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How IFRS Based Financial Statement Define the Relationship between Capital Structure and Firm's Profitability: An Analysis based on Selected Indian Companies

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Abstract

Capital structure is defined as the composition of Debt and Equity. When Company earn profit, Return on Debt treated as expenses before tax and return on Equity is the distribution of profit after tax. The earlier study disclosed that there is a strong relationship between capital structure and firm's profitability when Indian Companies prepared their financial statement as per Indian Accounting Standard. But from 2010-11 financial year, some Indian Companies prepared there financial statement as per IFRS according with Indian accounting standard. In this paper through multiple regression analysis, try to find out whether the same relationship exists or not when the Indian Companies prepare their financial statement as per International Financial reporting Standard. In this study, data have been extracted from the 2010-11, financial statement which were prepared as per IFRS.

Keywords:

Capital Structure, Profitability, Indian Accounting Standard, IFRS

Introduction

When a firm raised its capital structure from different sources, mix of these sources generally called Capital Structure. A Company balance Sheet shows the different proposition of Debt, preferred and common stock which are jointly represent the capital structure of that company. According to Bierman & Smidt Capital structure is nothing but the relative proposition of various kinds of securities used by a company. A common choice between Debts and Equity aims to maximize the wealth of stock holder. So, it means that Capital structures have a direct effect on the firm's value and profitability. Modiglini and Mill (1963) define how the firm value will increase by using debt capital into capital structure of a Company. Return on Debt capital is an item which is consider as a pre tax factor at corporate level. For identifying this corporate tax benefit against the relevant cost, so many research have been done from the last few decades and the result is that, researcher developed the trade-off theory.

The main objective of financial management is to create the Shareholder wealth or maximize the firm value. Through minimizing the weighted average cost of capital, a firm can achieve it. Empirically there are so many researches across the globe on the relationship between Capital Structure and Firms profitability. Most of them have found a strong relationship between capital structure and Company's profitability. But all the researches have been done when the respected country followed the local accounting standard.

In India, Financial statement basically prepared as per Indian Accounting standard where all the Assets including financial instrument measured as per historic value or the book value. Depreciation calculation, revenue recognition, borrowing cost calculation has been done as per AS 9 and AS 16 respectively. In the year of 2010, when ICAI announced their opinion regarding the adaptation of IFRS and officially said to disclosed the next financial statement as per IFRS, some Indian company voluntarily adopt it and presented their financial statement ,2010-11 as per IFRS.

In open economy, where entire globe treated as a common village, need a common set of business language which is easily understandable for all. On the basis of this concept International Accounting Standard Board formulated the International Accounting Standard. Most of the countries in the globe have already been adopt this international standard. To keep all this things in mind ICAI have announced the adaptation year for India.

In this paper I have tried to find out whether the same relationship between Capital structure and firm's profitability exist or not when Indian Companies prepare their financial statement as per International Accounting Standard.

Review of Literature

Ibiamke et.al **(2014)** disclosed how financial ratios have been effect by IFRS adaptation in Nigeria. They found that IFRS adaptation does not differ significantly but through gray Comparability Index they show that IFRS negatively effect on financial ratios. Khalid Ashraf Chisti et.al **(2013)** carried a research on Impact of capital structure on profitably of Listed Companies (Evidence from India).They found that Debt to Equity ratio was negatively correlated with profitably ratio and Debt to Assets ratio was positively correlated with profitably ratio. Rameltulla & Elsana Ejupi **(2010)** conducted a research on the relationship between capital structure and profitability at Macedonia. They found a negative relationship with return and Debt. Yhlas Sarbetor **(2013)** carried a study to find out how IFRS impact on financial ratio in U.K market. They revealed that IFRS does not make any significant difference on financial ratio of U.K firms. Dr Mohanmod Fawzi Shibita & Dr jaafer maroof **(2012)** concluded that there is a negative relationship between Capital structure and Profitability.Irena Jindrichovska & Dana Kubisckova **(2014)** found some positive result on financial ratios by adopting IFRS on Czech Republic. Balios Dimitrios et.al **(2013)** studies the impact of IFRS on ratio of listed and new listed Companies of Athens Exchange. They found that there is no significant effect from the adaptation and implementation of IFRS in Greace.Other way they found a strong relationship between local GAAP and IFRS.Ying Wang & Michael Campbell **(2012)** revealed that there was no change on financial figure by adopting IFRS of Chinese Companies through Tobin's Q Test. Balasundaram Nimalathesan & valeriu Brabeta **(2010)** conducted a study at Sri Lanka on this relationship. They found that Debt Equity ratio was positively correlated with all the profitability ratios.Debt to assets ratio was strongly associated with major profitability ratios. Susana Callao **(2007)** has done a research on the effect of IFRS adaptation on the comparability and relevancy of financial reporting in Spanish Firm. They stated that most of the ratios significantly differ due to application of IFRS. Dr. Edward Lee et.al **(2008)** conducted a study on the impact of IFRS on Cost of Equity Capital. They found some limited and mixed result of this impact. Ahmet aca & Rafet Akta **(2007)** imparted the impact of IFRS on financial ratio when the Turkish listed firms adopt it first time. They found that IFRS adaptation did not have significant effect on Turkish firm. Ishaya luka chechet & Abduljeetlee badmus Olayiwola **(2014)** conducted a study at Nigeria on the relationship between Capital Structure and Profitability. They conclude that Debt ratio was negatively correlated with profitability ratio.

Objectives of the Study

The review of literature disclosed that where a country changed her accounting language from local standard to IFRS. The relationship between the financial figures also changed. So, on the basis of this concept, the objectives of this study are:

1. To find out the relationship between capital structure and net profit
2. To find out the relationship between capital structure and Operating profit
3. To find out the relationship between capital structure and return on capital employed
4. To find out the relationship between capital structure and return on investment

Methodology and Hypothesis

Sample selection: As per ICAI previous announcement, the first time adaptation of IFRS and presentation of financial statement period was 2010-11.But they failed to meet the target. Still it is not a mandatory criterion. At that time, some Indian companies voluntarily adopt it. They are 1. Wipro Ltd. 2. Infosys Ltd.3. Rolta India Ltd. 4. Noida toll Bridge ltd and 5.Great eastern electronics Ltd. In this study, I have considered 2010-11 financial year for analyzing this relationship.

Data Source: To meet the objectives and testing the hypothesis, data were collected from the secondary source, mainly the financial statements which have published at Companies Annual Report.

Design of Statistical Analysis: In this study capital structure and Co's profitability expressed as ratios. To find out the relationship, some major capital structure's ratios and some profitability ratios have been considered. These are:

Capital Structure Ratios

1	Debt to Equity	D/E
2	Debt to Assets	D/A
3	Capital gearing	CG

Profitability ratios

1	Net Profit ratio	NPR
2	Operating Profit ratio	OPR
3	Return on capital Employed	ROCE
4	Return on Investment	ROI

Multiple regression Equations have been formulated to prove the objectives and two ways ANOVA is considered to test the hypothesis.

The following Equations are being formulated to measure the impact of Capital structure on profitability. Where profitability ratios are dependent variable and capital structures ratios are independent variables.

$$1.NPR = \alpha + \beta_1(D/E) + \beta_2(D/A) + \beta_3(CG) + e \qquad (1)$$

$$2.OPR = \alpha + \beta_1(D/E) + \beta_2(D/A) + \beta_3(CG) + e \qquad (2)$$

$$3.ROCE = \alpha + \beta_1(D/E) + \beta_2(D/A) + \beta_3(CG) + e \qquad (3)$$

$$4.ROI = \alpha + \beta_1(D/E) + \beta_2(D/A) + \beta_3(CG) + e \qquad (4)$$

The following hypothesis has been formulated to determine the relationship between capital structure and firm's profitability as per IFRS based financial statement.

Hypothesis

H_1: Capital structure has an impact on net profit.

H_2: Capital structure has an impact on Operating profit.

H_3: Capital structure has an impact on Return on Capital Employed.

H_4: Capital structure has an impact on return on Investment.

Analysis and Findings

Capital Structure Ratios on Net Profit Ratio

REGRESSION STATISTICS	
R Square	0.992280533
Adjusted R Square	0.969122133
Standard Error	0.019269433
Observations	5

On the above regression results, show that R Square value is 0.99 and the Adjusted R Square is 0.96.So we can conclude that 96% portion of net profit ratio can define by the capital structure ratios and other 4% may be some other factors.

ANOVA					
	df	*SS*	*MS*	*F*	*Significance F**
Regression	3	0.047729	0.01591	2.84754	0.111723364
Residual	1	0.000371	0.000371		
Total	4	0.048101			

*5% Significant Level

On the other hand ANOVA table show that the calculated F value is 2.84 which is higher than the tabulated F value (0.111) at 5% level of significance. So here we reject the null hypothesis and can conclude that there is a strong relationship between Capital structure and net profit numbers , when Companies prepare their financial statement as per IFRS.

Capital Structure Ratios on Operating Profit Ratio

Regression Statistics	
R Square	0.174366293
Adjusted R Square	-2.302534828
Standard Error	0.562302294
Observations	5

On the above regression results, show that R Square value is 0.174and the Adjusted R Square is --2.30.So we can conclude that capital structure ratios does not carry any relationship or better to say carry a negative relationship with operating profit ratio. May be the reason is that operating profit calculate by the operating expenses and operating income, there is no role of financial cost.

ANOVA					
	df	*SS*	*MS*	*F*	*Significance F**
Regression	3	0.066775144	0.022258381	0.070396954	0.967311295
Residual	1	0.31618387	0.31618387		
Total	4	0.382959014			

*5% Significant Level

On the other hand ANOVA table show that the calculated F value is 0.0703 which is lower than the tabulated F value (0.967) at 5% level of significance. So here we accept the null hypothesis and can conclude that there is a no relationship between Capital structure and Operating profit numbers which have prepared as per IFRS base financial statement

Capital Structure Ratios on Return on Capital Employed

Regression Statistics	
R Square	0.843695435
Adjusted R Square	0.674781741
Standard Error	0.095077476
Observations	5

On the above regression results, show that R Square value is 0.84 and the Adjusted R Square is 0.67.It depict that 67% portion of return on capital employed can define by the capital structure ratios and other 33% may be some other factors .So we can conclude that there is a relationship between capital structure ratios on return on capital employed.

ANOVA					
	df	*SS*	*MS*	*F*	*Significance F**
Regression	3	0.048794	0.016265	1.799255269	0.48994051
Residual	1	0.00904	0.00904		
Total	4	0.057834			

*5% Significant Level

On the other hand ANOVA table show that the calculated F value is 1.799 which is higher than the tabulated F value (0.489) at 5% level of significance. So here we reject the null hypothesis and can conclude that there is a strong relationship between Capital structure and return on capital employed, when Companies prepare their financial statement as per IFRS.

Capital Structure Ratios on Return on Assets

Regression Statistics	
R Square	0.890476736
Adjusted R Square	0.761906945
Standard Error	0.067288756
Observations	5

On the above regression results, show that R Square value is 0.89 and the Adjusted R Square is 0.761.It leads to the conclusion that 76% portion of return on capital employed can define by the capital structure ratios and other 24% may be some other factors .So we can conclude that there is a strong relationship between capital structure ratios on return on Assets.

ANOVA					
	df	*SS*	*MS*	*F*	*Significance F**
Regression	3	0.036813	0.012271	2.71016	0.413546488
Residual	1	0.004528	0.004528		
Total	4	0.041341			

*5% Significant Level

On the other hand ANOVA table show that the calculated F value is 2.710 which is higher than the tabulated F value (0.413) at 5% level of significance. So here we reject the null hypothesis and can conclude that there is a strong relationship between Capital structure and return on capital employed which have got as per IFRS base financial statement.

Support from the Literatures

Moazam. Me et.al (2011) conducted a study and disclosed that there is a significant relationship between capital structure and profitability: case study on Tobacco Industry in Pakistan. Khalid Ashraf Chisti et.al (2013) carried a research in India on the Impact of capital structure on profitabily of Listed Companies. They found that Debt to Equity ratio was negatively correlated with profitabily ratio and Debt to Assets ratio was positively correlated with profitably ratio.

Conclusion

These findings led us to the conclusion that IFRS adoption does not have a significant effect on the relationship between capital structure and firm profitability. As per earlier study in India, when Companies prepared their financial statement as per Indian Accounting standard, researcher found a strong relationship between capital structure and firm profitability. The same tradition is being carried when Indian firms adopt IFRS voluntarily.

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