

ANALYSIS OF FINANCIAL STATUS OF THE IDBI BANK THROUGH VARIOUS MODELS

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ABSTRACT

The Industrial Development Bank of India (IDBI Bank) was established as a wholly-owned subsidiary of Reserve Bank of India in 1964 to provide credit and other financial facilities for development of the fledging Indian Industry. It has undergone various changes from its inception to till date. Therefore, an attempt has been made in this paper is to evaluate the influencing factors of net profit and periodic changes in the functioning of the IDBI Bank.

KEYWORDS

IDBI Bank, Financial Status, Linear Regression, Tukey's Hamming Model

INTRODUCTION

IDBI is now the principal financial institution for coordinating the working of institution for coordinating the working of institutions engaged in financing, Promoting or developing industry, assisting the development of such institutions and providing credit and other facilities for the development of industry. The main objective of the Industrial development Bank is to serve the apex institution for term finance for industry in India.

OBJECTIVES OF THE STUDY

This research study is pursued with the following objective:

- ☞ To analyse the factors influencing the Net profit of the bank
- ☞ To assess the periodic changes in the functioning of the IDBI Bank

REVIEW OF LITERATURE

The various studies relating to the financial performance of the banks are given as under:

S.Dasarathan¹ (2011) in his thesis, “A Study on the Financial Performance of Cooperative Banks in Tiruchurapalli District” has analysed in detail the deposit mobilization, solvency, liquidity, profitability performance, loans and advances and overdues through ratio analysis.

C.H.Sreesha and M.A Joseph² (2012) in their article on “Financial Performance of banks in Banc assurance: A study with special reference to state banks of India” analyse the performance of SBI in banc assurance. Ratio analysis is one of the most important techniques of financial statement analysis which is generally used to find out the financial performance.

Harish Kumar Singla³ (2013) in his article on “Financial Performance of Banks in India” examined that management plays a crucial role in the growth of banking. It is concerned with examining the profitability position of the selected sixteen banks. This study reveals that the profitability position is reasonable. It is proved by the nature of investment.

A.Ramachandran and N.Kavitha⁴ (2014) in their article entitled, “Financial Performance of New Private Banks with other Bank Groups in the Banking Industry” deal with the financial indicators which are analysed by using the growth rate, compound growth rate and ratio analysis.

METHODOLOGY

This study is based on secondary data. The data required for the study have been collected from the annual accounts of the IDBI Bank, books, journals and the like. Discussions have also been held with the officials of the bank. The overall analysis has been done through S.P.S.S. Package – Version 16.0

PERIOD OF THE STUDY

This study covers a period of 10 years commencing from 2006-07 to 2015-16.

ANALYSIS OF THE STUDY

Factors Influencing Net Profit

In this section, an attempt has been made to assess the extent of influence of factors on the net profit of IDBI Bank during the period from 2006-07 to 2015-16. For assessing the influencing factors on the net profit, Multiple Linear Regression Analysis has been used and ten variables have been identified. In order to avoid the problem of multi-collinearity, among the ten coefficient factors, the factors such as interest income, non interest income, non interest expenditure and total expenditure were dropped, since these factors are included and form

a factor in the other coefficient variables. Hence, the independent variables taken up for running the regression analysis such as net profit, interest paid, total deposits, spread, total income, burden and net working funds. The functional form of regression model is as follows:

$$Y=b_0+b_1X_1+b_2X_2+b_3X_3+b_4X_4+b_5X_5+b_6X_6$$

Where Y= Net Profit

X_1 = interest paid, X_2 = total deposits, X_3 = total income, X_4 = spread

X_5 = burden, X_6 = net working funds, b_0 =intercept,

b_1 to b_6 are regression coefficients

The analysis is made through SPSS Package-Version 16 and the results are given in Table 1

Table 1 – Factors Influencing Net profit – Regression Estimates of the Factors

| <i>Factors</i> | <i>Coefficient</i> | <i>T</i> | <i>Significance</i> |
|-----------------|--------------------|----------|---------------------|
| (Constant) | -- | -0.948 | 0.397 |
| Interest paid | -1.228 | -1.273 | 0.272 |
| Total deposits | -0.171 | -0.387 | 0.718 |
| Total income | 2.387 | 2.294 | 0.084 |
| Burden | 0.039 | 0.522 | 0.629 |
| Networking fund | -0.111 | -1.586 | 0.188 |
| R^2 | 0.989 | | |
| F | 69.037 | | |

Source: Secondary data

Note: Dependent Variable: Spread

Table 1 exhibits the regression estimates of the influencing variables of Net profit. Among the related six factors, the coefficient of interest paid, total deposits, burden and the net working funds show values which are less than 0.05 and hence are statistically significant. The coefficient of burden and spread are closely equal to 0.05 which shows that each unit increase in these factors will contribute a unit to net profit and hence the result is as per the expectation. The coefficient of the interest paid, total deposit and net working funds are negative. This negative influence of the interest paid is mainly due to two reasons. One is the level of short term deposits whose major portion is supposed to be idle. The second is the influence of fixed deposit on which the interest payable component is high. Only when this source is effectively utilized, it may contribute to high interest revenue and profits. The growth in deposits had been higher than that of advances and hence the negative coefficient. However it is not found to be statistically significant. Even though the coefficients of total income and the interest paid are statistically not significant, the sign of the coefficient are up to the expectation in that the result shows a negative relationship between interest paid, total deposits, net working funds and net profit as well as a positive relationship between total income burden and the net profit. Thus, it can be

concluded that the factors such as total deposits, spread, burden, net working funds, interest paid and total income are the factors influencing the net profit of the IDBI Bank.

Periodic Changes in the Functioning of the Bank Tukey-Hamming Model

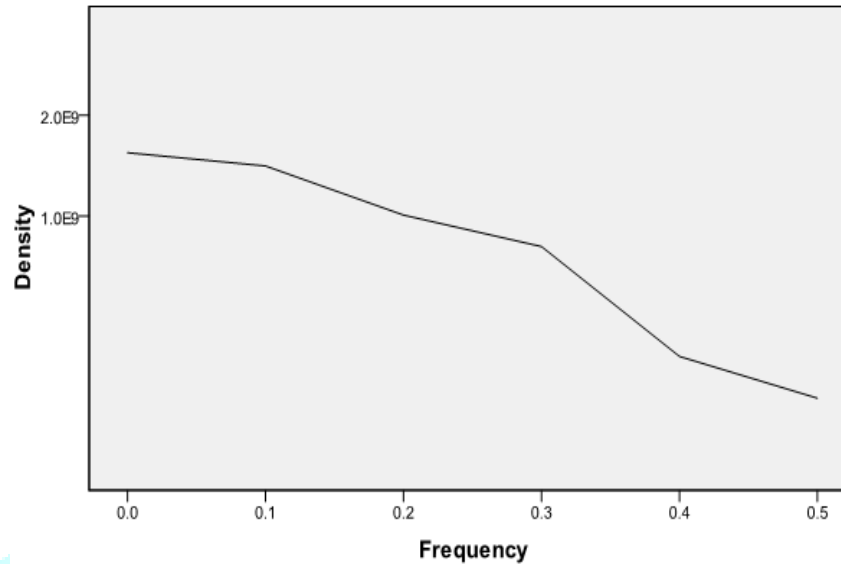
At present, there are many techniques available for evaluating the periodic changes made in the overall functioning of financial institutions including the banks. Tukey-Hamming Model is one among them. Tukey-Humming Model is a statistical device used to analyse the periodic changes in the selected variables (ratios) taken for the study.⁴ Spectral density for the variables pertaining to operating profit, operating expenses, capital employed, interest expenses and gross income has been analysed in this model.

The spectral density is useful to analyse the periodic changes in the above mentioned variables. It constructs suitable Sin and Cosin transform function, periodogram value and spectral density estimates for each variable every year. This would help to identify strong seasonal components and the presence of longer cycles in the data. The analysis is done through S.P.S.S Package – Version – 16.1 and the results are presented in the model description Table 2 and Figure 1

Table 2 - Periodic Changes in the functioning of the bank – Model description

| | | | |
|-----------------|------------------------------|--------------------|-------|
| Model Name | MOD_1 | | |
| Analysis Type | Univariate | | |
| | 1 | operating profit | |
| | 2 | operating expenses | |
| Series Name | 3 | capital employed | |
| | 4 | interest expenses | |
| | 5 | gross income | |
| Range of Values | Reduced by Centering at Zero | | |
| Spectral Window | Tukey-Hamming | | |
| Window Span | 5 | | |
| | Weight Value | | |
| | 1. Operating Profit | W(-2) | 1.204 |
| | 2. Operating Expenses | W(-1) | 1.923 |
| | 3. Capital Employed | W(0) | 2.240 |
| | 4. Interest Expenses | W(1) | 1.923 |
| | 5. Gross Income | W(2) | 1.204 |

Source: Secondary data

Figure 1 - Spectral Density of capital employed by Frequency**Window: Tukey – Hamming (5)**

From Table 2, it is found that Tukey- Hamming values are all greater from one, which implies that there is statistical significance at 5 per cent level. Thus it is inferred that operating profit, operating expenses, capital employed, interest expenses and gross income are showing an increasing trend and the capital employed and gross income presented its data with longer cycles rather than the other variables. It is followed by two subsequent variables namely operating expenses and interest expenses. The spectral density values clearly indicated on increasing and positive trends for a span of 10 years from 2006-07 to 2015-16. Therefore it can be concluded that in IDBI Bank, the capital employed depends upon its operating expenses and interest expenses. They have more proximity with capital employed. It is also found through spectral analysis for the operating profit in IDBI Bank has constantly maintained importionality with gross income for the 10 years.

Conclusion

It can be concluded from the linear regression the influencing variables of Net profit, the coefficient of the spread and burden are influencing passively and interest paid, total deposit and net working funds are influencing negatively. From the Tukeys hamming model, it can be concluded that in IDBI Bank, the capital employed depends upon its operating expenses and interest expenses. They have more proximity with capital employed.