

## A Study on Determinants of Capital Structure in Andrew Yule & Corporation Limited in India

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**Abstract:** The capital structure is fundamentally the forms of acquiring the permanent long term financing of firm. Although there has been abundance of research focusing on the most important determinants of capital structure. This study aims to identify the determine of capital structure factors of Andrew Yule & Corporation Limited. The factors considered are financial leverage, size, return on investment, tangibility, non-debts tax shield, tax liability on capital structure. The data collected from Andrew Yule & Corporation Limited web site, period of the study is ten year (2005-2006 to 2014 -2015). The result generally consisting theory of capital structure, predictions as well as previous research papers.

**Keywords:** capital structure, Andrew Yule, investment

### INTRODUCTION

In finance, capital structure refers to the way a corporation finances its assets through some combination of equity, debt, or hybrid securities. A firm's capital structure is then the composition or 'structure' of its liabilities. The Modigliani-Miller theorem, proposed by Franco Modigliani and Merton Miller, forms the basis for modern thinking on capital structure, though it is generally viewed as a purely theoretical result since it disregards many important factors in the capital structure decision process, factors like fluctuations and uncertain situations that may occur in the course of financing a firm[1]. In today's global recessionary Economic environment the sustainability of a firm heavily depends on the ability and sources of its financial management function. Traditionally corporate finance involves three important decisions. Although there has been abundance of research focusing on the most important determinants of capital structure, they are not uniform since several factors significantly differ to ally affect a firm's combination of debt, equity and further sources of financing that is used to fund its long-term asset. However, investors are better off putting their money into companies with strong balance sheets and also profit value generating. Common sense tells that such companies should have, generally speaking, debt and equity levels to provide sufficient profits which theoretically point to high debt and low equity. But a company considered too highly leveraged (too much debt versus equity) may find its freedom of action restricted by its creditors and/or may have its profitability hurt as a result of paying high

interest costs. Of course, the worst case scenario would be having trouble meeting operating and debt liabilities during periods of adverse economic conditions. Lastly, a company in a highly competitive business, if hobbled by high debt, may find its competitors taking advantage of its problems to grab more market share. Theoretically, the financial manager should plan for an optimum capital structure for his company. The optimum capital structure is obtained when the market value per share is maximum. There is significant variation among industries and, among individual companies within an industry in terms of capital structure. Since a number of factors influence the capital structure decision of a company, the decisions of the person making the capital structure decision plays a crucial part. Two similar companies can have different capital structures if the decision makers differ in their decisions of the significance of various factors[2]. A totally theoretical model perhaps cannot adequately handle all those factors, which affect the capital structure decision. Some of these factors are psychological complex and qualitative and do not always follow accepted theory, since capital markets are not perfect and the decision has to be taken under in perfect knowledge and risk.

### STATEMENT OF THE PROBLEM

Financial requirement is continuous one for any business organization. Whenever a company needs any funds for medium or long-term purpose, the finance manager of the company has to decide on its source. This is referred to as capital structure decision and is a

critical one since it is to be decided whether the financial needs are to be fulfilled by issue of equity or debt or internal source or a combination of these. Importance of capital structure decision lies in deciding the source of finance considering various factors theoretically identified. This study attempts to identify the determinants of capital structure of multiproduct company in India. Andrew Yule Corporation limited it is also a major player in the industry. Hence, capital structure of a company is determined by various factors. The significant of factors according to the industry to which it belongs. Every industry has its own natures, diversified industry differs from other industries, since it products various line of products. Capital structure decision of the industry is difficult one. Andrew Yule & corporation limited is one of the diversified companies. The researcher has made an attempt to study the determinants of capital structure of the company.

### OBJECTIVES

The study has been made with the following objectives;

1. To identify the factors determining the capital structure of Andrew Yule & Corporation Limited.
2. To measure the combined impact of such factors on the capital structure of Andrew Yule & Corporation Limited

### METHODOLOGY

#### Selection of the company

The researcher has been selecting the Andrew Yule & Corporation Limited. It is the top companies in diversifies business in terms of sale. The influence of select factors on the capital structure changes were analyzed over the period of ten years from 2005 - 06 to 2014- 15[3].

### Data collection and source

This study mainly considered accounting variable, they were extracted from profits and loss account and balance sheet of the selected company, which were taken from the annual reports of the said company of the concerned years.

### Scope of the study

This study is intended to analyze the influence of factors of capital structure changes in terms of debt equity ratio. This is considered as dependent factor and the variables financial leverage, size return of investment, tangibility, non-debts tax shield, and tax liability are considered as independent factors. These factors are taken for the study on the basis of past research works reviewed by the researcher. Other factors are considered out of scope of the study.

### Tools of analysis and measurement of variables

Dependent variable: D/E ratio total debts/total equity,  
Independent variables: Size natural logarithm of sale,

ROI = EBIDA/GFA+CAN,  
Tangibility = Net Fixed Assets/Total Assets,  
Non Debt Tax Shield = Depreciation/EBIT,  
Tax liability = Tax paid/ EBIT

The study used regression analysis as statistical tool to find influence of selected independent variables on changes of capital structure.

### DATA ANALYSIS AND INTERPRETATION

**Table 1: Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.997 <sup>a</sup>	.994	.981	.06923
a. Predictors: (Constant),tax liability, size, tangibility, non-debts, ROI				

#### Interpretation

Table 1 Shows that the calculated value of R, R square and adjusted R square of selected determinants of capital structure of Andrew Yule & Corporation Limited stood at 0.997, 0.994 and 0.981 respectively.

All the selected factors namely financial leverage, return on investment, tangibility, non-debt tax shield and tax liability explained capital structure of the company to the extent of 98.1 percent as shows by the result of adjusted R<sup>2</sup>.

**Table 2: ANOVA<sup>a</sup>**

	Model	Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	2.283	6	.380	79.382	.002 <sup>b</sup>
	Residual	.014	3	.005		
	Total	2.297	9			
a. Dependent Variable: dept equity						
b. Predictors: (Constant), tax liability, size, tangibility, non-debts, ROI						

#### Interpretation

Table 2 shows the result of ANOVA for the regression analyze model used for the study in order to test the influence of selected independent variable on changes of capital structure. The study has analyzed influence of selected independent variables on change

of capital structure of the selected company. The overall regression analysis in table 2 the overall statistical fitness of the regression model is indicated  $F = 79.382$  which means is that the model is fit.

**Table 3: Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	6.209	1.206		5.147	.014
	Financial leverage	-.582	.123	-.342	-4.739	.018
	Size	-.915	.101	-.766	-9.074	.003
	Return on investment	1.667	.164	.840	10.171	.002
	Tangibility	9.874	1.034	.969	9.549	.002
	Non debt tax shield	.905	.223	.346	4.065	.027
	Tax liability	1.996	.359	.520	5.566	.011
A. Dependent Variable: Dept Equity						

### Interpretation

#### Financial leverage

Financial leverage is one of the variables which influence capital structure of the company. It was calculated as the Changes in Earning per Share divide by Changes in Earning before Income Tax of the company. The result showed that the co-efficient of regression analysis was negative at -0.342; it means financial leverage negatively influenced on capital structure of the company and it was significant at five percent level as shows by result of p value 0.018. Hence financial leverage has significant negative influence on capital structure of the company.

#### Size of the firm

Firm size is one of the variables which influence capital structure of the company. It was calculated as the log of sale of the company. The result showed that the co – efficient of regression analysis was negative at -0.766, it means firm size negatively influenced on capital structure of the company and it was significant at one percent level as shows by result of P value 0.003. Hence firm size has significant negative influence on capital structure of the company.

#### Return on investment

The return on investment is one of the variables which influence capital structure of the company. It was calculated as earnings before interest and tax, depreciation and amortization by gross fixed assets + current net assets of the company. The results shows that the co-efficient of regression analysis was positive at 0.840, it means return on investment positively influenced on capital structure of the company and it was significant at one percent level showed by the P value at 0.002. Hence return on investment had significant positive influence on capital structure of the company. This is understandable

because, firms with higher profits may able to generate retained earnings in sufficient amounts or sometimes would be contributing positively towards equity due to their profits.

#### Tangibility

Tangibility is one of the variables which influenced capital structure of the company. It was calculated as Net Fixed Assets divided by total assets of the company. The results shows that the co-efficient of regression analysis was positive at 0.969, it means tangibility influenced capital structure of the company positively it was significant at one percentage level shows by P value 0.002. Hence tangibility had significant positive influence on capital structure of the company.

#### Non-debts tax shield

Non-debts tax shield is one of the variables which influenced capital structure of the company. It was calculated as depreciation by (EBIT) Earnings before Interest and Tax of the company. The result showed that the co – efficient of regression analysis was positively at 0.346, it means non debts tax shield positively influenced capital structure of the company and it was significantly and positively influenced on capital structure of the company.

#### Tax liability

Tax liability is the one of the variables which influenced capital structure of the company. It was calculated as tax paid divided by (EBIT) Earnings before Interest and Tax of the company. The results showed that the co-efficient of regression analysis was positive at 0.520; it means taxliability positively influenced capital structure of the company and it was significant at five percent level as shown by the result of P value (0.011), hence tax liability had significant

and positive influence on capital structure of the company. Corporate taxes are usually levied by all of government the tax liability are measured by tax paid by profit before tax.

### CONCLUSION

The research has been undertaken to analyze the determinants of capital structure of Andrew Yule & Corporation Limited. A total of seven factors were considered for the study. The factors financial leverage, size, return on investment, tangibility, non-debts tax shield and tax liability explained capital structure of the company of the extent of 98.1 percent the result of adjusted  $R^2$ . All the selected factors had significant impact on capital structure of the company, among them the factors financial leverage and size had negative impact on capital on capital structure and other selected factors had positive impact on capital structure.

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