

# RELATIONSHIP BETWEEN PROFITABILITY, FREE CASH FLOWS, DIVIDEND AND LEVERAGE

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**ABSTRACT:** *The study is aimed to examine the relationship between firm Profitability, Free Cash Flows, Dividend, and Leverage of companies listed on the London stock exchange. In this research paper Profitability, Free Cash Flows, Dividend, and Leverage variables are used. Conventionally profitability, free cash flows, dividend and debt are very important for a firm and company. Every firm manages these financial terms to the best of the interest of the organization. The Source of data collection is Secondary and data has been collected from the financial statement of listed companies of London stock exchange. The 50 companies and 9 years data from 2007-2015 is used for the analysis. Descriptive Approach is used to verifying whether a hypothesis of the research are satisfied or not. SPSS Software is used in this study for getting results. The regression analysis by SPSS is used for analysis. The result showed negative and significant relation between firm's profitability and leverage and the significant level is 0.01. The relation between free cash flows and leverage is positive but insignificant. The dividend payout has negative relation with leverage.*

**Key words:** Profitability, Free cash Flows, Dividend, Leverage

## INTRODUCTION:

Any person invests in the business or the company to earn profit, no one wants to face a loss in a business he invested, whether he invested his capital or ideas, and it depends on the situation [1]. The profit that is earned by the person invested in the business is known as a dividend in term of finance. A company always needs a cash to pay off its cash, owned to others. If the company fails to pay off its money owned to others, then it would be difficult to manage the organization along with facing complications in converting its assets to cash. From it is concluded that cash flows are different then profit of a company [2]. Cash flow is very essential for a company to go all the way in maintaining its business either it relates to long term or short term [1]. The free cash flows is the cash flows that be result in after subtracting capital expenditure from cash flows from operating activities [3]. The consumption of the imitated money in order to boost the creation of the goods (production) along with the sales of the products and making increase in the money for work performed (earning) is considered as the financial leverage. The higher amount of money owed to the other will result in the high financial leverage of the company or a firm or an organization [4]. The leverage is considered to be the favorable status of possessing a small amount of the cost of production of labor in comparison to the coming gain of the company. Most of the companies consume the leverage for the benefit of the company, any company which has the leverage is not required to increase in equity, and this result in an increment in the investment of the company the company is able to run its operations more actively than anything else [5].

## Literature Review

[6] Evaluated "The Effect of Leverage on Cement Industry Profitability". For this purpose 28 cement firms have been studied on Tehran Stock Exchange during the time period 2008-2011. Leverage variables were considered as the

independent variables. Profitability variables were considered as dependent variables of research and the regression model and descriptive have been used in order to test the hypotheses. The results suggested that there was a significant and negative relationship between leverage and firm profitability. [4] Studied "The Effect of Financial Leverage on Profitability and Risk of Restaurant Firms". This study presented an empirical insight into the relationship between return on equity (ROE), financial leverage and size of firms in the restaurant industry. Research results suggested that at least during the test period firm size had a more dominant effect on ROE of restaurant firms than debt use, larger firms earning significantly higher equity returns. Results also suggested that regardless of having lower financial leverage, smaller restaurant firms were significantly more risky than larger firms.

## Methodology:

In this research paper the variables are firm profitability, free cash flow and dividend payout are independent one and leverage is dependent variable. Conventionally profitability, debt and dividend are considered important for any company or a firm. If the firm contains high amount of profitability, it will have more leverage, along with this a company should have high leverage when it endures high profitability and more leverage. The company having low leverage along with lower ratio of dividend payout will possess more growth opportunities along with an increase in the investment. Most of the companies aim to pay attention on attaining high free cash flows in order to maintain a good performance in the future and to keep the company safe from any hard times. This research is based on the "Quantitative Research". The data for this research is gathered through financial statements of the selected companies which is a secondary source of collecting data as this research is related to four financial terms free cash flow, dividend payout, leverage and firm profitability. This research paper is based on the descriptive research as the data for analysis of this research paper is

gathered through secondary source from the financial statements of the companies. An” deductive approach” is used to define the way of doing research along with the system of accomplishing the research questions and also refers to the data that is collected for analysis and also verifying whether that data satisfies the hypothesis of the research or not. The data for this research paper is collected from financial statement of the companies listed in the London stock exchange (LSE). The companies selected in different sectors

#### Sample size:

The 50 companies listed on the London stock exchange (LSE) are selected for the analysis. The data for 9 years is used that is collected from the financial statements available in the annual reports of the companies. The data from 2007-2015 is collected.

#### Hypothesis of research:

This research is being conducted to find relation between the firm profitability, free cash flow, dividend payout, and the leverage of any company or a firm. The hypothesis drawn for the research work is given below:

H1: Firm’s profitability has anegative and significant effect on leverage

H2: Free cash flows has positive relation with leverage

H3: there is a negative relation between dividend payout and leverage

#### Analysis and interpretation

Here is the analysis of 50 companies of LSE for the year 2007-2015. All variables are already explained in the above data now the relation between them is being explained based on the base of data gathered from the financial statements of the companies listed on London Stock Exchange by using various means and sources

#### Descriptive Statistics

	Mean	Std. Deviation	N
Leverage	1.705899446	10.46666579	450
ROE	0.208049543	1.529652048	450
FCF	3983.665241	24398.04687	450
Dividend Payout	1.791246731	25.97618874	450

The above table is of descriptive statistics. This table provides the reader with the information about the number of variables being used in the analysis. It is used as sample of the population and the coefficients used in the research paper. Four variables are used in this research paper which are free cash flow, dividend payout ratio, return on equity and debt to equity ratio. Here we calculate mean and standard deviation of variable. The Mean is average of set of all numerical numbers and to calculate the mean sum of all numerical number in a set and divide on total quantity of numerical number and the Standard deviation mean how much differ

quantity member of group from the mean of the group. The mean of the leverage is 1.7 and standard deviation is 10.64 and 450 observations. The mean of Return on Equity is 0.20 and standard deviation is 1.529. The Mean of Free Cash Flow is 3983.66 and the standard deviation is 24398.04. The mean of Dividend payout ratio is 1.79 and Standard deviation is 25.97.

#### Regression Analysis

The relationship between return on equity, free cash flow (FCF), dividend payout ratio, and debt to equity ratio has been investigated by ANOVA Table. OLS regression results are also presented in this table.

#### Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.690a	0.477	0.473	7.59630

a. Predictors: (Constant), Dividend Payout, ROE, FCF

Result explain in this table shows that the R square is 47.7 percent variance in the dependent variable (R Square = 0.77; R Square adjusted = 0.473). It means regression model use in this table is very good predictor. The independent variable shows that 43.3% variation in model. The correlation between the variable explained the (R=0.690) that means the

strong relationship between the variable.

#### Analysis of Variance:

Analysis of Variance (ANOVA) is a statistical method that was used to test differences between the variable of listed firms. The results are provided in the table below:

#### ANOVA

Model	Sum of Squares	Df	Mean Square	F	Sig.
1 Regression	23452.536	3	7817.512	135.477	.000b
Residual	25735.905	446	57.704		
Total	49188.441	449			

a. Dependent Variable: Leverage

b. Predictors: (Constant), Dividend Payout, ROE, FCF

From the ANOVA's results shows that the regression results significant value less than 5%, which mean significant relationship exist between independent variable and dependent variable. It means 1% increase in one variable in result to change into another variable. Model is found statistically 5% significance level.

significant ( $F = 135.477$ ,  $p\text{-value} = 0.000$ ) though all the explanatory variables included in this model. This result shows that the overall regression model is statistically significant and is useful for prediction purposes at

**Coefficients**

Model		Unstandardized Coefficients		Standardized	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.693	0.367		7.337	0.000
	ROE	-4.725	0.234	-0.690	-20.159	0.000
	FCF	7.823E-07	0.000	0.002	0.053	0.958
	Dividend Payout	-0.004	0.014	-0.009	-0.276	0.783

a. Dependent Variable: Leverage

The table shows that independent variable firm profitability (return on equity) has a negative and significant effect on leverage. The un-standardized co-efficient between return on equity and leverage is -4.725. The significance level is 0.000. The free cash flow has positive, but insignificant effect on leverage. The dividend payout has a negative and insignificant effect on leverage. The positive relation means these variables are directly related to each other so the increase in one value will cause the increase in the other value too, and the decrease in the one variable will cause a decrease in the other value. There is a negative relation means that the variables have an inverse relation between the each other so the increase in one value will cause the decrease in the other value and the decrease in the one variable will cause an increase in the other value.

The result of 50 companies for the time period of 9 years is explained above in the analysis section. The interpretation related to the topic has also been done. The main hypothesis is that there is negative and significant relation with firm profitability and leverage. In this analysis the firm profitability is computed by the way of computing return on equity ( $\text{Net income} / \text{shareholders' equity}$ ) from data sample the leverage is taken from its formula of  $\text{total debt} / \text{total equity}$ . The return on equity is independent variable and leverage is dependent variable. The results show that there is a negative relation between two variables and the table of regression coefficient shows that un-standardized co-efficient of ROE is -4.725 and the significance level is 0.000 that indicates these variables in this analysis have strong negative and significant relation which each other. It means that if profitability increase then leverage will decrease and if leverage decrease then profitability will increase.

In this analysis, it is show in the table that free cash flows have insignificant, but positive relation with the leverage. But the relationship is not strong. The positive relation indicates that the increase in one variable will cause the increase in other and the decrease in one variable also cause decrease in other variable. The firms that have free cash flows surplus,

they do not need debt for operation. These firms should distribute the profit to equity holders. But sometimes management wants to hold free cash flows for expansion of business but for expansion purpose the free cash flows available is not suffice the all requirements then they need debts to finance new projects. By the use of available free cash and debt firms starts new products or make capital investments for the sake of increase of future profitability, in these scenario increase in free cash flows will cause a increase in leverage.

In this analysis the relation between dividend payouts and leverage is negative and insignificant. Negative relation indicates that they have an inverse relation with each other. It means that increase in one variable will decrease other variable and decrease in one variable will cause an increase in other variable. This relation indicates that more levered firms have low dividend payouts and as debts increase the dividend payout reduces. Normally, it is seen that that the firms have more debts to repay, their free cash flows are being utilized mainly for payment of debts. Due to finance cost the firm's net income also increases and the firms generate free cash flows they all mainly use to repayments of debts and these firms have no cash surplus for payments of dividend.

#### CONCLUSION:

The relation between return on equity (ROE) and firm's leverage was observed in the analysis section. The firm's leverage is measured as a debt to equity ratio in this research paper. Most of the companies consume the leverage for the benefit of the company; any company which has the leverage is not required to increase in equity, and these results in an increase in the investment of the company. The company is able to run its operations more actively than anything else. The increase in the leverage could result in higher risks for the company because in case the financier or the investor capitalizes its leverage as a source of investment rather than their own investments. This could result in large amount of loss by financier, if the loss occurs in the business they

invested. If they invested through non leverage means and on contemporary if the gain occurs it could result in large amount of gain for the investor if they invested through leverage mean. Financial leverage is that type of the ratio that is used by any company to communicate that which of the capital is extracted from the borrowings and which is through the financial capital. The increase in the amount of the financial leverage ratio is useful to the company in the boom period, but in case the recession occurs this can have unfavorable impact and can cause cash flow problems for the company. In is analysis, it is seen that firms profitability has significant and negative relation with the leverage, the significance level is 0.000.

The overall result that is concluded from above all discussions in this research paper is that there do exist a significant relation between the financial terms or the variables of this research paper but the level of significance varies from variable to variable. Profit, free cash flows, dividend and leverage, all these terms are very important for any company or an organization because you can't run any business without them. So it is also important for any organization or the company to maintain its stability that affects the business in a positive sense. The companies are required to manage its strategies according to the recession and boom period of the economy. The higher ratio of return on equity shows that the shareholders are being facilitated with high return. These types of all strategies depend on the profit, the managerial policies or roles of the companies. For the betterment of the business the companies need to focus on the capital, leverage and dividend that are really important for them.

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