Financial Structure And Profitability Of IFCI Ltd. : An Empirical Analysis

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ABSTRACT

A company's Capital Structure determination constitutes a difficult decision that involves several antagonistic factors. Profitability is the main factor for consideration at the time of designing the capital structure of a firm. The purpose of this paper is to examine the extent to which growth determines the Capital Structure of IFCI Ltd. This is done by examining some component of capital structure in relation to IFCI Ltd. and then testing the resulting ideas empirically. This paper may provide useful insights for the interested parties, such as owners, investors etc.
Keywords: Financial Institution, IFCI Ltd., Capital, Shareholders' Fund, Loan Fund, Leverage, Working Capital, Profitability

INTRODUCTION

"Successful industrialization has always been dependent on factors such as availability of entrepreneurship, efficient production techniques, skillful management methods and above all, adequate financial resources." [3]

The need for and the necessity of financial institutions capable of promoting new industries and catering to the medium and long-term capital needs of the existing industries for their expansion and modernization gave birth to the concept of development banking. Development banks have been conceived and adapted to fill in the institutional void by many underdeveloped and developing countries of the world to promote and accelerate their economic growth in the post-world war era. They are advised not to compete with other agencies of industrial finance and are required to satisfy themselves before sanctioning loans that the funds are not available to the borrowing party from any other source on reasonable terms.

The idea of establishing specialized institutions for the provision of finance for industry was given by different commissions and committees long before independence and finally took concrete shape with the establishment of IFCI. The first step towards building up a structure of development finance institution was taken with the establishment of the Industrial Finance Corporation of India in July 1948, with a view to provide medium and long-term credit to units in the corporate sectors and industrial co-operatives [5]. Development banks have been conceived of as gap fillers [7]. There is a positive relationship between a firm's performance and capital structure, measured by short-term loans and total loans [1]. After 15 years of experience as the pioneer development bank in the country, IFCI was converted from a Statutory Corporation into a Public Limited Company on July 1, 1993.

RESEARCH METHODOLOGY

❖ **Collection of Data And Its Analysis Method:** The present study is based on the Secondary Data extracted from the annual reports of IFCI Ltd. from 2005-06 to 2010-11, from which financial structure of the company has been taken. The collected data were analyzed by using statistical tools and techniques namely Correlation and Regression Analysis. In order to get the results, statistical software such as MS-Excel and SPSS have been used. Charts and Figures had been prepared for presenting and simplifying the process of analysis.

OBJECTIVE OF THE STUDY

The main objective of this study is to analyze the financial structure which help to identify the shortcoming and inadequacy of the fund to raise profit during the study period.

HYPOTHESES

For analyzing the objectives of the study, the following null hypotheses are to be tested :

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1) Loan fund is not contributing towards the profitability of the company.

2) Financial Leverage is not casting a favourable impact on the corporation's profitability.

3) Working Capital is not favourably influencing the profitability of the company.

CAPITAL STRUCTURE OF IFCI LTD.

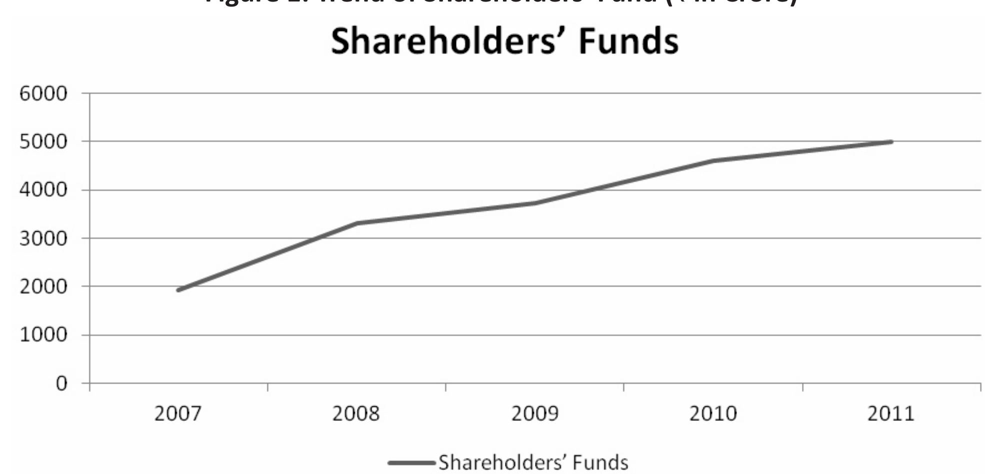
Capital Structure consists of Share Capital i.e. Equity Shares, Preference Shares, Reserves & Surplus and Loan Funds. The trend of Capital Structure is analyzed in three parts i.e. Shareholders' Funds, Loan Funds and Capital Employed.

Table 1: Shareholders' Fund of IFCI Ltd. (₹ In Crore)

Year	Share Capital	Reserves and Surplus	Shareholders' Funds	Changes (in times)
2007	1,067.95	873.84	**1,941.79**	-
2008	1,190.32	2,134.55	**3,324.87**	**0.71**
2009	1,108.29	2,632.47	**3,740.76**	**0.13**
2010	1,001.68	3,608.12	**4,609.80**	**0.23**
2011	1,001.68	4,001.72	**5,003.40**	**0.09**
Average	**1,073.98**	**2,650.14**	**3,724.12**	**0.29**

Source: Computed from Annual Reports of IFCI Ltd. - 2007 to 2011

Figure 1: Trend of Shareholders' Fund (₹ in Crore)



Source: Computed from Annual Reports of IFCI Ltd. - 2007 to 2011

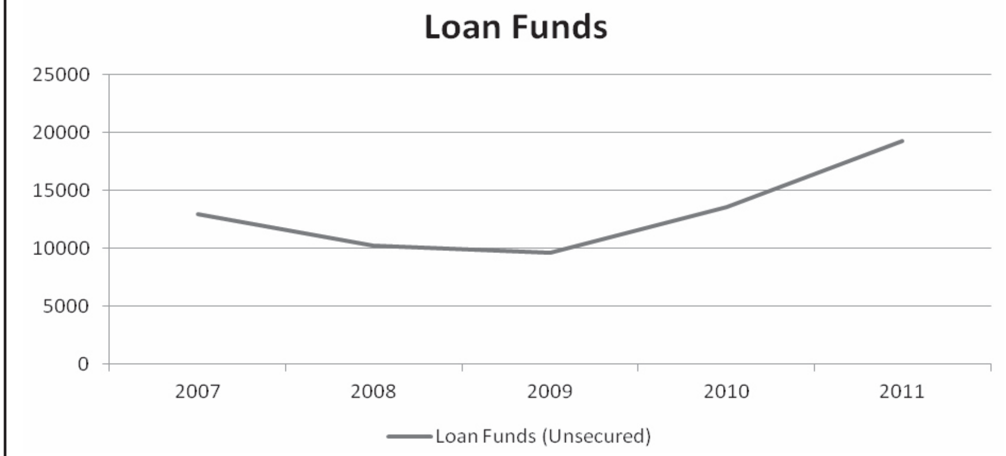
The Table 1 depicts that the Share Capital of IFCI Ltd. increased during 2007 to 2008 due to the issue of new equity shares, but in the next year, a decline is noticed in the share capital value, which was caused by the redemption of

Table 2: Loan Funds of IFCI Ltd. (₹ In Crore)

Year	₹ Loans	Foreign Currency Loans	Loan Funds	Changes (in times)
2007	11,452.50	1,471.78	**12,924.28**	
2008	9,595.91	627.08	**10,222.99**	**-0.21**
2009	9,042.49	631.29	**9,673.78**	**-0.05**
2010	13,028.27	534.19	**13,562.46**	**0.40**
2011	18,737.72	526.85	**19,264.57**	**0.42**
Average	**12,371.38**	**758.24**	**13,129.62**	**0.14**

Source: Computed from Annual Reports of IFCI Ltd. - 2007 to 2011

Figure 2: Loan Funds of IFCI Ltd. (₹ in Crore)



Source: Computed from Annual Reports of IFCI Ltd. - 2007 to 2011

Preference Shares in 2008-09, while the equity Share Capital remained the same. In the year 2009-10, the reduction in share capital is noticed again, but it was caused due to the re-conversion of equity share into loans. Increase in Reserves & Surplus in the year 2007-08 was primarily contributed through the Securities Premium Account, which increased by ₹ 1,200.25 crore during the year, which was also a major cause of change in Shareholders' Fund by 0.71 times i.e. higher than the average change of 0.29 times during the study period. From the analysis, it clear that the Shareholders' Fund has shown an increasing trend during the entire period of study.

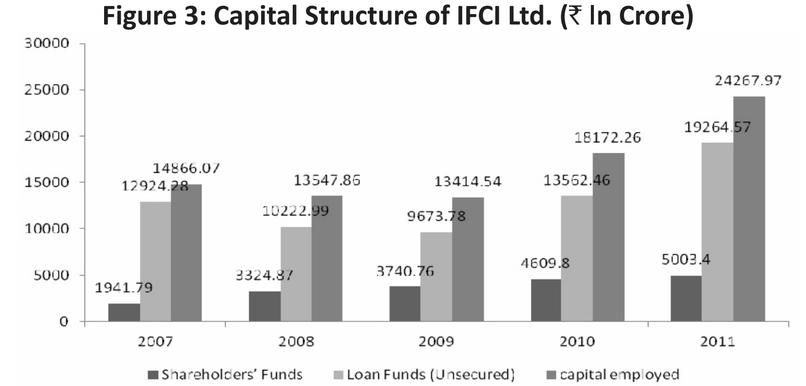
Table 2 shows that the Loan Funds of ICFI Ltd. consists of Rupee Loans and Foreign Currency Loans, in which Rupee Loans had a major share. On an average, their proportionate share in total Loan Funds was16:1 (Approx.). Total Loan Funds showed a declining trend from 2007 to 2009. However, in the years 2009-10 and 2010-11, the Loan Funds

Table 3: Capital Employed of IFCI Ltd. (₹ In Crore)

Year	Shareholders' Funds	Loan Funds (Unsecured)	Capital Employed	Changes (in times)
2007	1941.79	12924.28	**14866.07**	
2008	3324.87	10222.99	**13547.86**	-0.09
2009	3740.76	9673.78	**13414.54**	-0.01
2010	4609.80	13562.46	**18172.26**	0.35
2011	5003.40	19264.57	**24267.97**	0.34
Average	**3724.124**	**13129.62**	**16853.74**	**0.15**

Source: Computed from Annual Reports of IFCI Ltd. - 2007 to 2011

Figure 3: Capital Structure of IFCI Ltd. (₹ In Crore)



Source: Computed from Annual Reports of IFCI Ltd. - 2007 to 2011 increased due to an increase in Rupee Loans by ₹ 3,985.78 crore and ₹ 5,709.45 crore respectively, although the Foreign Currency Loans showed a declining trend. From the study of Table 3, it is clear that the solvency position of was not good as the proportion of Shareholders' Fund was quite low than the Loan Funds. The proportion between Shareholders' Funds and Loan Funds is 1:4 (approx.), which shows that a bigger part of the capital was financed by Loan Funds. The changes in the capital employed are mainly affected by the changes in the Loan Funds.

FINANCIAL ANALYSIS

The Table 4 shows the different financial ratios, which help in determining the financial position of IFCI Ltd. Debt Ratio shows the participation of Loan Funds in total assets. On an average, Debt Ratio is 0.71 times, which is higher than the standard. Highest Debt Ratio was 0.79 times in the year 2007, and the lowest was 0.65 in 2009, which is not an ideal situation. As Proprietary Ratio is also calculated on the basis of total assets, it does not depict the ideal position. Highest and Lowest Proprietary Ratios were 0.25 times in 2009, and 0.12 times in 2007 respectively. Debt Equity Ratio of the company was on an average 3.82 times, which is an adverse situation, as it should be 0.50 times (1:1). The above analysis does not show good solvency position of the company, as capital mix of IFCI Ltd. is mainly contributed by Loan Funds, whereas participation of Shareholders' Fund is comparatively less. Average Current Ratio was 5.62 in IFCI Ltd., which is higher than the ideal Current Ratio, i.e. 2 times (2:1). In the last three years of the study period i.e. 2009, 2010 and 2011, Current Ratio became much higher than the standard - 5.61 times, 7.67 times and 9.52 times respectively. This situation of Current Ratio shows that the company had blocked its capital unnecessarily in Current Assets rather than investing it in profitable opportunities. Current Assets took a bigger portion in Total Assets in the last three years, which was more than 50 percent. The company also does not depict a sound profitable position as its Return on Assets had been between 0.03 times to 0.07 times during the study period and the average Earnings per Share were ₹ 11.27.

Table 4: Financial Ratios of IFCI Ltd. (in Times)

Year	Debt Ratio	Proprietary Ratio	Debt Equity Ratio	Current Ratio	Current Assets to Total Assets	Return on Assets	Earnings per Share
2007	0.79	0.12	6.66	2.50	0.22	0.06	13.91
2008	0.67	0.22	3.07	2.82	0.30	0.07	15.22
2009	0.65	0.25	2.59	5.61	0.55	0.04	8.55
2010	0.69	0.24	2.94	7.67	0.55	0.03	9.08
2011	0.74	0.19	3.85	9.52	0.60	0.03	9.57
Average	**0.71**	**0.20**	**3.82**	**5.62**	**0.45**	**0.05**	**11.27**

Source: Computed from Annual Reports of IFCI Ltd. - 2007 to 2011

IMPACT OF CAPITAL STRUCTURE ON PROFITABILITY OF IFCI LTD.

The main objective of this study is to analyze the impact of capital structure on the profitability of IFCI Ltd. To determine the effect of working capital management on corporate profitability, the researcher used the following equations:

$$EPS = b_0 + b_1 SF + b_2 LF + b_3 CE + b_4 WC + u \text{ ....} (1)$$

$$ROA = b_0 + b_1 DR + b_2 PR + b_3 DER + u \text{ ....} (2)$$

$$ROA = b_0 + b_1 CR + b_2 CATA + u \text{ ....} (3)$$

The first equation is based on absolute value of different variables. On the other hand, the second and third equations were used to calculate the impact of different ratios on returns, whereas, the second equation determines the impact of capital structure on profitability, while the third equation establishes the effect of Working Capital on Return On Assets.

Where:

EPS= Earning per Share, SF= Shareholders' Fund, LF= Loan Fund, WC= Working Capital, ROA= Return on Assets,

Table 5: Pearson Correlation					
	EPS	CE	SF	LF	WC
EPS	1.000	-.436	-.709	-.299	-.463
CE	-.436	1.000	.705	.975	.784
SF	-.709	.705	1.000	.530	.934
LF	-.299	.975	.530	1.000	.645
WC	-.463	.784	.934	.645	1.000
Source: Computed from Annual Reports of IFCI Ltd. (2007 to 2011) with help of SPSS					

DR= Debt Ratio, PR= Proprietary Ratio, DER= Debt Equity Ratio, CR= Current Ratio, CATA= Current Assets to Total Assets Ratio, e= the error term and b_0= constant of the regression equation and $b_{1,}$ $b_{2,}$ $b_{3,}$ b_4 and b_5 are parameters to be estimated.

CORRELATION MATRIX

The correlation matrix computes the correlation coefficients between each variable of the matrix. The Table 5 shows the correlation matrix for the defined variables, i.e. EPS, CE, SF, LF and WC. From the Table 5, it was found that EPS is negatively correlated with CE, SF, LF and WC. The negative correlation between SF and EPS depicts that Shareholders' Fund was accompanied by a decrease in EPS. This is due to the SF increasing at a fast rate, while profitability did not increase at the same rate. Negative correlation between LF and EPS suggests that the purpose of borrowing loans could not be achieved since heavy borrowings led to a reduction in EPS instead of increasing profits.

Table 6: Pearson Correlation						
	DR	DER	PR	CR	CATA	ROA
DR	1	0.928421	-0.94941	-0.08549	-0.41054	-0.09216
DER	0.928421	1	-0.9873	-0.41953	-0.65903	0.206867
PR	-0.94941	-0.9873	1	0.386063	0.658562	-0.21069
CR	-0.08549	-0.41953	0.386063	1	0.924313	-0.94978
CATA	-0.41054	-0.65903	0.658562	0.924313	1	-0.86126
ROA	-0.09216	0.206867	-0.21069	-0.94978	-0.86126	1
Source: Computed from Annual Reports of IFCI Ltd. (2007 to 2011) with help of SPSS						

In the Table 6, ROA is negatively correlated with DR (low degree), PR (low degree), CR (high degree), CATA (high degree), while it is low degree correlated with DER. Tables 5 and 6 demonstrate that profitability is not significantly correlated with the financial structure of the company.

Table 7: Multiple Regression Result			
Variable	Coefficient	t-value	One sided p value
Intercept	25.4362	3.732	0.167
SF	-0.0034	-2.123	0.280
LF	0.0010	-0.563	0.674
CE	-0.0036	0.852	0.228
WC	0.0013	1.558	0.363
Standard Error of Estimate		2.318	
Coefficient of Determination (R Squared)		0.857	
Dependent Variable		EPS	
Source: Computed from Annual Reports of IFCI Ltd. (2007 to 2011) with help of SPSS			

MULTIPLE REGRESSION ANALYSIS

Table 8: Multiple Regression Result			
Variable	**Coefficient**	**t-value**	**One-sided p value**
Intercept	0.7799	1.8575	0.1565
DR	-0.7842	2.1352	0.1394
DER	0.0001	0.0068	0.4978
PR	-0.8718	1.0778	0.2381
Standard Error of Estimate (SEE)			0.013
Coefficient Error of estimate (R-squared)			0.8279
Dependent Variable			ROA
Source: Computed from Annual Reports of IFCI Ltd. (2007 to 2011) with help of SPSS			

$$EPS= b_0 + b_1\, SF+ b_2\, LF+ b_3\, CE + b_4\, WC+ u \quad ....(4)$$

In the Table 7, the impact of financial structure components on profitability is shown with the help of multiple regression analysis. The Table 7 shows that the impact of Shareholders' Fund, Loan Fund, Capital Employed and Working Capital were insignificant as seen from the values of the regression co-efficient. Regression analysis shows that there is a minor effect on Earnings per Share. For a unit increase in Shareholders' Fund and Capital Employed, profitability decreased by 0.0034 unit and 0.0036 respectively, which are statistically insignificant at 5% level. Similarly, one unit increase in Loan Fund would increase the Earnings per Share by 0.0010 unit, which is not statistically significant at the level of 5%. One unit increase in Working Capital increases EPS by 0.0013 unit, which is also statistically insignificant at the 5% level. The independent variables explain 85% of the variations in the dependent variable.

Table 9: Multiple Regression Result			
Variable	**Coefficient**	**t-value**	**One-sided p value**
Intercept	0.0833	6.3525	0.0119
CR	-0.0035	0.9606	0.2191
CATA	-0.0396	0.6130	0.3011
Standard Error of Estimate (SEE)			0.008
Coefficient Error of estimate (R-squared)			0.890
Dependent Variable			ROA
Source: Computed from Annual Reports of IFCI Ltd. (2007 to 2011) with help of SPSS			

$$ROA= b_0 + b_1\, DR + b_2\, PR+ b_3\, DER +u........(5)$$

The Table 8 presents the impact of ratios of capital structure on the profitability through multiple regression analysis. In the Table 8, the impact of Debt Ratio, Debt Equity Ratio and Proprietary Ratio are examined on Return on Assets. One unit increase in Debt Ratio and Proprietary Ratio decreases ROA by 0.7842 and 0.8718 unit, which are statistically insignificant. Increase of one unit in Debt Equity Ratio increases ROA by 0.0001 unit. The independent variables explain 83% of the variations.

$$ROA= b_0 + b_1\, CR+ b_2\, CATA + u........(6)$$

The Table 9 depicts the impact of working capital ratios i.e. Current Ratio and Current Assets to Total Assets on the profitability ratio i.e. Return on Assets. One unit increase in CR and CATA decreases ROA by 0.0035 and 0.0396 unit, which are not statistically insignificant at the 5% level.

CONCLUSION

It is a known fact that the financial decision of any corporation is a complex affair which involves the analysis of different variables - the present work tries to evaluate the relationship between financial structure and Return On Assets. IFCI Ltd. has since long been facing the problem of low profits and various factors were taken into consideration during the study to analyze the impact of Loan Fund, Financial Leverage and Working Capital on profitability. These factors failed to demonstrate any effect on the increase in profit of IFCI Ltd. From the study, it is found that more than 70 percent of the total assets are financed by Loan Funds, which is not a good sign of profitability since the liabilities of the corporation on fixed interests exceed the earnings from fixed assets. The profitability was not favourably affected by the Loan Funds during the period of analysis due to this trend. The aforesaid fact is supported by the figures of Company's Debt Equity Mix, which also shows an adverse figure, as it is 4 times on an average. During the study period, profitability, measured on the basis of EPS and Return on Assets, had declined, which shows that financial structure of the company failed to increase the profitability. For the testing of the hypotheses, Correlation and Multiple Regression analysis have been used. The results support the null hypotheses and prove that Loan Funds failed to enhance the profitability of the company. The second hypothesis of the study is also proven correct due to the ineffective Capital Mix. Lack of favorable impact of working capital on IFCI Ltd.'s profitability, as denoted by their negative correlation and insignificant regression results, helps in accepting the third hypotheses of the study.

SUGGESTIONS

On the basis of the above results, some suggestions may be given to overcome the problems engulfing the company. IFCI Ltd. should reduce its Loan Funds gradually so as to remove the burden of non operating expenses, i.e. interest on profits. Just by reducing the Loan Funds, the problem of decreasing profit cannot not be solved; and hence, the company should reach an optimum level of capital mix. For this purpose, IFCI Ltd. should redesign its capital structure, such that it can gain maximum profit at minimum risk. At last, it was seen that a large amount of working capital is blocked in loans to assisted concerns, which the company should try to recover at the earliest. Materialization of the above suggestions is expected to increase the profitability by maintaining appropriate capital structure, leverage and working capital in IFCI Ltd.

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