declined substantially from 57 per cent in 1980 to 33.4 per cent in 2019. The decline was much faster during the later years of liberalisation (2000s). Credit to agriculture sector too declined, however there has been significant increase in bank lending in other sector that includes services sector and personal loans.

Recent data shows that bank lending to Services sector and personal loans constitute more than 50 per cent of the total bank lending in India (Table 9). Lending to these sectors is following an upward trend. Data also shows that with in the industrial sector, there has been substantial decline in lending to the medium segment industries. While lending to all segments has declined, however the decline is fast in case of the medium industries. Lending to medium industries as percentage of total bank credit decline from 5 per cent in 2008 to 2.12 per cent in 2019.

Table 8: Bank Credit to Broad Sectors (in per cent)

<i>Sector</i>	<i>Agriculture</i>	<i>All Industry (large, medium & small)</i>	<i>Other sectors</i>
1980	14.46	56.98	28.56
1981	15.55	57.23	27.22
1982	17.07	55.69	27.24
1983	16.73	56.34	26.93
1984	16.88	55.13	27.99
1985	18.11	53.32	28.56
1986	18.23	52.82	28.95
1987	18.39	53.01	28.59
1988	17.64	52.85	29.51
1989	16.42	53.34	30.24
1990	16.42	53.45	30.13
1991	14.76	54.35	30.90
1992	14.96	53.77	31.27
1993	14.22	56.03	29.75
1994	14.53	55.14	30.33
1995	12.98	55.39	31.63
1996	12.18	56.26	31.56
1997	12.51	55.11	32.38
1998	12.12	55.96	31.93
1999	12.19	55.04	32.77
2000	11.83	53.35	34.82

<i>Sector</i>	<i>Agriculture</i>	<i>All Industry (large, medium & small)</i>	<i>Other sectors</i>
2001	12.10	50.99	36.91
2002	12.59	47.54	39.87
2003	11.86	47.67	40.48
2004	12.43	42.98	44.59
2005	12.53	42.70	44.77
2006	12.38	39.18	48.43
2007	12.79	38.71	48.50
2008	12.49	38.93	48.58
2009	13.02	40.53	46.46
2010	13.68	43.15	43.18
2011	13.11	43.75	43.14
2012	12.74	45.16	42.10
2013	12.11	45.80	42.09
2014	12.04	45.51	42.45
2015	12.76	44.27	42.97
2016	13.49	41.71	44.80
2017	13.99	37.77	48.24
2018	13.40	35.11	51.49
2019	12.87	33.43	53.70

Source: Calculation based on RBI data.

Table 9: Sectoral Deployment of Bank Credit (in per cent)

<i>Year</i>	<i>Agriculture & Allied Activities</i>	<i>Industry (Micro & Small, Medium and Large)</i>	<i>Large</i>	<i>Medium</i>	<i>Micro & Small</i>	<i>Services</i>	<i>Personal Loans</i>
2008	12.49	38.93	27.89	5.03	6.02	24.91	23.67
2009	13.02	40.53	29.33	4.69	6.50	24.84	21.62
2010	13.68	43.15	31.99	4.36	6.79	23.91	19.27
2011	13.11	43.75	34.84	3.18	5.73	24.38	18.76
2012	12.74	45.16	36.74	2.91	5.52	23.85	18.25
2013	12.11	45.80	37.40	2.56	5.84	23.65	18.43
2014	12.04	45.51	36.97	2.24	6.30	24.19	18.26
2015	12.76	44.27	35.87	2.07	6.33	23.54	19.43
2016	13.49	41.71	34.28	1.75	5.67	23.54	21.27
2017	13.99	37.77	31.08	1.48	5.21	25.40	22.84
2018	13.40	35.11	28.91	1.35	4.85	26.67	24.82
2019	12.87	33.43	27.84	1.23	4.35	27.98	25.72

Source: Calculation based on RBI data.

5.5 Greater Emphasis on Market Mechanism

While on the one hand the presence of private sector in the financial sector has increased substantially, on the other side the financial markets have started playing a much greater role in the financial system. Greater emphasis was given on introducing policy measures that will facilitate key markets in the financial system, namely the money market and the capital market. Emphasis was given to develop both the equity and debt market within the capital market. The push towards development of capital market as provider of finance to the industrial sector in India resulted in increased capital market activities.

5.6 Greater Role of Global Finance

Financial liberalisation has facilitated greater role for global finance in India. During the later years of financial liberalisation (2000s), there has been significant flow of financial resources into India, both in the form of foreign investment and borrowings. While the benefit and the volume of real inflow of foreign investment both in the form of Foreign Direct Investment (FDI) and Foreign Portfolio Investment (FPI) is subject to debate, there has been substantial inflow of gross foreign investment into India (Table 10). The flow of foreign investment is substantially high during the post crisis period, largely due to portfolio investment. Similarly, flow of foreign borrowings into India has increased substantially in the form of external Commercial Borrowings (ECBs) and short term credit.

Table 10: Flow of Financial Resources to India (US\$ million)

Year	Foreign Investment			Foreign Borrowings			
	Foreign Investment	FDI	FPI	Loans	External Assistance	ECBs	Short Term Credit
1990-91	113	107	6	9432	3397	4282	1753
1991-92	151	147	4	9419	4367	3152	1900
1992-93	589	345	244	8671	3302	1179	4190
1993-94	4609	651	3958	9970	3475	3015	3480
1994-95	5763	1351	4402	10930	3193	4249	3488
1995-96	5644	2174	3456	11331	2933	4261	4137
1996-97	7825	2864	4953	17720	3056	7579	7085
1997-98	9266	3596	5573	17301	2885	7382	7034
1998-99	5892	2518	3225	14771	2726	7231	4814
1999-00	12240	2170	9951	13060	3074	3207	6779
2000-01	17720	4101	13619	23806	2941	9621	11244
2001-02	15488	6229	9259	11601	3352	2687	5562
2002-03	14001	5168	8833	11568	2878	3514	5176

Year	Foreign Investment			Foreign Borrowings			
	Foreign Investment	FDI	FPI	Loans	External Assistance	ECBs	Short Term Credit
2003-04	32682	4464	28218	19667	3350	5228	11089
2004-05	46934	6087	40847	30287	3809	9084	17394
2005-06	77298	9178	68120	39479	3631	14343	21505
2006-07	133210	23590	109620	54642	3767	20883	29992
2007-08	271121	37322	233800	82192	4240	30293	47658
2008-09	171660.2	43005.9	128654	62216.87	5230.2	15221.9	41764.8
2009-10	198652.7	38484.1	160169	74163.46	5896.95	15002.7	53263.9
2010-11	292561.2	38609	253952	108780.7	7881.86	24123.1	76775.7
2011-12	234617.7	49007.4	185610	140990.5	5645.9	32590.3	102754
2012-13	215026.9	39786.2	175241	155085.3	4734.68	27616.5	122734
2013-14	246766	43582.3	203184	134836.2	4659.19	30059.8	100117
2014-15	308556.5	51795.7	256761	123354.9	5779.67	27846.5	89728.7
2015-16	276433	59878.2	216555	120322.9	6123.3	24156.7	90042.9
2016-17	310522.4	70784.3	239738	120532.1	6494.79	22584.5	91452.9
2017-18	359545.6	64461.4	295084	147111	7718.01	38879.1	100514

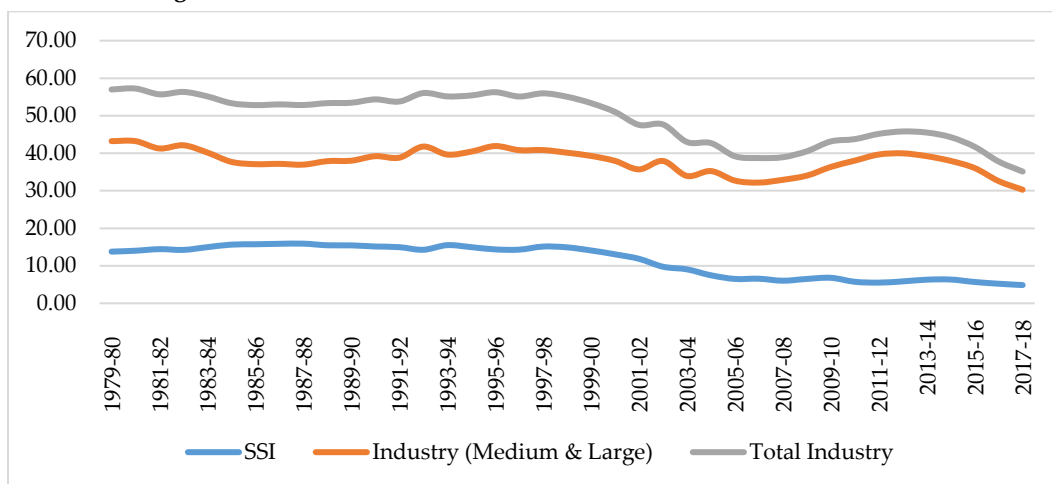
Source: RBI: Handbook of Statistics on Indian Economy.

6. Industrial Finance after Financial Liberalisation: Emerging Features

The access to and availability of adequate industrial credit or financial resources is critical for industrial development. This section elaborates on the emerging issues concerning industrial finance with critical emphasis on the aspects of access and availability. It is to be seen to what extent financial liberalisation has helped in improving the access and availability of credit or finance.

6.1 Declining Share of Industrial Credit (Bank Credit)

The declining share of bank credit to the industrial sector is one of the key emerging features or outcomes of the liberalisation exercise. Contrary to the expectation, the share of industrial sector in total bank non-food credit declined during the later years of liberalisation (Figure 3). The bank credit to the industrial sector (all industry) declined from about 57 per cent in 1980 to about 35 per cent in 2018. The decline was faster between 1997 and 2008. The decline is much faster for the Small Sector Industry (SSI) relative to the large sector.

Figure 3: Bank Credit to Industrial Sector (Per Cent to Non-Food Credit)

Source: RBI: Handbook of Statistics on Indian Economy.

6.2 Insufficient Fund Mobilisation by Stock Market

The stock market is an important source of finance for the industrial sector. Companies raise resources by issuing IPOs and debentures. Data suggests that mobilisation of funds through the stock market is not adequate from the perspective of industrial financing. After an initial surge, the equity market has not performed as per the expectation (Table 11). The new issues in terms of number was relatively high between 1993 and 1997. The IPOs declined substantially after initial years of liberalisation. Subsequent events of Asian financial crisis and Global financial crisis did adversely impact the performance of the stock market. There volume of new issues in terms of value suggest that equity market cannot be seen as a stable source of funds for Industry in India.

The story is quite similar for the debenture market as well (Figure 4). After initial years of surge, during the first decade of 2000s, the debenture market did not do well. Another dimension of the capital that was raised from the primary market is that most of it went to the financial companies (Figure 5). The financial companies have a dominant share in the capital raised from the primary market.

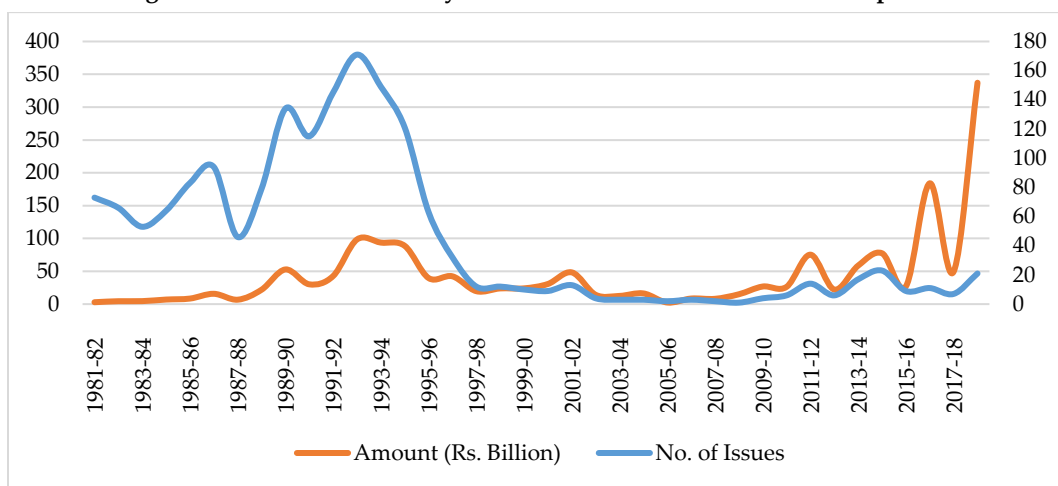
Table 11: Capital Issued by Non-government Public Limited Companies

Year	Total		New	
	No. of Issues	Volume (Rs. Billion)	No. of Issues	Volume (Rs. Billion)
1970	113	0.7	51	0.3
1980	237	1.6	141	0.6
1990-91	364	43.1	86	7.4
1991-92	514	61.9	94	9.4
1992-93	1040	198	188	33.1
1993-94	1133	193.3	244	55.8

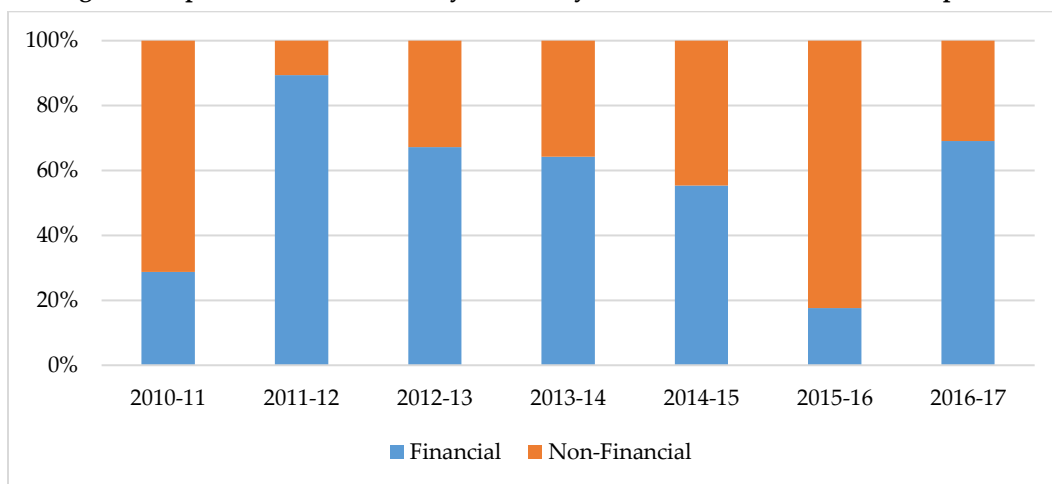
Year	Total		New	
	No. of Issues	Volume (Rs. Billion)	No. of Issues	Volume (Rs. Billion)
1994-95	1678	264.2	368	64.6
1995-96	1663	160	577	31.2
1996-97	838	104.1	367	22.7
1997-98	102	31.4	27	6.8
1998-99	48	50.1	7	0.6
1999-00	79	51.5	10	2.2
2000-01	139	58.2	111	23.1
2001-02	19	56.9	4	0.9
2002-03	9	18.8	3	2.1
2003-04	38	37.2	9	13.8
2004-05	54	130.8	22	47.8
2005-06	131	211.5	77	102.6
2006-07	117	306	72	256.6
2007-08	115	636.4	80	370.9
2008-09	46	161.7	21	20.3
2009-10	71	279.8	36	144.8
2010-11	76	274.6	49	161.5
2011-12	63	156.8	33	57.8
2012-13	54	161	32	49.4
2013-14	70	116.8	38	12.4
2014-15	86	170.6	46	30.4
2015-16	96	267.2	73	142.6
2016-17	237	845.3	104	280.6
2017-18	221	729.5	192	465.9

Source: Calculated from RBI data.

Figure 4: Debentures Issued by Non-Government Public Limited Companies



Source: RBI: Handbook of Statistics on Indian Economy.

Figure 5: Capital Raised from Primary Market: By Financial Vs Non-Financial Companies

Source: SEBI

6.3 Weak Domestic Bond Market

In a market driven financial system, the Corporate Bond market plays a critical role by providing long term finance to industry. In India, it was expected that market reform policies will lead to the creation of a vibrant domestic bond market. However, data suggests that the size of the corporate debt market in India is quite small (Table 12). Even the size of India's corporate debt market is smaller than several other developing economies like Brazil and China. And, it is too small in comparison to the markets of the advanced industrialised countries with dominance of banks like Germany and Japan. Recent data suggest that the size of India's corporate bond market is as small as US\$ 26.2 billion, vis-à-vis Brazil US\$214.8 billion and China US\$ 3024 billion.

Table 12: Status of Bond Market (Amount Outstanding) as on December 2018 (US\$ Billion)

Country	Government	Financial Institutions	Corporate issues	Total
Brazil	1469.3	564.1	214.8	2248.3
Canada	1278.2	1352.3	449.4	3079.9
China	4819.3	4853.4	3024	12696.7
France	2263	1607.9	676.2	4547.1
Germany	1812.9	1542.3	192.2	3547.4
India	857.6	19.2	26.2	905.7
Japan	9199.5	2608.8	688.2	12496.6
South Korea	626.1	672.1	589	1887.2
UK	2634.7	2597.5	510.8	5747.8
US	18680.4	16120.7	6283.9	41301.1

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

6.4 Unequal Access: Distribution of Investible Funds

Bank credit and Capital market are seen as the major sources of finance for the industrial sector in India. While availability of finance is a critical for industrial development, access is also equally important from the perspective of industrialisation. Data suggest, both forms of finance is not equally accessible to firms across region and sectors, also in terms of location.

Unequal distribution of credit and investible funds across different sectors and regions, and location is the dominant feature of the financial system in the post liberalisation period. The Metropolitan area is the preferred destination for credit flow, followed by Urban and Semi Urban areas (Table 13). The flow of credit to metropolitan areas increased significantly from about 37 per cent in 1990 to about 62 per cent in 2017. Other locations – urban, semi urban and rural have witnessed reduced credit share over years, especially during the post liberalisation period. It is abundantly clear that increasingly credit has been consolidated around the metropolitan region, thereby suggesting greater economic activity around it. This phenomenon suggest that lesser credit is available for the rural and semi rural areas, thereby squeezing the economic potentials of the region. From industrial finance perspective, while the above pattern of credit does look promising for firms and new industrial activities located in metropolitan areas, however, it gives a discouraging picture to the firms located or potential firms to be located in the rural and semi urban areas. It also deprives entrepreneurs, small industries and handicraft industries from having access to bank credit either for their expansion or a new start-up.

Table 13: Population Group Wise Distribution of Bank Credit in India (in per cent)

<i>Year</i>	<i>Rural</i>	<i>Semi-urban</i>	<i>Urban</i>	<i>Metropolitan</i>
1980	9.63	16.41	22.31	51.66
1981	11.61	17.48	22.20	48.71
1982	12.68	17.42	21.90	47.99
1983	12.19	17.50	22.20	48.11
1984	14.44	16.27	23.44	45.85
1985	13.96	18.12	23.00	44.92
1986	14.63	17.69	22.35	45.33
1987	15.11	17.70	22.77	44.42
1988	15.83	18.41	22.53	43.23
1989	16.14	17.89	22.65	43.32
1990	24.41	16.87	21.50	37.22
1991	21.45	16.75	22.04	39.77
1992	20.13	16.71	22.04	41.12
1993	18.70	15.61	20.69	45.00
1994	17.55	15.06	20.57	46.83
1995	15.90	15.08	17.67	51.36
1996	15.16	14.48	17.43	52.92
1997	14.16	14.28	18.21	53.35

<i>Year</i>	<i>Rural</i>	<i>Semi-urban</i>	<i>Urban</i>	<i>Metropolitan</i>
1998	14.59	14.10	18.13	53.19
1999	14.10	14.33	18.49	53.08
2000	12.92	14.08	17.30	55.70
2001	12.79	13.21	17.70	56.30
2002	13.37	13.74	18.87	54.02
2003	14.09	13.78	18.90	53.24
2004	12.49	13.05	19.31	55.16
2005	13.92	12.39	18.42	55.26
2006	13.17	11.55	18.26	57.02
2007	12.11	10.93	17.99	58.98
2008	13.37	10.59	17.82	58.22
2009	10.87	10.92	17.51	60.70
2010	11.51	11.00	17.75	59.74
2011	9.63	11.09	19.13	60.15
2012	9.21	11.00	17.80	62.00
2013	9.48	12.23	17.88	60.41
2014	9.02	11.43	16.90	62.66
2015	9.53	11.58	17.14	61.75
2016	9.78	12.45	17.24	60.54
2017	9.78	12.32	16.26	61.64

Source: Calculated from RBI data.

Recent data suggest that in 2018, the rural areas received only 1.9 per cent of the total bank credit disbursed to the industrial sector in India (Table 14). Other areas like the Semi Urban and Urban areas have also recorded reduction in industrial credit share. On the other side, industrial credit has consolidated in favour of the metropolitan areas with about 79 per cent share in industrial credit. Data suggest that there is increasing consolidation in favour of metropolitan areas and on the other side, parallel marginalisation of the rural, semi urban areas.

The regional distribution of bank credit suggest that credit is concentrated in three regions – Western, Southern and the Northern Region (Table 15). These three regions received more than 80 per cent of the bank credit in 2018. Regions which received lesser credit included the North-Eastern region, Eastern and Central regions.

Along with unequal distribution of industrial credit across regions and locations, another emerging feature of the liberalisation outcome is the consolidation of credit in favour of large loans (Table 16). Recent data shows that about 42 per cent of the credit is large loans with credit size Rs. 25 crore and above. While in one hand, credit disbursed to small size loans has declined, except for Rs. 5 -10 lakh and Rs. Rs. 10-25 lakh loans; on the other side, large size loans have increased. It is also observed that some of the borrowers are moving up the ladder by larger credit size, however, data does suggest there is a consolidation in favour of big-sized loans. It suggests that small firms may find it increasingly difficult to access industrial credit.

As we have seen, it is not only distribution of bank credit which has become more unequal across regions and locations, capital raised from stock market too is found to be distributed unequally across sectors. The capital raised from the primary market is consolidated in favour of the banking and financial institutions (Table 17). This sector constituted more than 55 per cent of the capital raised from primary market in 2017, thereby suggesting lesser volume of capital is available to the productive sector.

Table 14: Population Group Wise Bank Credit to Industrial Sector in India (in per cent)

Population Group	2011	2012	2013	2014	2015	2016	2017	2018
Rural	3.9	2.6	2.5	1.6	1.8	1.9	1.9	1.9
Semi Urban	6.4	5.8	6.8	4.9	5.1	5.8	5.2	5.2
Urban	18.9	16.9	16.5	14.8	14.7	14.0	13.6	13.6
Metropolitan	70.8	74.7	74.1	78.7	78.4	78.3	79.3	79.3
Total	100	100	100	100	100	100	100	100

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

Table 15: Region Wise Distribution of Bank Credit in India (in per cent)

Region	2011	2012	2013	2014	2015	2016	2017	2018
Northern Region	23.42	23.39	23.28	23.17	23.94	22.91	22.76	22.82
North-eastern Region	0.77	0.77	0.76	0.75	0.8	0.87	0.96	1.02
Eastern Region	7.78	7.72	7.63	7.52	7.83	7.67	7.70	7.61
Central Region	7.04	7.1	7.39	7.67	8.49	8.66	8.80	8.94
Western Region	34.06	33.92	33.75	34.15	31.57	32.43	32.05	30.85
Southern Region	26.92	27.11	27.19	26.73	27.37	27.46	27.73	28.76
All India	100	100	100	100	100	100	100	100

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

Table 16: Distribution of Credit as Per Size (Per Cent of Total Credit)

Credit Size	1981	1995	2002	2018
Rs.25,000 and Less	17.8	16.2	5.87	0.50
Above Rs.25,000 and up to Rs.2 Lakh	11 [^]	11.4	13.28	7.83
Above Rs.2 Lakh and up to Rs.5 Lakh	11.9&	5.2	6.66	7.97
Above Rs.5 Lakh and up to Rs.10 Lakh	5.1	3.3	3.47	6.60
Above Rs.10 Lakh and up to Rs.25 Lakh	7.8	4.9	3.77	8.32
Above Rs.25 Lakh and up to Rs.50 Lakh	7.2	5	3.2	6.00
Above Rs.50 Lakh and upto Rs.1 Crore	7.2	6.3	3.54	4.00
Above Rs.1 Crore and upto Rs.4 Crore	9.9	15.2	9.46	6.55
Above Rs.4 Crore and upto Rs.6 Crore	3.8	5.6	3.95	2.28
Above Rs.6 Crore and upto Rs.10 Crore	4.1	6.2	5.67	2.90
Above Rs.10 Crore and upto Rs.25 Crore	14 [#]	20.9 [#]	9.44	5.46
Above Rs.25 Crore			31.69	41.60

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.

Table 17: Industry-wise Classification of Capital Raised from the Primary Market (Rs. Crore)

<i>Industry</i>	<i>2010-11</i>	<i>2011-12</i>	<i>2012-13</i>	<i>2013-14</i>	<i>2014-15</i>	<i>2015-16</i>	<i>2016-17</i>
Banking/FIs	17248.15	35610.71	8272.561	29700	2873	0	35561.29
Cement & Construction	2840.75	187	8.56	731	2034.63	1152.11	964.93
Chemical	246.77	0	9.35	0	7.84	71.98	503.85
Electronics	0	120.65	0	0	32.71	0	510.11
Engineering	1393.73	217.41	74.0066	591	524.52	373.22	901.56
Entertainment	715.16	89.28	11.67	602	883.54	20.9	491.05
Finance	2209.56	7708.25	10738.88	6058	7756	10269.16	1249
Food Processing	1245.38	0	18.77	0	24.81	400	1937.63
Healthcare	292.49	65.18	210.24	0	0	1898.6	1355.75
Information Technology	170	137.6	4.08	19	136.66	911.98	1266.79
Paper & Pulp	0	306.17	0	28	0	0	0
Plastic	0	11.36	0	18	7.7	103.79	149.99
Power	9468.6	0	0	11702	0	1406.44	3.58
Printing	51.5	71	0	0	0	3.04	0
Textile	207.17	0	582.032	14	388.3	90.65	941.73
Airlines	0	0	0	0	0	0	3059.19
Automobile	0	0	0	0	0	0	1161.73
Consumer Services	0	0	0	0	0	0	406
Electrical Equipment/ Production	0	0	0	0	0	0	27.77
Hotels	0	0	0	0	0	0	0
Roads & Highways	0	0	0	0	0	0	659.15
Telecommunication	0	0	0	0	0	0	11.22
Oil & Natural Gas	0	0	0	0	0	0	1038.88
Insurance	0	0	0	0	0	0	6056.79
Others	31519.26	3943.38	8351.89	6184	4357.25	41463.92	3809.01
Total	67608.52	48467.99	28282.04	55647	19201.54	58165.79	62067

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

7. Long Term Financial Needs and Institutional Response: Possible Role of DFIs

Financial liberalisation was introduced with the objective of moving away from a state controlled financial provisioning to a market driven system which was argued to be efficient way of resource mobilisation and allocation to meet the financial needs of the industrial sector in India. It would remove financial constraints on Indian industry and therefore, will advance industrial development in India. In the post reform framework of financing industrial sector, it was envisaged that capital market will play a greater role as provider of finance to the industrial sector. The Corporate Bond market should address

long term financial needs of the industrial sector, and the commercial banks will provide working capital. However, in the absence of a robust corporate bond market, the industrial sector continued to rely on the Commercial banks, largely the Public Sector Banks as providers of long term finance. The current NPA problem in Indian banks to a large extent can be attributed to this form of lending. The commercial banks largely rely on short term deposits as source of lending and did lend long term. The pressure on commercial banks to lend long term big industrial projects arises due to the fact that the role of specialised term lending institutions have been reduced and the absence of a robust corporate bond market in India. This opens up space for potential future role for the specialised terms lending institutions in India.

The reliance of both Public and private limited companies on commercial banks as a source of long term capital is evident (Table 18 & 19). However, the reliance of the private limited companies on banks is higher than the public limited companies. In 2014-15, the private limited companies borrowed 10.3 per cent of their total funds from the banks, which is about 43 per cent of the total long term borrowing. Similarly, in the same year, the public limited companies borrowed 9.3 per cent of their funds from the banks which is about 35 per cent of their long term borrowing. However, following Asset Quality Review (AQR) exercise of the RBI, banks avoided lending long term high value industrial and infrastructure projects.

Table 18: Composition of Sources of Funds of NGNF Public Limited Companies (in per cent)

<i>Sources of Fund</i>	<i>2014-15[#]</i>	<i>2015-16[#]</i>	<i>2016-17*</i>	<i>2017-18*</i>
Internal Sources	42.1	48.1	34.3	39.3
External Sources	57.9	51.9	65.7	60.7
1. Share capital and premium	7.8	5.9	34.0	7.5
2. Long-term borrowings	26.9	12.1	2.1	-4.4
a) Bonds/Debentures	10.1	4.5	4.6	5.3
b) Term loans	9.3	-2.9	-7.0	-5.4
of which, From banks	9.3	-2.9	-4.5	-2.2
c) Deferred payment liabilities	-1.3	9.3	3.6	-0.4
d) Deposits	-0.4	0.6	0.1	0.1
e) Loan and advances from related parties	2.8	0.3	-0.1	-3.8
f) Long-term maturities of finance lease obligation	-0.2	0.0	-0.7	0.1
g) From others	6.4	0.4	1.5	-0.3
3. Other long-term liabilities	1.2	1.7	-2.0	0.9
4. Short-term borrowings	-2.1	4.4	7.7	10.0
Total	100	100	100	100

[#] 19602 & ^{*}16130 Public Limited Companies

Source: Calculation based on RBI data.

Table 19: Composition of Sources of Funds of Private Limited Companies (in per cent)

<i>Sources of Fund</i>	<i>2014-15[#]</i>	<i>2015-16[#]</i>	<i>2016-17[*]</i>	<i>2017-18[*]</i>
Internal Sources	2.8	50.9	34.6	46.1
External Sources	97.2	49.1	65.4	53.9
1. Share capital and premium	20.9	11.4	5.0	3.5
2. Long-term borrowings	24.0	16.1	20.1	17.4
a) Bonds/Debentures	7.5	3.9	-6.7	3.3
b) Term loans	10.3	5.1	8.7	-6.9
of which, From banks	10.3	5.1	9.1	-6.7
c) Deferred payment liabilities	0.3	-0.1	-0.9	0.1
d) Deposits	-0.5	0.3	1.3	0.1
e) Loan and advances from related parties	-0.8	1.6	3.2	13.9
f) Long-term maturities of finance lease obligation	0.1	0.1	-0.1	-0.4
g) From others	7.1	5.2	14.6	7.3
3. Other long-term liabilities	6.9	0.9	1.6	-0.3
4. Short-term borrowings	8.3	7.7	8.4	12.7
Total	100	100	100	100

292308 & * 245333 Private Limited Companies

Source: Calculation based on RBI data.

7.1 Provider of Long Term Finance

Given that the banks are burdened with the responsibility of lending long term and there has been large scale loan failure which has adversely impacted the performance of banks, especially the Public Sector Banks; time has come to rethink and address the issue of long term finance. With a relatively small and weak corporate bond market, there is a need for specialised financial institutions to address the issue of long term finance. Availability of adequate long term lending is critical for industrial development, as it one hand helps in the establishment of a new firm, on the other side, it also helps in creating industrial infrastructure which is critical for the growth of industry. At a macroeconomic level, by the above acts it boosts investment capabilities. The DFIs can potentially play a critical role of advancing R & D activities in the economy by funding high risk R & D intensive and innovative projects (Guadagno 2016). Given that private investment is not forthcoming in financing large industrial and R & D intensive projects because of its risk averse nature; the specialised institutions can fill this gap and help in industrial development.

7.2 Prudent Assessment of Risk

Given the nature of expertise available within the specialised financial institutions, it will be much easier for these institutions to assess the risks associated with the project lending. One of key reason of the current NPA problem is the inability of the commercial banks to prudently assess the associated risk in a given project. Often to evaluate large industrial

and infrastructure projects require certain technical expertise, which the commercial bank do not possess as they are supposed to disburse working capital. In the absence of a proper assessment of project, the lenders do not figure out the inherent risk associated with a project, thereby unable to assess the viability of a project. Usually the DFIs are technically equipped to assess such projects as their expertise lies in term lending.

7.3 Promotion of Entrepreneurship

The DFIs play a critical role by promoting entrepreneurship. It is the specialised institutions, given their nature of mandate and expertise can possibly support an infant firm till it attains reasonable productive capacity. Typically, a firm requires capital at its early stages to buy and set up production facility and it would continue to seek support it starts producing. During this time, the entrepreneur requires sufficient capital which is affordable. The start-ups can only survive in the market if they have access to affordable finance. Not only the DFIs provide the needed finance, but also provide technical support to their clients. This is how the specialised institutions create entrepreneurship.

8. Summary & Conclusion

The study aims to explore the impact of financial liberalization on industrial development by analysing the relationship between the financial structure and industrial structure and what it holds for industrial finance in India. The dynamic interaction between financial and industrial structure has been examined by exploring two key questions with respect to industrial finance in post reform period. These are, first, has financial liberalisation succeeded in removing financial constraints on industrial sector, and second, are DFIs relevant in a liberalised regime from the perspective of industrial financing? The paper found that the institutions and agencies produced by financial liberalisation is not in sync with the financial needs of the industrial sector in India. The structure of the newly emerged financial system following financial liberalization while brought new opportunities in terms of access to finance for few industries (large firms); on other hand reduced the access to finance for several Small and Medium Enterprises (SMEs). The SMEs were highly dependent on the DFIs as one of the key accessible source of finance, which is no longer available to them (currently there are few operational DFIs). While the large firms now could borrow from both internal and external sources with low interest cost, the SMEs are increasingly financially constrained. The cost of capital is still very high for small loans vis-a-vi large loans. In one hand, liberalisation has not succeeded in addressing the issue of availability and access to affordable finance as argued; on the other side, the post reform financial structure tends to benefit the large firms, thereby making the small and medium ones disadvantaged. The seemingly failure of liberalisation in creating a robust corporate debt market also a cause of concern as it was visualised and argued as a substitution for DFIs as a source of long term finance. Given the critical role of term finance for industrial development and absence of a robust corporate bond market almost after

three decades of reforms, there is a greater role of specialised term lending institutions. In the absence of any robust source for long term finance, commercial banks are burdened up with the responsibility of funding some of the large industrial projects. The lack expertise on the part of commercial banks in term lending large industrial infrastructure projects has resulted in high NPA. It is also a fact that commercial banks are supposed to fund only working capital needs of the industrial sector. Therefore, given the dynamic role the DFIs can potentially play in industrial development, there should be a rethink on this. The most important problem that current NPA crisis unfolds and the banks are facing is the lack of technical expertise in assessing the associated risk in any large project. DFIs can play key role in addressing this problem. Globally, the specialised financial institutions have played important role in economic development in general, industrial development in particular. Countries, including India at different stages of their development have relied heavily on these institutions as source of capital. In the past, development or industrial banking had occupied prime position in the industrial policies of several countries. There should be a rethink in our policy towards DFIs as they can play multiple critical role from providers of long term finance to promotion of entrepreneurship.

References

- Bank for International Settlements. (2015). Debt Securities Statistics.
- Bhaduri, S. (2005). Investment, Financial Constraints and Financial Liberalization: Some Stylized Facts from a Developing Economy. India. *Journal of Asian Economics*. 16(4): 704-718.
- Bhattacharjee, S. and D. Chakrabarti .(2013). Financial Liberalisation, Financing Constraint and India's Manufacturing Sector. *Economic and Political Weekly*. 48 (6): 61–67.
- Central Statistical Organisation. (2016). All India Report of Sixth Economic census 2013-14. New Delhi.
- Das, S.K. and I. Drine. (2011). Financial Liberalisation and Banking Sector Efficiency in India: A Fourier Flexible Functional Form and Stochastic Frontier Approach. *International Business and Management*. 2(1): 42–58.
- Das, S.K. (2015). Industrial Finance in the Era of Financial Liberalisation in India: Exploring Some Structural Issues. ISID Working Paper No. 186.
- 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.
- Guadagno, F. (2016). The Role of Industrial Development Banking in Spurring Structural Change. Inclusive and Sustainable Industrial Development Working Paper Series, WP 08/2016. UNIDO, Vienna.
- Hermann, J. (2010). Development Banks in the Financial-liberalisation Era: The Case of BNDES in Brazil. *Capital Review*. 100:189–203.
- Hermes, N. and Lensink, R. (1998). Financial Reform and Informational Problems in Capital Markets: An Empirical Analysis of the Chilean Experience, 1983–1992. *Journal of Development Studies*. 34(3): 27–43.
- Jaramillo, F., Schiantarelli, F. and Weiss, A. (1996). Capital Market Imperfections Before and After Financial Liberalization: An Euler Equation Approach to Panel Data for Ecuadorian Firms. *Journal of Development Economics*. 51(2): 367–386.
- Khanna, S. (1999). Financial Reforms and Industrial Sector in India. *Economic and Political Weekly*. 34(45): 3231–3241.
- Laeven, L. (2003). Does Financial Liberalization Reduce Financing Constraints? *Financial Management*. 32(1): 5-34.
- Lawrence, P. and I. Longjam. (2003). *Financial Liberalisation in India: Measuring Relative Progress*. Keele Economics Research Paper No. 2003/8, Keele University.
- Love, I. (2003). Financial Development and Financing Constraints: International Evidence from the Structural Investment Model. *Review of Financial Studies*. 16(3): 765-791.
- Mathur, K.B.L. (2003). Development Financial Institutions at the Crossroads. *Economic and Political Weekly*. 38(8): 799–806.

- Nayyar, D. (2015). Birth, Life and Death of Development Finance Institutions in India. *Economic and Political Weekly*. 50(33): 51–60.
- Rajan, R. and Zingales, L. (1998). Financial Dependence and Growth. *American Economic Review*. 88(3): 559-586.
- Ray, Parth. (2015). Rise and Fall of Industrial Finance in India. *Economic and Political Weekly*. 50(5): 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. Mumbai.
- 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*. 4:1–28.
- Securities and Exchange Board of India. (2014). Handbook of Statistics on Indian Securities Market. Mumbai.
- Sen, K. and Vaidya, R.R. (1997). *The Process of Financial Liberalisation in India*. Delhi: 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*. (pp. 50-109). New Delhi: Tulika Books.

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