

Analysis of Bank Credit in Strategic Industries: A Study of Indian Public Sector Banks

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ABSTRACT

Indian financial system is dominated by presence of banks which act as heart and soul of the economy. Banks channelize the funds from savers to investors. Present study analyze the lending trends in selected heavy and key industries as well as difference in average lending ratio of PSBs across 7 years from 2010-11 to 2016-17. Credit deployment data of 18 PSBs has been analyzed using ANOVA during the study period. The study reveals that there is no significant difference in lending ratio of selected PSBs across the industries during the study period.

1. Introduction

Banking sector of a country act as mobiliser of savings into productive investments. Banks play crucial role in providing necessary funds to an industry which will boost its growth. Economic growth is dependent on development of several heavy and strategic industries. Sectors like Power, Basic Metals, Iron & Steel, Cement, and Infrastructure are the commanding heights of economic growth. These sectors requires huge amount of investment and they provide less return. Private lenders or banks are more concern with return on investment and usually avoid lending in above mentioned key sectors because of long gestation period. As development of country is a function of growth of key industries, government has taken the charge to play an active role in it.

2. About Indian Banking Sector

Indian banking sector has co-existence of public, private, foreign and cooperative banks. It mainly comprises of 27 public and 22 private sector banks, 44 foreign banks, 56 RRBs, 1,589 urban and 93,550 rural cooperative banks. According to CRISIL research report, bank credit will surge to 8 – 9 % in fiscal 2018 as compared to 3.7% in 2017. The report by CARE Rating depicts an increase in net interest income by 22.4% and Gross NPA are increased by 34.5% in Q3 – FY2018. As compared to private sector, public sector banks (PSBs) have witnessed a lower overall performance.

Indian banks are focusing on adoption of integrated approach of risk management by embracing the international banking supervision accord of Basel II. Most of the banks meet the capital adequacy norms of Basel III. It is expected that digital payment revolution will bring major changes in credit disbursements. Debit cards are preferred mode of payment as compared to credit card after demonetization. According to research report of CRISIL, bank profitability is expected to fall because of higher NPA, high level of provisioning and rate cuts. As a result, RoA will remain negative for public sector banks due to net losses by most of PSBs.

3. Key Strategic Industries

Economic development of a country like India is highly dependent on several important and large sectors which provide inputs to other allied industries. As discussed earlier, deployment of sufficient credit is the key of development of these sectors. Following sectors are identified for the purpose of study.

Iron & Steel

India was the third largest producer of steel after China and Japan in 2017. Availability of raw material and low cost labour are the drivers of growth in steel industry. India's crude steel production grow by 5.87% on YOY basis to 101.227 million tons. Exports and imports of iron and steel are 14.6 MT and 13.4 MT respectively during 2017-18. According to the Dept. of Industrial Policy and Promotion, the total FDI in this sector is of USD 10.56 billion in last 7 years (2010 – 2017).

Petroleum

Petroleum sector is one of the key industries that boosts growth of other sectors. India is the fourth largest importer of LNG after Japan, South Korea and China which signifies the ever increasing demand of petroleum products. To meet the demand, government allows 100% FDI in this sector which attracts total investment of USD 6.86 billion in last 7 years.

Power

Indian Power sector is a highly diversified consisting of conventional sources like coal, oil, ignite, and natural gas and nuclear energy of power generation. India has remarkable place in utilization of non-conventional sources of power generation like wind, solar and agriculture and domestic waste. Installed capacity of all power stations of India is 334146.91 Megawatt (MW) on February, 2018. The sector has attracted USD 12.3 billion in FDI from April – 2000 to September – 2017 accounting for 3.44% of total FDI.

All Engineering

Engineering sector of India has noticed remarkable growth in terms of investment and turnover. It is estimated that turnover in the sector have reached to USD 125.4 billion in 2017. Indian engineering products are exported to various countries and accounts for 60% of total exports. The total FDI in this sector is USD 3.39 billion as per the data released by Department of Industries Policy and Promotion (DIPP).

Construction

Indian Construction industry consists of four sub sectors namely, housing, retail, hospitality and commercial. It secures 3rd rank among 14 major sectors having direct or indirect impact on all sectors of economy. Construction industry is the second largest employer of the country after agriculture. The market size is expected to reach USD 180 billion by 2020 with an expected CAGR of 11.2%. According to DIPP, the total FDI in construction sector is amounting USD 24.67 billion from 2000 – 2017.

Cement

India is the second largest cement producer in the world and the sector provides employment to more than 10 lakhs of people. About 67% of total cement is consumed by housing sector. Indian cement sector is expected to grow at 6–7% and it produces 280 million tons cement. Top 20 cement companies command almost 70% of total cement production. According to DIPP, FDI in cement industry is USD 5.25 billion from April 2000 to December 2017.

4. Objectives

Following set of objectives are intended to be fulfilled by the study:

- To understand the lending scenario of public sector banks with respect to selected industries
- To analyze the difference in sector wise lending ratios across the banks of public sector

5. Literature Review

Kolapo, Ayeni, & Oke (2012) have studied the impact of credit risk on performance of 5 banks of Nigeria using panel data of 11 (2000-10) years. Performance of banks is measured by "Return on Asset (ROA)" whereas ratios like "Non-Performing Loan to Total Loan (NPL/LA)", "Loan to Total Deposit (LA/TD)", "Loan Loss Provision to Classified Asset (LLP/CL)" are used as proxy of credit risk. The paper supports negative relation between credit risk and bank performance.

Abbas, Zaidi, Ahmad, & Ashraf (2014) have analyzed how banking performance is affected by credit risk faced by the bank. They have collected data of 21 banks of Pakistan for 5 years (2006-2011) and applied fixed effect regression model. Ratios of "Non – Performing Loans to Total Loan" and "Loan Loss Provision to Non – Performing Loans" are indicating the credit risk whereas ROA and ROE are considered as

performance variables. The study reveals that credit risk negatively affect the performance of the bank.

Almekhlafi, Almekhlafi, Kargbo, & Hu (2016) have empirically investigated the factors of credit risk and its effect on bank performance in Yemen for a period of 15 years (1998 – 2013). They concluded that bank performance is negatively affected by NPAs and the results are consistent among all selected banks. They also found a causal relationship between bank performance and credit risk.

Taiwo, et al., (2017) have carried out empirical study on the effect of credit risk management on lending growth and performance of Deposit Money Banks of Nigeria. They have collected the data over 17 years and used OLS regression to study the effect of independent variable on dependent one. The study shows that confidence of savers and investors get boosted by sound credit norms. It also recommends that banks should adhere to the credit norms prescribed by the central bank to increase their profitability.

As the research topic of the paper is into infancy stage, a very limited work is carried out in this area. Based on the review literature it is identified that most of the scholars have worked on credit risk and bank performance. No one has tried to analyze the lending strategies of banks in different sectors. The proportion of fund deployed in an industry is a crucial decision to make. Hence, this paper will analyze the lending proportion of different PSBs across selected industries.

6. Research Methodology

6.1 Sampling Plan and Data Collection

For the study purpose, all listed public sector banks are considered. Out of total 21 listed banks, 18 are selected based on the availability of balanced panel data for 7 years (2010-11 to 2016-17). The research work is based on secondary data collected from various sources like academic journals, books and annual reports of banks. Data from annual report is transformed in form of ratio of sector wise exposure to total exposure for better comparison.

6.2 Statistical Tools

Compiled data has been analyzed using statistical tools like descriptive statistics and graphical representation for understanding trend of sectoral lending. To compare the mean lending ratios across different banks one way ANOVA has been used.

6.3 Hypothesis

H₀: There is no significant difference among the average lending ratios of selected sectors across various banks.

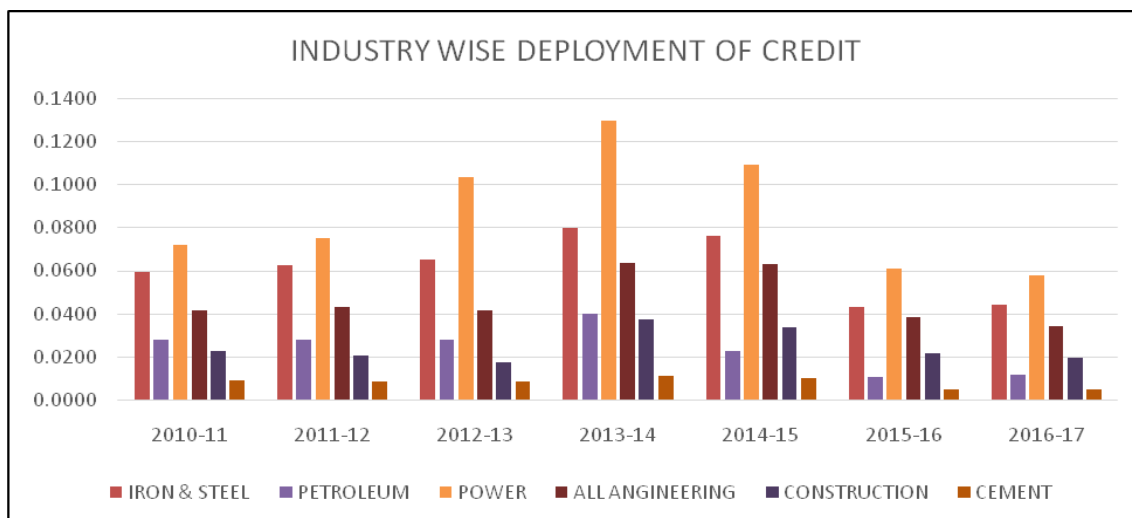
H₁: There is a significant difference among the average lending ratios of selected sectors across various banks

7. Data Analysis and Interpretation

Table 1: Deployment of Bank Credit across Strategic Industries

| Year | Iron & Steel | Petroleum | Power | All Engineering | Construction | Cement |
|---------|--------------|-----------|--------|-----------------|--------------|--------|
| 2010-11 | 0.0594 | 0.0280 | 0.0716 | 0.0412 | 0.0225 | 0.0087 |
| 2011-12 | 0.0622 | 0.0280 | 0.0748 | 0.0429 | 0.0204 | 0.0086 |
| 2012-13 | 0.0651 | 0.0279 | 0.1031 | 0.0415 | 0.0172 | 0.0082 |
| 2013-14 | 0.0794 | 0.0401 | 0.1295 | 0.0637 | 0.0372 | 0.0110 |
| 2014-15 | 0.0762 | 0.0223 | 0.1093 | 0.0631 | 0.0335 | 0.0097 |
| 2015-16 | 0.0432 | 0.0107 | 0.0608 | 0.0383 | 0.0213 | 0.0045 |
| 2016-17 | 0.0438 | 0.0117 | 0.0575 | 0.0340 | 0.0196 | 0.0046 |
| Average | 0.0613 | 0.0241 | 0.0867 | 0.0464 | 0.0245 | 0.0079 |

Source: Compiled by the Author



Iron & Steel

Iron and Steel industry is the having second largest share in terms of credit deployment. Iron & Steel industry provides input for many other industries like machinery, heavy equipment, construction, etc. The highest investment was 7.94% of total bank credit in 2013-14 whereas the lowest was in 2015-16 that is 4.32%. The average lending by PSBs in this sector stood at 6.13% during the study period.

Petroleum

The sector has experienced stable lending policy during 2010 to 2013. During 2013-14, the 4.01% of bank credit was deployed in this sector which is the highest one. Since then, there is a steady reduction of lending till 2016. A slight increase is noticed in year 2016-17. With an average lending of 2.41% it secures fifth rank among the six sectors considered for study.

Power

Power sector receives the highest credit from PSBs as compare to other industries. The ever increasing demand of electricity creates a need of continuous pumping of funds. In 2013-14, 12.95% of total bank credit was deployed in this sector which is the highest one. Post 2014, there is continuous reduction in lending which reduces to the lowest level of 5.75% in 2016-17. The average deployment of credit in power sector is 8.67%.

All Engineering

Engineering industry mainly includes machineries and technical products. This industry receives the third highest funding out of six selected industries. The average credit deployed is 4.64% with highest 6.37% and lowest 3.4% in 2013-14 and 2016-17 respectively.

Construction

Construction and Real estate is one of fastest growing sectors of the country because of increasing population and urbanization. The highest and lowest credit was 3.72% (2013-14) and 1.72% (2012-13) respectively. Due to recessionary pressure, lending in this sector has reduced continuously and reached to 1.96% in 2016-17. On an average, the credit deployed in the sector stood at 2.45%.

Cement

Cement industry has secured the last place in terms of credit deployment. Average credit in the sector is 0.79% with 1.10% highest and 0.45% lowest in 2013-14 and 2015-16 respectively. Small ticket size of loan is one of the reasons for lower lending ratio.

Analysis of Sectoral Credit across different banks

Banks follow different strategies with respect to lending in different sectors. In this section average lending ratios are compared across sample banks to find out any difference among them. One way ANOVA has been applied for the same and the result is given in Table 2. As the significant value is

more than 0.05 (0.458), null hypothesis will not be rejected. In other words, there is no significant difference in the average

lending ratio of selected industries across the PSBs.

Table:2 ANOVA
Average Lending Ratio

| | Sum of Squares | df | Mean Square | F | Sig. |
|----------------|----------------|-----|-------------|-------|------|
| Between Groups | .053 | 17 | .003 | 1.007 | .458 |
| Within Groups | .281 | 90 | .003 | | |
| Total | .334 | 107 | | | |

Source: Compiled from SPSS

8. Scope for Future Research / Limitations of Study

As one research paper cannot be exhaustive and has to be limited to a certain scope of study. As a result few limitations arise which give rise to further study. Areas of new research that can be explored are as follows.

- As the selected banks are public sector, a similar study can be carried out for private sector banks as well.
- A comparative analysis of public and private sector banks can be explored for getting an insight for overall banking sector.
- The current study is based on heavy industries and does not include priority sector, food industry, pharmaceuticals, Transport, etc. Hence, one can explore these industries too.
- The study is based on secondary data compiled from annual reports of PSBs hence the validity of results depend on the accuracy of data.

9. Conclusion

Banking industry in India is largely dominated by public sector in terms of branch networks, retail business and customer base. Country like India is dependent development of several key industries for economic growth. Such Industries require huge investment and are taking long to provide ROI. Due to such distinguishing characteristics, PSBs are major sources of finance for them. The paper analyses the trends and lending strategies of PSBs with reference to selected sectors. The study concludes that all PSBs behave similarly with respect to their credit deployment in selected industries. In other words, there is no significant difference in lending ratios of selected PSBs. Power sector occupies the first position in terms of bank credit followed by Iron & Steel, Engineering and Construction. Cement industries stood last in terms of total credit deployed in that sector.

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