DOI : 10.18843/ijms/v6si1/06
DOI URL :http://dx.doi.org/10.18843/ijms/v6si1/06

An Empirical Study on Industrial Credit Portfolio of Banking Sector in India - During Post Reforms Era

Dr. K. Maddileti,
Assistant Professor,
Sri Krishnadevaraya University,
Anantapuramu, Andhra Pradesh, India.

Dr. B. Arun Kumar,
Director,
Smart Research and Academic Services,
Kurnool, Andhra Pradesh, India.

ABSTRACT

As result of four decades of closed economic policies, India undergone into deep Balance of Payment crisis in 1990. To come out of this crisis India opened its economy by integrating with other world economies. As part of integrating its economy with world economy it liberalized strict regulations, invited private people to play significant role in economy development and permitted global players to participate and enhance domestic efficiency. Along with economic reforms, banking sector was also liberalized, privatized and globalized which led to increased competition in the industry. This led to sanction of credit to industrial sector liberally which means on the basis poor standard credit policy. As result of free bank credit outflow to industrial sector, the industrial sector has grown significantly during 2000-2007, but sub-prime crisis in 2007 strongly hit the demand for Indian business products. Consequently their earnings fallen since ever. This phenomenon increased debt burden on corporate balance sheet ,as result, In 2016 they failed in repayment their dues which increased Non-Performed Assets in Banking sector. The increased stress on banking assets caused increase in allocation of major portion of profits for writing off these NPAs. The impact of heavily loaded corporate balance sheets with debts on the Assets of banks balance sheets called as "Twin Balance Sheet" problem. Therefore, in the present study we examined the banks industrial credit portfolio over twenty five years of post reforms period. The analysis of banks credit flow to industrial sector has done into five phases (each five years) through using growth and percentages. This study found that banks industrial credit portfolio is dominated by six sectors only namely infrastructure metal, textile, chemical, engineering and food processing industries which account three-fourth the total bank credit to industrial sector over study period. Due to allocation of huge funds on few sectors banking sector was exposed to huge default risk which led to corporate debt crisis in 2016. Therefore, we suggested credit risk diversification by expansion of credit to other essential and profitable sectors in the economy.

Keywords: Industrial Credit portfolio, bank loans, industrial borrowings, banks industrial credit portfolio. Bank credit to infrastructure, textile, electronics, pharmaceutical.

INTRODUCTION:

Credit is an engine to the economic growth of the country and smooth functioning of industrial sector. Financial institutions like banks play significant role in providing credit to industrial sector to meet it's short and medium term financial requirements. Before reforms banking sector in India was highly regulated by RBI and central government in granting credit to industrial sector. Consequently, before independence the growth of industrial sector and Indian economy was very slow compared to other nations in the world. As result of defensive credit policy by banking sector Indian economy experienced of low industrialization, low employment and high poverty which led to BOP crisis in 1990. To overcome this crisis Indian government introduced privatization, liberalization and globalization aspects. As part of these reforms industrial credit flow by banking sector was

liberalized without proper guidelines. Consequently, all private, public and foreign banks started granting credit liberally to industrial sectors which are profitable as per their credit preferences. Portfolio refers to group of assets which may be securities or products or financial instruments or services. Here, banks industrial credit portfolio refers group of industries granted credit by banking sector during entire post reforms period i.e twenty five years.
Review of literature: (2017)[1] Buddhi kumar has analysed the credit portfolio of Nepalese banks and revealed that 96 percent of bank credit portfolio is based on collateral which indicates high conservative lending policy which resulted into less than NPAs of the banking sector. (2017)[2] Ozili and Erick have found strong interrelationship between loan loss provisioning of banking sector and accounting, prudential norms, religious, culture, institutional, fiscal and tax aspects. (2017)[3] ECB paper examined the relationship between bank credit allocation policy and productivity growth of industrial sector in Euro grouped countries as comparison between complete and incomplete credit markets. The study revealed that in Italy due to bank constraints on credit allocation by industries on long term investments they could not effectively allocate bank credit than France and Germany (where no constraints on credit allocation) which resulted in slow growth in industrial productivity in the long run. Therefore, the study found the significant relationship between bank credit allocation policy and industrial productivity growth. (2016)[4] Syed and Tahseen have analyzed the credit portfolio management efficiency of banking sector in Pakistan by establishing relationship between bank loan distribution polices and Non Performing Assets. The study found that Islamic, private banks and foreign banks are relatively efficient than public and private banks. This is attributable to the reason that in Islamic, private and foreign banks textile, engineering and individuals account nearly 40 percent of total credit portfolio where as public banks more focused on food industry in credit allocation. On the other hand textile and engineering sectors account for large portion of NPAs in the banking sector.
(2015)[5] Hosung has found that fall in lending ratio during severe market illiquidity period is higher in case of large banks which have high core funding ratio than normal banks, this study is done by analyzing relationship between banks and borrowing firms in Korea. (2015)[6] Santosh found that due to wide consideration of firm size, location, origin and nature of activities by financial institutions financial liberalization in India failed in effective and adequate catering of varied financial requirements of industries. As result industrial sector could not access adequate capital for their development. This result is quite opposite to the general principle that financial liberalization leads to increase in availability and accessibility of finance at lower cost. He also pointed out that in India equity and corporate bond market is not well developed which hamper the availability of long term financial needs of industrial sector, therefore, he suggested increase the role of DFIs and corporate bond market in provision of industrial finance in the country. (2014)[7] Chen group has examined the implication of traditional portfolio theory in Chinese banking sector. Study tested the general principle of diversification portfolio reduce risk and enhance the return. In the study collected panel data of 16 Chinese banks trading stock markets during 2007-2011. The study found that diversified portfolio of bank credit resulted in decrease in both risk and return which is contradictory to general principle of theory. (2004)[8] Mohan has presented wide discussion on the industrial finance aspects in India particularly post independence period. He pointed out that India adopted three dimensional approaches for industrial finance which comprises of Government- Finance Institutions- Financial Markets. After independence due to lack of adequate financial network, government initially played a primary entrepreneur role which is later supplemented by banks and capital markets today. This model is different to "market based" industrial finance of American model and "Bank based" industrial finance of Japanese model which are top two industrial models in world.

NEED/SIGNIFICANCE OF THE STUDY:

After initiation of economic and banking sector reforms in India curtain was raised for competition in granting credit to various sectors in India particularly of for industrial sector. However, as part of competition many banks adopted liberal credit policy. By nature, at that time employees in banking sector were not well professionalized in analysis of profitable industrial projects and in construction of effective credit portfolio for industrial credit. As result they have constructed a narrow industrial credit portfolio (where priority was given to few sectors) instead of wide industrial credit portfolios. Narrow bank industrial credit portfolio is characterized by few dominant sectors, Risk concentration and possibility of adequate monitoring. But, in practice lack proper professionals banks failed in effective monitoring of industrial credit portfolio. Since then result banking sector exposed to huge credit risk or default risk. No research study has done on banks industrial credit portfolio during post reforms. Therefore present study focused on the analysis of banks industrial credit portfolios during twenty five years of post reforms (1994-2018)

OBJECTIVES OF THE STUDY:

- To analyze the overall bank credit portfolio trend of industrial sector during post reforms period
- To analyze the bank credit portfolio of infrastructure sector during post reforms period.
- To analyze the bank credit portfolio of textiles industry during post reforms period.
- To analyze the bank credit portfolio of chemical sector during post reforms period.
- To analyze the bank credit portfolio of metal and engineering sectors during post reforms period.

RESEARCH METHODOLOGY:

Present study is purely based on secondary data collected from RBI annual reports. Present study analyzes the credit portfolio of banking sector for industrial sector in India during 25 years of post reforms period i.e. 1994-2018. In present study growth rates and percentages are used to understand bank credit portfolio during the study period. Within industrial sector bank credit to sub-industries which accounts for significant proportion in total bank credit is also analyzed. For the purpose of analysis total 25 years of study period is analyzed by sub-division total period into five phases, each consists five years. Major sub sectors in the total industry comprises of infrastructure, textile, metal and engineering and chemical sectors which accounts for two third of the total bank industrial credit during entire post reforms period.
Table 01: During 1994-98 post reforms period only four sector accounts for 56 percent of total bank credit portfolio namely engineering (18.67%), Textile (13.41%), chemical (12.43%) and Metal (11.85%). During same period banks allocated 2.56 percent for food processing, 2.49 percent for Beverage, tobacco, leather industry, 2.36 percent for jewelers, and 2.03 percent for petrol and coal products. Similarly, banks allocated 1.98 percent for paper industry, 1.86 percent for construction industry, each 1.50 percent for each cement and rubber industries, on the other less than one percent i.e. 0.68 percent for mining and plastic industries, 0.53 percent for infrastructure and 0.50 percent vehicles and transport industry is allocated by banks during 1994-98. During 1999-03 post reforms period five industries accounts for 56 percent of total bank credit namely metal (12.89%), textile (12.35%), chemical (11.67%), engineering (11.05%) and infrastructure (7.48%). Here, we observed that in banks shifted significant portion of their credit from engineering to infrastructure industry. During the same period banks allocated 4.86 percent to petroleum and coal industries, 3.09 percent for food processing, 2.81 percent for gems and jeweler and 2.01 percent for vehicle and transport industry. Similarly, banks allocated 1.93 % for cement products, 1.72% for beverage and tobacco industry, 1.70 percent for paper industry, 1.23 % to mining industry and 1.04 percent to rubber industry.
During 2004-08 period infrastructure stood as most attractive industry with 21.09 percent in bank credit portfolio, in contrast, a the share of chemical and engineering sectors are substantially fallen to 6.59 percent and 5.40 percent respectively which is half of earlier period. During the same period major portfolio changes observed in total bank credit for other sectors also, such as increase bank credit for food processing industry to 5.56 percent, construction 2.72 %, gems and jewelers 3.35% , transport sector 3.10% and mining 1.74%, in contrast, falling share of petroleum industry 4.71%, cement industry 1.56% and beverage and tobacco industry 1.19%. During 2009-13 post reforms period also infrastructure continued its top share in total bank credit with 31.10 percent followed by 13.28 percent for metal industry. Slightly increase is observed in share of chemical and engineering products during the same period and reached to 6.83 and5.82 percent respectively, in contrast, sharp decrease is found in bank credit for textile i.e. 8.75 percent. During the same period banks reduced their credit to specific sector such as food processing 5.01 percent, petroleum 3.97 percent, gems and jewelers 2.61 percent, transport 2.82 percent, mining 1.51 percent and paper industry 1.35 percent, in contrast, the share of some sectors increased such as construction 2.79 percent, cement sector 1.92 percent, beverage and tobacco 1.91 percent and rubber sector 1.43 percent. During 2013-18 post reforms period infrastructure occupied one third of entire bank credit along with 15.05 percent of credit for metal sector, these two sectors contributes 50 percent of entire bank credit during the study period, On the other, the share of textile, chemicals and engineering declined further to 7.65, 6.18 and 5.72 percent respectively. During the same period slight increase is observed in share of food processing sector (5.79%), construction(2.89%), jems and jewelers (2.68%) cement products (2.04%) and rubber industry (1.46%), in contrast, the share of petroleum, vehicle and transport, beverage and tobacco, mining and paper industries declined to 2.23, 2.68%,1.76%,1.40% and 1.25 percent respectively.
Overall, it is observe that during 25 years of entire post reforms period banks allocated around 30 percent of their funds only to infrastructure. On the other hand, metal, textile, chemical, engineering and food processing industries accounts for 41 percent of total bank credit during the entire post reforms percent. This indicates that only banks granted around 71 percent of its credit only seven industries in the economy, which implies that

remaining 29 percent of credit granted for all other industries. This indicates that bank adopted aggressive credit portfolio policy which causes high portfolio risk.

Table 02: This table reflects the growth in the bank credit to different industries during twenty five years of post reforms period 1994-2018. Total bank credit for industrial sector is only Rs 5855 Cr during 1994-98 but it reached to Rs 10727 Cr with growth of 83.21 percent during 1999-03, in next two consequent phases (2004-08 and 2009-13) also it has grown with growth rate of 158.65 % and 193.31 percent an d reached to Rs 27745 Cr and Rs 81379 Cr respectively. In the last phase i.e. 2013-18 bank credit to industrial sector crossed one lakh cores by reporting credit of Rs 132839 Cr with growth rate of 63.23 percent. In overall study period funds allocation for infrastructure has grown significantly during three phases of study period 1999-2013 i.e. 2487 percent in 1999-03, 629.68 percent in 2004-08 and 332.50 percent in 2009-13. In the last phase of study period is also bank credit to infrastructure increased to Rs 45230 Cr with growth rate of 78.71. After infrastructure funds allocation for food processing and petroleum products increased significantly both in term of size and growth rate. During 1999-2013 total Rs 5951 Cr allocated for food processing sector similarly Rs 5059 Cr allocated for petroleum sectors in India. After this Gems and Jewellary, transport equipment, mining and cement industries are the major emerged sectors for banks credit during the study period 1999-2018. By nature, these sectors are subject to high credit and liquidity risk, therefore credit portfolio risk of banking sector increased significantly during this period. During 2013-18 growth in bank credit to industrial sector fallen significantly compared to earlier periods. This is attributable to the reason that serial failures of corporate sector in repayment of bank credit since 2016. This led to increased stress on formulating less risky credit portfolio in banking sector by inclusion of low risk and high profitable industries in the place of high risk and return industries.

Table 03: This table reflects the bank credit for infrastructure industry during post reforms period 1994-2018. Infrastructure sector is a largest sector with 29.87 of credit in total bank credit portfolio during post reforms period. Infrastructure industry consists of sub sectors such as power, telecommunication, Road and Ports and Other miscellaneous sectors. It is observed that in bank credit portfolio for infrastructure power sector occupied major portion during entire post reforms period with 56 percent. However, in the initial phase one it is only 23 percent but thereafter reached to peak portion of 62 percent during 1999-03. In contrast, in next two phases i.e. 2004-08 and 2009-13 it is decreased to 52 percent and finally it accounts to 59 percent in last phase. Telecommunication sector accounts for 65 percent in infrastructure portfolio of bank credit during first phase of study period but in next phase it has fallen sharply to 20 percent, thereafter also, the share has fallen gradually to 17, 15 and 10 percent in next phases respectively. During entire post reforms period telecommunication sector accounts for 12 percent in bank credit portfolio for infrastructure. Banks spent only 13 percent of funds for roads and ports in phase one period, but in next three phases it is stable at 18 percent. In last phase it is slightly increased to 19 percent and finally it is observed that roads and ports accounts for 18 percent share in total bank credit portfolio for infrastructure during entire post reforms period. Finally, miscellaneous sector accounts only 13 share in total bank credit portfolio for infrastructure during entire post reforms period (1994-2018).

Table 04: Metal industry is a second largest industry in bank credit portfolio with 14.06 (Rs 36252) percent of bank credit during the post reforms period. In the study we separately analyzed metal and engineering sectors. Basic metal industry is subcategorized into iron &steel and other metal products. Iron and steel industry accounts for 76 percent of share in total bank credit portfolio for metal industry during post reforms period which implies that other metal products comprises only 24 percent. During post reforms period banks credit for iron and steel industry has shown uptrend, in contrast, bank credit for other metal products has down trend. Iron and steel industry accounts for 69 percent in phased I(Rs 684 Cr), thereafter, it increased to 76 percent (Rs 1046 Cr)in Phase II, in phase III also increased slightly to 77 percent (Rs 2594), in contrast, in phase iv and V the share of bank credit to iron& steel industry fallen by one percent to 76 percent (Rs 8239Cr) and 75 percent (Rs 15076Cr). During phase one the share metal products other than iron and steel is 31 percent (Rs 212 Cr, which is fallen to 24 percent (Rs 337 Cr) in phase II, in Phase III also the share of non iron and steel metal products decreased one percent and reported 23 percent (Rs 793 Cr). In contrast, in phase IV and V the share other metal products increased continuously by one percent such as 24(Rs 2568 Cr) and 25 (Rs 4915 Cr) percent respectively. In overall, it is observed that bank allocation of credit for iron and steel industry in total bank credit portfolio has increased significantly during post reforms perio

Table 05: Textile industry occupied third position in total bank credit portfolio with 8.65 percent of share and Rs 22372 Cr funds during entire post reforms period. This textile industry is fragmented into four such ah cotton, garment, manmade and jute industries. Since the beginning of reforms, garment and cotton industries are major subcategories in textile industry which accounts for above 90 percent of funds while manmade and jute industries accounts only less than ten percent of bank credit for textile portfolio during entire post reforms

period. The share of garment industry in total textile portfolio has gradually decreased during all five phases of post reforms period i.e. from 51 percent in phase one to 39 in phase V. In contrast, the share of cotton industry has shown uptrend in first three phases and down trend in last two phases like 45 percent in phase one, which further increased to 47 and 52 percent in II and III phases respectively, in phase v the share is unchanged, but in phase v it is fallen to 50 percent. The share of jute industry in textile industry portfolio has gradually decreased in all five phases i.e. four percent in phase one, three percent in phase II, two percent in Phase III, one percent in Phase IV and Phase V. Regarding Man mange industry bank credit to this sector is zero in first three phases, which is accounts for seven percent in phase v and 11 percent in Phase V. Low share of jute and manmade sectors in textile industry portfolio indicates less preference of credit by banking industry to jute and manmade sectors which is very neglected during post reforms period.

Table 06: chemical industry occupied fourth position in overall bank credit portfolio with 6.80 percent of share and Rs 17571 Cr during post entire post reforms period. For the purpose of analysis chemical industry is further fragmented into four such as Fertilizer, drugs and Pharmaceuticals, Petro chemicals and others. Among these four categories first three accounts for 71 percent of share in overall bank credit portfolio to chemical sector during entire post reforms period while all other products accounts only 29 percent. Bank credit for fertilizers industry has uptrend in first three phases of study period (1994-08),in contrast, downtrend in last two phases, this can be observed in the table share of fertilizers industry was 15 percent in phase one, increased to 21 and 22 percents in phase two and phase three respectively but thereafter, fallen to 16 and 18 percents in phase IV and Phase V. Similarly, share of pharmacy industry in portfolio has shown upward in first four phases and downward in last phase. This is observed in table as share of drugs and pharmaceutical is 20 percent in phase one, which has increased to 25,32 and 36 percent in phase two, phase three and phase four but in last phase it has fallen it 30 percent. The share for petro chemical industry in credit portfolio has shown uptrend in all phases, except phase three. This is observed as 11 percent in phase one, which has increased to 25 percent in phase two, and again fallen to 16 percent in phase three, thereafter, it has increased to 21 and 25 percent in phase four and five respectively. Other than above thee industries, bank credit to other sectors characterized by chemicals was 55 percent in phase one, and reported to 30 percent in both two and three phases, further also it is decreased to 26 percent and in last phase it has increased slightly to 27 percent.

Table 07: Engineering sector occupied fifth place in total bank credit portfolio with Rs 16108 Cr during entire post reforms period. This sector accounts for 6.03 percent of total bank credit during post reforms period. This engineering sector is subdivided into electronics and non-electronic engineering products. It is observed that bank granted three-fourth of credit to non-electronic products while only one-fourth to electronic sector during overall post reforms period. In first two phases electronics sector accounts for 19 and 24 share in bank credit, which implies that the share of non-electronic sector was 81 and 76 percent respectively. But in phase three both electronic and non-electronic sectors accounts for 51 and 49 proportions respectively. In last two phases again the share of non-electronic and electronic sectors was as share in first two phases which was 75-25 percent. However, it is observed that in overall study period the preference of banking sector is very less on electronic products and high on non-electronic products.

FINDINGS AND SUGGESTIONS:

- We observed that banking sector overall credit portfolio to industrial sector during 25 years of post reforms period and revealed that nearly three-fourth of credit inflow incurred only to six major sectors such as infrastructure, iron& steel, textiles, chemical, engineering and food processing sectors. This portfolio structure indicates over credit concentration on few industries only therefore, banking sector heavily exposed to default risk in India. Thus, it is suggested to diversification of bank credit to some other priority sectors those ensures less risk and high return to the banking sector.
- Particularly, it is noticed that infrastructure industry is top industry accounts for one-fourth of funds in bank credit portfolio i.e 30 percent share and Rs 77225 Cr funds. The growth rate funds allocation for this sector is also very high compared to all other sectors during post reforms period. Within this sector banks high preference of credit has moved from telecom sector (65%) to power sector (56%) and roads and ports sectors (18%) during post reforms period. By, nature this sector characterized by huge funds, long term projects and profits, high risk, high political interference and delay in project completion. However, government recognized significance of infrastructure development for overall development of the country.
- After infrastructure, metal industry occupied second largest industry in overall banks credit portfolio with 14 percent share and Rs 36261 Cr funds after reforms period. This sector is further divided into iron &steel

and other metals. It is observed that in total funds of bank credit to this sector three-fourth of funds flown into only iron and steel sector demand for which is heavily depend on construction sector. The study also found that only one-four granted for other metal products in the industry. In this sub-portfolio also concentration of credit risk seems clearly.

- Gradual decrease is observed in the share of textile sector in overall bank credit portfolio during post reforms period i.e. from 13.41 percent in phase I to 7.5 percent in Phase V. However, still it is a third largest sector in overall bank credit portfolio with 8.65 percent of share and Rs 22372 Cr. Within this sector, 92 percent of funds were flown only to Garment and Textile sector which implies granting of only eight percent of funds to manmade and jure sector. This also indicates the high preference of credit by banks and high concentration of default risk of portfolio.
- After textile sector, pharmacy and engineering sectors occupied fourth and fifth positions respectively in over bank credit portfolio during entire 25 years of post reforms period. Within the sector petro and drug chemicals accounts for half of the total funds of pharmacy sector which implies that all other chemicals complements rest of the share. In engineering sector three-fourth of funds allocated for non-electronic sector and only one-fourth funds granted for electronic sector.

CONCLUSION:

In overall, it is observed that Bank credit portfolio to industry during post reforms period witnessed tremendous changes. Bank allocation of credit has shown down trend in case of textile, chemical and engineering sectors and continuous up trend in case of infrastructure, metal, food processing and construction sectors. This indicates changing banking sector credit portfolio during post reforms period. However, these seven industries accounts for three-fourth share of overall bank credit portfolio during post entire post reforms period which all other sector accounts only one-fourth of share. Within these sectors also major funds granted to one or two sub-sectors. This structure of overall bank credit portfolio to industry (dominated by few industries) is exposed to high default risk and low return. This is also proved in 2016 when corporate debt crisis incurred. As result of this portfolio the Non-performing Assets percentage has increased significantly in banking sector, which increased the stress on allocation of provisions. This phenomenon adversely affected banks profitability after 2016 and now government and banking sector both are striving in reducing this impact and enhance public confidence on banking sector and investors interest on overall economy of India. Ultimately, this empirical analysis stresses the need of diversified credit portfolio for banking sector in India.

REFERENCES:

Buddhi Kumar Malla, (2017). Credit Portfolio Management in Nepalese Commercial Banks, *The Journal of Nepalese Bussiness studies,* Vol. X No.1 December ISSN:2350-8795.

Fadi Hassan, Filippo di Mauro, Gianmarco I.P. Ottaviano (2017). Banks credit and productivity growth, *Comp Net The Competitiveness Research Network*, February- ECB Working Paper 2008, February.

Hosung Junga1, DongcheolKimb2, (2015). Bank funding structure and lending under liquidity shocks: Evidence from Korea, *Pacific-Basin Finance Journal*, Volume 33, June 2015, Pages 62.

Peterson K. Ozili (2017). Bank loan loss provisions research: A review, *Borsa _ Istanbul Review*, 17-3 (2017) 144e163.

Rakesh Mohan (2004). Finance for Industrial Growth, *RBI Bulletin*, march 2004.

Santosh Kumar Das (2015). Industrial Finance in the Era of Financial Liberalization in India: Exploring Some Structural Issues, *Institute for Studies in Industrial Development,* New Delhi- working paper 186-December.

Syed M. Waqar Azeem Naqvi, Tahseen M. Khan Sayyid Salman Rizavi (2016). The Efficiency of Credit Portfolio Management in Pakistan's Banking Sector, *The Lahore Journal of Business,* 4:2 (Spring 2016): pp. 51–72.

Yibing Chen,Yong Shi, Xianhua Wei & Lingling Zhang (2014). How does credit portfolio diversification affect banks' return and risk? Evidence from Chinese listed commercial banks, *Technological and Economic Development of Economy*, Pages 332-352 | Received 27 Sep 2013, Accepted 11 Jan 2014, Published online: 27 Jun 2014.

TABLES:

Table 01: Industry Wise Bank Credit Portfolio in India During Post Reforms Period
(1994-2018) Rs Crores

S. NO	INDUSTRY	1994-98 (Phase I)	1999-03 (Phase II)	2004-08 (Phase III)	2009-13 (Phase IV)	2013-18 (Phase V)	1994-98
01	Infrastructure	31 (0.53)	802 (7.48)	5852 (21.09)	25310 (31.10)	45230 (34.05)	77225 (29.87)
02	Basic Metal & Metal Product(iron and steel and other metal products)	694 (11.85)	1383 (12.89)	3387 (12.21)	10806 (13.28)	19992 (15.05)	36261 (14.03)
03	Textiles	785 (13.41)	1325 (12.35)	2980 (10.74)	7121 (8.75)	10161 (7.65)	22372 (8.65)
04	Chemicals & Chemical Products	728 (12.43)	1252 (11.67)	2472 (6.59)	5620 (6.83)	8208 (6.18)	18279 (6.80)
05	All Engineering	1094 (18.68)	1185 (11.05)	1497 (5.40)	4737 (5.82)	7595 (5.72)	16108 (6.23)
06	Food Processing	150 (2.56)	331 (3.09)	1542 (5.56)	4078 (5.01)	7687 (5.79)	13789 (5.33)
07	Petroleum, Coal Products & Nuclear Fuels	119 (2.03)	521 (4.86)	1308 (4.71)	3230 (3.97)	2969 (2.23)	8147 (3.15)
08	Construction	107 (1.83)	174 (1.62)	755 (2.72)	2269 (2.79)	3837 (2.89)	7143 (2.76)
09	Gems & Jewellery	138 (2.36)	301 (2.81)	930 (3.35)	2125 (2.61)	3561 (2.68)	7055 (2.73)
10	Vehicles, Vehicle Parts & Transport Equipment	29 (0.50)	216 (2.01)	861 (3.10)	2296 (2.82)	3560 (2.68)	6963 (2.69)
11	Cement & Cement Products	88 (1.50)	207 (1.93)	434 (1.56)	1562 (1.92)	2711 (2.04)	5002 (1.93)
14	Beverage &tobacco, Leather, Wood and glass industry	146 (2.49)	185 (1.72)	331 (1.19)	1557 (1.91)	2338 (1.76)	4558 (1.76)
12	Mining & Quarrying (incl. Coal)	40 (0.68)	132 (1.23)	484 (1.74)	1247 (1.53)	1866 (1.40)	3769 (1.46)
13	Paper & Paper Products	116 (1.98)	182 (1.70)	471 (1.70)	1095 (1.35)	1656 (1.25)	3520 (1.36)
15	Rubber, Plastic & their Products	88 (1.50)	112 (1.04)	344 (1.24)	1160 (1.43)	1938 (1.46)	3642 (1.41)
16	Other Industries (miscellaneous)	1502 (25.65)	2419 (22.55)	4740 (17.08)	7231 (8.89)	9528 (7.17)	25420 (9.83)
	Total	**5855 (100)**	**10727 (100)**	**27745 (100)**	**81379 (100)**	**132839 (100)**	**258545 (100)**

Source: RBI Hand Book on Indian Economy Note: Value in brackets indicates percentage of each in total

Table 02: Industry Wise Growth of Bank Credit in India During Post Reforms Period
(1994-2018) Rs Crores

S. NO	INDUSTRY	1994-98 (Phase I)	1999-03 (Phase II)	2004-08 (Phase III)	2009-13 (Phase IV)	2013-18 (Phase V)
01	Infrastructure	31	802 (2487)	5852 (629.68)	25310 (332.50)	45230 (78.71)
02	Basic Metal & Metal Product(iron and steel and other metal products)	694	1383 (99.28)	3387 (144.90)	10806 (219.04)	19992 (85.01)
03	Textiles	785	1325 (68.79)	2980 (124.91)	7121 (138.97)	10161 (42.69)
04	Chemicals & Chemical Products	728	1252 (71.98)	1829 (46.09)	5554 (203.68)	8208 (47.77)

S. NO	INDUSTRY	1994-98 (Phase I)	1999-03 (Phase II)	2004-08 (Phase III)	2009-13 (Phase IV)	2013-18 (Phase V)
05	All Engineering	1094	1185 (8.32)	1497 (26.33)	4737 (203.68)	7595 (47.77)
06	Food Processing	150	331 (120.67)	1542 (365.86)	4078 (164.50)	7687 (88.48)
07	Petroleum, Coal Products & Nuclear Fuels	119	521 (337.82)	1308 (151.06)	3230 (146.92)	2969 (-8.08)
08	Construction	107	174 (62.62)	755 (333.1)	2269 (200.58)	3837 (69.08)
09	Gems & Jewellery	138	301 (118.12)	930 (208.97)	2125 (128.50)	3561 (67.59)
10	Vehicles, Vehicle Parts & Transport Equipment	29	216 (644.8)	861 (298.61)	2296 (166.70)	3560 (55.05)
11	Cement & Cement Products	88	207 (135.23)	434 (109.66)	1562 (259.83)	2711 (73.63)
14	Beverage &tobacco, Leather, Wood and glass industry	146	185 (26.71)	331 (78.92)	1557 (370.52)	2338 (50.14)
12	Mining & Quarrying (incl. Coal)	40	132 (230.0)	484 (266.67)	1247 (157.61)	1866 (49.69)
13	Paper & Paper Products	116	182 (56.90)	471 (158.79)	1095 (132.39)	1656 (51.33)
15	Rubber, Plastic & their Products	88	112 (27.27)	344 (207.14)	1160 (237.38)	1938 (67.0)
16	Other Industries	1502	2419 (61.05)	4740 (95.95)	7231 (52.56)	9528 (31.77)
	Total	**5855**	**10727 (83.21)**	**27745 (158.65)**	**81379 (193.31)**	**132839 (63.23)**

Source: RBI Hand Book on Indian Economy
Note: Value in brackets indicates Growth over base year

Table 03: Bank Credit to Infrstructure Indutry in India Duirng Post Reforms Period
(Rs in Crores)

SEGMENT	1994-98 (Phase I)	1999-03 (Phase II)	2004-08 (Phase III)	2009-13 (Phase IV)	2013-18 (Phase V)	1994-2018
Power	7 (23)	494 (62)	3052 (52)	13255 (52)	26694 (59)	43502 (56)
Telecommunications	20 (65)	160 (20)	978 (17)	3848 (15)	4410 (10)	9416 (12)
Roads and Ports	4 (13)	148 (18)	1052 (18)	4536 (18)	8506 (19)	14245 (18)
Other Infrastructure	0 (0)	0 (0)	770 (13)	3671 (15)	5621 (12)	10062 (13)
Total	**31 (100)**	**802 (100)**	**5852 (100)**	**25310 (100)**	**45230 (100)**	**77225 (100)**

Source: RBI Hand Book on Indian Economy
Note: Value in brackets indicates percentage of each in total

Table 04: Bank Credit to Metal and Metal Products Indutry in India Duirng Post Reforms Period
(Rs in Billions)

SEGMENT	1994-98 (Phase I)	1999-03 (Phase II)	2004-08 (Phase III)	2009-13 (Phase IV)	2013-18 (Phase V)	1994-2018
Basic Metal & Metal Product						
Iron & Steel	472 (69)	1046 (76)	2594 (77)	8239 (76)	15076 (75)	27427 (76)
Other Metal Product	212 (31)	337 (24)	793 (23)	2568 (24)	4915 (25)	8825 (24)
Total	**684 (100)**	**1383 (100)**	**3387 (100)**	**10807 (100)**	**19992 (100)**	**36252 (100)**

Table 05: Bank Credit to Textile Indutry in India Duirng Post Reforms Period

(Rs in Billions)

SEGMENT	1994-98 (Phase I)	1999-03 (Phase II)	2004-08 (Phase III)	2009-13 (Phase IV)	2013-18 (Phase V)	1994-98 (Phase I)
cotton	357 (45)	628 (47)	1555 (52)	3557 (52)	5063 (50)	11161 (51)
Manmade	0	0	0	499 (7)	1074 (11)	1573 (7)
jute	31 (4)	41 (3)	52 (2)	79 (1)	109 (1)	313 (1)
Garment	397 (51)	656 (50)	1373 (46)	2705 (40)	3914 (39)	9045 (41)
Total	**785 (100)**	**1325 (100)**	**2980 (100)**	**6840 (100)**	**10161 (100)**	**22092 (100)**

Source: RBI Hand Book on Indian Economy
Note: Value in brackets indicates percentage of each in total

Table 06: Bank Credit to Chemicals and its Products Indutry in India Duirng Post Reforms Period

(Rs in Billions)

SEGMENT	1994-98 (Phase I)	1999-03 (Phase II)	2004-08 (Phase III)	2009-13 (Phase IV)	2013-18 (Phase V)	1994-98 (Phase I)
Fertilizer	106 (15)	258 (21)	548 (22)	921 (16)	1485 (18)	3318 (18)
Drugs & Pharmaceuticals	145 (20)	307 (25)	795 (32)	2019 (36)	2461 (30)	5728 (31)
Petro Chemicals	79 (11)	314 (25)	389 (16)	1197 (21)	2012 (25)	3991 (22)
Others	398 (55)	373 (30)	740 (30)	1483 (26)	2249 (27)	5243 (29)
Totals	**728 (100)**	**1252 (100)**	**2472 (100)**	**5620 (100)**	**8208 (100)**	**18279 (100)**

Source: RBI Hand Book on Indian Economy
Note: Value in brackets indicates percentage of each in total

Table 07: Bank Credit to Engineering Indutry in India Duirng Post Reforms Period

(Rs in Billions)

SEGMENT	1994-98 (Phase I)	1999-03 (Phase II)	2004-08 (Phase III)	2009-13 (Phase IV)	2013-18 (Phase V)	1994-2018
All Engineering						
Electronics	205 (19)	290 (24)	964 (51)	1238 (26)	1777 (23)	4474 (27)
Non-electronic	889 (81)	895 (76)	933 (49)	3499 (74)	5818 (77)	12034 (73)
Total	**1094 (100)**	**1185 (100)**	**1897 (100)**	**4737 (100)**	**7595 (100)**	**16508 (100)**

Source: RBI Hand Book on Indian Economy Note: Value in brackets indicates percentage of each in total

----