

Relationship between Manufacturing Industrial Output and Bank Credit in India

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ABSTRACT

Manufacturing industries are very significant in the contribution towards employment generation, export and GDP of a country. For their holistic development like Raw material, Technological adaptation, Managerial efficiency etc., are monumental factors. To attain monumental factors bank credit amuse important role. These paper exhibition the declining bank credit in overall credit share. Correspondingly industries share in countries GDP are stagnant at 13%. The correlation among both of the variables are 0.844002 (positive correlation) but in the declining trend. The regression result is significant with high coefficient of Determination 0.864815 and t ratio.

Keywords: Technological Adaptation, Managerial Efficiency

INTRODUCTION

Manufacturing is a production of goods in large quantities after the process of raw material changed into valuable products. After the Liberalization, Privatization and Globalization reforms the share of commercial bank credit to the industries has increased by absolute terms but not in the percentage terms. After the LPG reforms market has been opened for the other countries too it increases the competition among the industries and it increases the country's export too. During the period of 1991 the industrial share in output to GDP ratio was more than 15 percentage and during these process it reduces to more than 13 percentage of the output.

Manufacturing industries execution is indispensable coupled with the bank credit. Bank credit assist to manufacturing industries to acquire Technological adaptation, Employment creation, Enlarge in export of goods, It can assist significantly contribute in GDP and It also contribute as Forward and Backward linkages which helps to grow industries like- Food processing, Textile

etc.

Bank credit is a essential constituent of Indian financial sector, which authorize industries in overall growth. They finance credit which assist industries to adopt technology, equipment, purchase of raw material, investment and working capital.

By gone years, country has perceptible remarkable growth in the areas like Unified Payment Interface, Information Technology, and Service Export of the country, Employment generation, Foreign Direct Investment, Foreign Portfolio Investment, Infrastructure Development like, Road, and Highway etc. Manufacturing industries output share in the GDP declined after the LPG reform and the total share of bank credit to the manufacturing industries correspondingly represent dwindling trend.

According to (RBI) the share of bank credit in overall credit disbursement has declined. Henceforth march 2024 bank credit to industries erected as 23.1%. The share of industries in total bank credit was in March 23 was 24.8% and earlier in March 22 were 27.1%. Disposed data of

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bank credit constitute a declining trend of credit to industries.

Review of Literature:

Arjune and Kumar (2022), have shown that the how bank credit is much important to the growth of industries. It shows positive relationship between the growth of credit and the industrial output. In India, it shows dualistic results first of all it shows the positive results with the manufacturing industries like food, beverages, pharmaceutical, tobacco etc. On the other hand traditional manufacturing industries like textile, petroleum, rubber and plastic etc. It shows the negative relationship of bank credit.

Chavarin and Rodriguez (2022), this paper presents evidence of a positive and significant impact of bank credit on manufacturing production in Mexico. The bank credit to disbursement affected by the stress in the banking system of the country because the GDP of a country influenced by the industrial output and the industrial output of a country influenced by the credit demand of a country. Supriya Dutta (2021), have analyzed the notable association among the bank credit and industrial output growth in a country. In deeper paper evaluate different sectoral industries and credit outlay. One the other hand, rotational movement of the GDP did not affect the demand for credit. Credit demand by the manufacturing industries was affected by the production and the demand of the good's of these industries. Ashok Thampy, Mrityunjay K. Tiwary (2021), this paper represents the importance of local banking in the development of manufacturing sector in the small regional areas. This paper explains that the local financial infrastructure is important towards the development of regional economies of the state. It further explains that in the big geographical reasons the credit did not affect the manufacturing growth. Agarwal and Azim (2021), this study do not find substantial for financial stress to be a major determinant of the investment slowdown in the manufacturing firms. In addition, this finds that the declining growth in sales is a major determinant in explaining the slowdown in fixed investments and profits. Paul and Otubu (2019), Positive relationship exist among Bank credit and Manufacturing industries output. A bank credit was found to be necessary for influencing or boosting manufacturing sector output. Granger Causality confirms the positive relationship among them in Nigeria. Ogunmuyiwa, Michael Segun, Okuneye, Babatunde A, Amaefule, Joseph, N. (2017),

This paper represent positive association between bank credit and private sector productivity and profitability. Subsequently countries monetary policy framework should support towards finance credit to the private sector. Das (2015), the inadequate financing works as block edge to the industrial development. In underdeveloped countries faced more blocked of financial stress towards the development of industries. The paper endeavours the impediment factors and strives to access the financing factors.

Objectives of the study:

- 1) To analyze the trend of Bank credit to manufacturing industries.
- 2) To find the relationship between bank credit and manufacturing industries.

METHODOLOGY

In this study, the data of manufacturing industries as the share of GDP has been taken from the World Bank and the data of bank credit to industries taken from Sectoral Deployment Of Bank Credit (RBI) of the period from 2011-2023. During this analysis the correlation is worn to occur the relationship between Bank Credit and Manufacturing Industries because the regression analysis done to found the impact between dependent and independent variable.

Historical Background:

In 1991 (Narshimham Committe 1) , Indian financial sector experience his first holistic development. The foremost intension was this committee to reduce SLR and CRR to financed credit in the economy and plays crucial role in the development of it. Another significant contribution of this committee was to furnish emancipation to the banks of their operational freedom. It insinuates gradual depletion in the Rate of Interest. They have now some freedom to set their rate of interest (ROI).

The second major reformed functioned in the year of 1998 (Narshimham Committee 2). It recommended reform like Innovation in the Banking system, Technological adaptation, Training of staff's, Strengthening of banks, Effacing of the automatic monetization of deficit, Narrow bank (Weak banks financed their fund to the short term), Erected administrative Rate of Interest, Opening of external

sector etc.

The most important recommendation they have constructed in the Credit disbursement to introduce SARFAESI, Act 2002 which enabled arranging Debt Recovery Tribunals and Asset Reconstruction Companies. The legal status has been given to the Credit Information Bureau and the Bankruptcy Act was passed in 2016.

Despite the importance of financial credit towards the growth in manufacturing industries, Credit growth has been inactive given Reserve Bank of India report. The growth has declined by 4.9% in 2019-20 from 15.6% in 2013-14. In 2020 the covid has worsen the economic situation. Thereafter, the outer head winds prevails like Russia-Ukraine war, Israel-Hamas war, Red sea interrupt, Strait of Hormuz crises etc. This will leads to enlarge in the raw material and input cost pressure on the manufacturing industries. Subsequent, it dent on their export and consequently on their credit demand. Newly it constitutes easing the price of raw material and enlarges the demand of bank credit. According to RBI (Sectoral Deployment of Bank Credit), manufacturing industry manifest increasing trend of bank credit increased by 1.5 trillion in the first half of (FY 25), which was 1.05 trillion in the first half of (FY 24), in percentage it manifest enlarge 3.1% (y-o-y) to 4.2% (y-o-y).

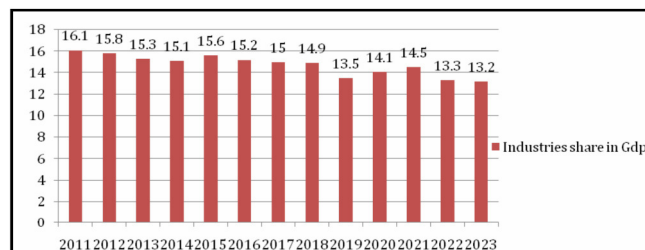
RESULTS AND DISCUSSION

In the liable the search manufacturing industries performance has been acknowledge. In underdeveloped countries industrial sector are foremost to absorb excess labour from the agriculture sector.

In the time period of 1970's china has applied the Lewis model in their country. Lewis model given in the year of 1954, emphasis that labour should shift from the agriculture sector to industrial sector because agriculture sector persist marginal productivity zero. China followed Lewis model blindly and shifts the excess labour from the agriculture sector to industrial sector. This citation leads to decline in unemployment of a country and increase countries economic growth.

The Fig. 1 elucidate the share of industrial output has declined continuously since past 13 years. The share of industry in countries GDP was 16 per cent in 2011, which declined up to 13 per cent in 2023. Even the GDP has increased faster pace but industries output contribution in the share of GDP has declined.

In the world with their sect oral development



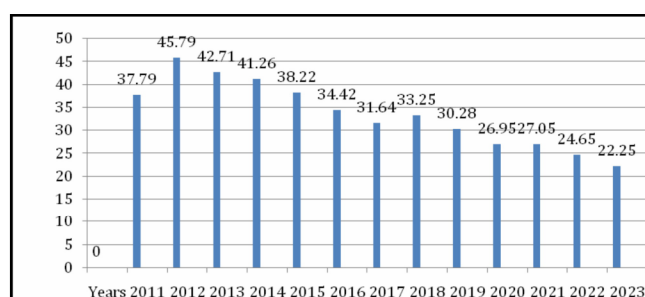
Source : World Bank

Fig. 1 : Industries share in GDP

countries follow the pattern of development Agriculture, Industry and Service sector. In India, we were sect oral shift from the agriculture sector to direct service sector. The country did not focus their development on the industrial sector. Consequently, it cannot push up that much, which lead to absorb extra labour from the agriculture sector and leads to restrict the productivity of industrial sector in the economy.

In 2014 the government of India tries to uplift the sector for which they launched MAKE IN INDIA scheme for alleviate reliance, increase share in GDP and increased in export.

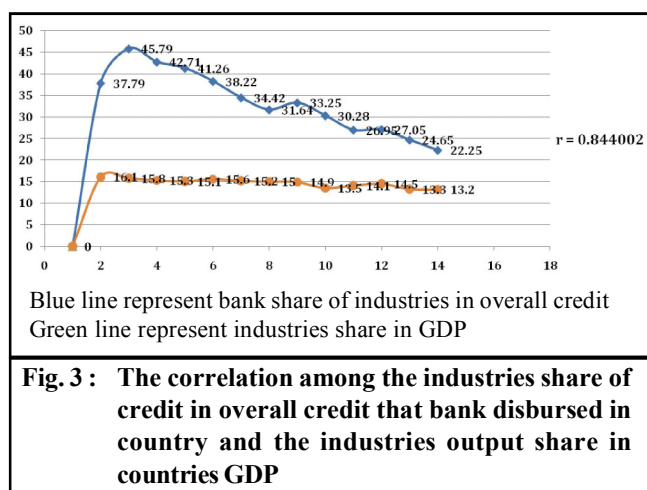
The Fig. 2 elucidates the bank share of industries in overall credit disbursement. This constitutes a declining trend towards industrial stipulation of bank credit in overall share. In the origination of the previous decade the share of the industries stood as 45 per cent which decline up to 22 percentage in the year of 2023.



Source : Sectoral Deployment of Bank Credit

Fig. 2 : Bank share of industries in overall credit

Among the overall bank credit, disbursed to the manufacturing industries the share of large industries are colossal and share of micro and small industries is inconsequential. Predominant reason after this stride is Non Performing Asset's of micro and small industries. The turnover and market share of the large industries are eminent rather than micro and small manufacturing



industries which reassured to the banks for disburse credit to the immense manufacturing industries.

Fig. 3 represent the declining trend of bank credit to industry in overall share and manufacturing industries shows the declining trends. Bank credit to manufacturing industries and the manufacturing industries share in GDP are shown declining collaboration trend. In the given figure (r) represent correlation coefficient among the both components. Correlation coefficient can be positive (+) or can be negative (-). The stated consequences is 0.844002 represent positive correlation, avenue it represent both the variable proceed in same declining direction.

In the given analysis, represent the 1 unit increase in bank credit manufacturing output will increase by 0.978183 unit. The prob. value in the regression shows the chances of occurrence of the error and the value of credit prob. is 0 that's significant. In the given results for the individual significance there's must that's $t(\text{cal}) >$

$t(\text{tab})$. In the given results we seen $t(\text{calculated})$ value is very high, which shows the individual significance at the level of 5% per cent or 0.05 (Table 1).

Limitations of the Regression Model:

Even the results of the regression model in term of coefficient of determination (R- square) and in the terms of individual significance is highly significant. But there are certain limitations consider in it.

1. No. of observation is taken only 13, with the only 1 independent variable.
2. The coefficient of credit is very high in the regression model but in the real world there is not the bank credit which affect the manufacturing industries output. Several internal and external factors which affect the manufacturing output production in the economy.
3. High R square could be the case of over fitting.

Conclusion:

The research paper shows the bank credit and the manufacturing output are highly related to each-other. The correlation among is more than 0.8 that represent importance of bank credit to the manufacturing output production. But in the embodied results shows the declining trends of the both share manufacturing industries in the GDP and the share of bank share of industries in overall credit. Underdeveloped countries facing severe credit deficit, resultant it dent their capacity utilisation, Technological adaptation and employment generation.

The finding also evince that, the bank should firstly categorized priority sector lending to the Micro and Small manufacturing industries in the economy and the government should ease norms towards the disbursement

Table 1 : industries output share in overall countries GDP

Dependent Variable: OUTPUT				
Method: Least Squares				
Sample: 2011-2023				
Included observations: 13				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-6.776560	3.319851	-2.041224	0.0660
CREDIT	0.978183	0.116608	8.388675	0.0000
R-squared	0.864815	Mean dependent var		20.79692
Adjusted R-squared	0.852525	S.D. dependent var		4.374790
S.E. of regression	1.680026	Akaike info criterion		4.016134
Sum squared resid	31.04737	Schwarz criterion		4.103049
Log likelihood	-24.10487	Hannan-Quinn criter.		3.998269
F-statistic	70.36986	Durbin-Watson stat		0.684216
Prob(F-statistic)	0.000004			

of credit accessibility and affordability to these Manufacturing industries because the likelihood of credit default of these industries is much greater than big industries therefore the banks refuse to finance credit.

REFERENCES

- Arjune, S. and Kumar, V.S. (2022). Impact of sectoral bank credit on India's industrial production and its economic growth. *Internat. J. Health Sci.*, **6**(S2) : 11582- 11598.
- Agarwal, M. and Azim, R. (2021). The Indian manufacturing sector: finance, investment and performance of firms. *NIPFP WORKING PAPER NO,339*.
- Chavrez, A.T. and Rodriguez, R.C., (2022). The importance of bank credit for the economic activity in Mexico: A manufacturing sector analyze. *Ensayos Revista de Economica*, **42**(1): 83-120.
- Das, S.K. (2015). Industrial financing in the era of financial liberalization in India. *Institute for Studies in Industrial Development*. Working Paper 186.
- Manikandan, K., Manivel, S. and Vettriselvan, R. (2012). Bank credit and industrial production in India: Granger Casualty test in VAR framework. *Asia-Pacific J. Management Res. & Innovation*, **8**(3) : 247-253.
- Paul, O. and Otubu (2019); The impact of Bank Credits on the Manufacturing Sector in Nigeria (1980-2015). *Internat. J. Sci. & Management Studies*. E-ISSN: 2581- 5946.
- Segun, M., Okuneye, N., Joshep, Babatunde, A., Amaefule (2017). Bank Credit and Growth of the Manufacturing Sector Nexus in Nigeria: An ARDL approach. *Euro Economica*. ISSN: 1582-8859.
