

Impact of Leverage, Profitability and Dividend Policy on Firm Value: An Explanatory Study

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ABSTRACT

This research investigated the relationship between leverage, profitability and dividend policy and firm value for the steel companies, based on market capitalization, listed on the Bombay Stock Exchange. The study utilized data from audited financial statements of 6 companies spanning from 2019 to 2024 i.e. for a period of 5 years. The study employed descriptive statistics and multiple regression analysis to assess the data. The study showed that the selected variables viz., debt equity ratio, return on net-worth and dividend payout ratio have no significant impact on the dependent variable firm value. The author recommended to companies and policymakers to make informed decisions in identifying the internal reasons for having such no impact to improve the situation and thereby helping investors to take informed decisions.

Key Words: Market capitalization, Leverage, Firm value, Dividend policy, profitability

INTRODUCTION

Companies in this competitive world have to be creative and effective in using the resources and capturing the opportunities available. The business world also expects the company management to be efficient to improve their performance by utilizing their

ability to take advantage of any opportunities to improve company performance. It is important to improve the company performance through strategies, techniques and business tools appropriate and suitable for the company. Investors use firm performance as a barometer of the success of the company while investing their funds. Higher level of the firm performance has its impact on the company's stock market price in the form of increases which act signal to investors to invest funds. As a representation of the firm value, the rising stock market prices show that the firm value is also increasing. Therefore, the firm value is the factor shown through increase in stock prices. More number of studies were available which contributed to science and management policies, for example capital structure theory by Modigliani and Miller, 1958 and 1963, agency theory by Jensen and Meckling, 1976 and so on. Theories are built from experimental research that has been done to address phenomena that occur and develop in business activities. So the problems arising in business act as base for research activities leading to theories that are then used as the basic foundation for the decision making and framing policies for the survival of the company. The policies generally focus on the development of the company by increasing the firm performance and the firm value.

The firm value ensures safety and interest of the investors and so increasing the value of the firm results in increasing their welfare. This task of maintaining and increasing the value falls on the shoulders of the management as an agent on behalf of the investors to carry out company operations effectively. Therefore, the management decide policies that impacts the firm value positively. Such policies may be related to funding policies, investment policies, and operational policies (Sudiyatno, 2010) which plays an important role in increasing the firm value through performance. So continuous researches help the policy makers in framing their policies to achieve the expected results

Problem Statement

Every company in India or other tries to increase the competitiveness continuously on account of increasing competition in both domestic and international markets. Companies are required to maintain or obtain high profits by effectively managing operational and financial activities. In addition to earning maximum profits, the companies are striving to maximize profit by using existing resources to attract the investors. Investors while taking decision on investment by looking into the companies with high value. High value is the reflection of higher stock prices in the market. The stock price is the relevant tool to measure the value of the company. The value of the company that is formed through the stock market value attracts the investors to make investment. But in general, several factors like leverage, profitability, liquidity, dividend policy, managerial ownership, institutional ownership, investment opportunity, and firm size will affect the firm value. So it is necessary for the companies to find out the values of their own firms to ensure presence in the market and to find out the measures needed to improve the value further compared to the competitors.

Under this background, the researcher interested in taking up a study to analyse the impact of Leverage, Profitability and Dividend Policy on Firm Value to help the companies and also adding knowledge to the existing literature. So the researcher carried out the present study to achieve the following objectives.

Objectives

1. To measure the leverage profitability and dividend policy of the selected companies on selected variables.
2. To analyse the impact of the selected variables on the firm value

REVIEW OF LITERATURE

1. **Septiana Mar'atus Sholikhah, Nabila Kharimah Vedy and Zain Khiswari (2022)** in their study analysed the factors that can lead to the perspective of the company's profitability based on dividend policy with company value as a moderating variable. The study was carried on 10 Indonesian Banks using Moderate Regression Analysis. The results showed that profitability and company size had a positive effect on the company's dividend policy and the company value moderates the effect of profitability on dividend policy.
2. **Taiwo Asalu and Olayinka Akinlo (2012)** in their study showed that the leverage was negatively related to profitability. The study discovered that the use of debt by the firms decreases the profitability so they suggested that the firm should need to reduce the debt ratio to boost the profitability.
3. **Khan Huma (2012)** analysed of relationship between working capital and profitability and impact of working capital on profitability and liquidity and the results indicated that all the variables are interrelated and based on the relationship of each other, the firms have to maintain

liquidity position, working capital and maintain profitability.

4. **Dr. J. Michael Sammanasu and Dr. A. Pappurajan(2017)** in their study analysed and understand the impact of leverage on the profitability of the firm by investigating the relationship between the leverage (financial leverage, operating leverage and combined leverage) and the earning per share. It described how the earning capacity of the firms is influenced by the fixed operating costs and the fixed financial charges. The study suggested that the leverage and profitability are related and the leverage is having impact on the profitability of the firm.
5. **Thi Ngoc Bui, Xuan Hung Nguyen and Kieu Trang Pham(2023)** investigated the relationship between capital structure and firm value for companies listed on the Vietnamese stock market using data relating to 769 companies spanning from 2012 to 2022 using financial ratios viz., return on assets (ROA), return on equity (ROE), and Tobin's Q. The findings indicated that the debt ratio positively influenced ROA, ROE, and Tobin's Q and the long-term debt ratio indicated no significant influence on firm value. The study suggested that informed decisions shall be made by companies, investors, business leaders, and policymakers in selecting an optimal and sensible capital structure.
6. **Divya Aggarwal and Purna Chandra Padhan (2017)** examined the effect of capital structure and firm quality on firm value of selected BSE listed Indian hospitality firms over a time frame of 2001-15. It is an empirical study with the help of variables including firm quality measured through Altman Z score, leverage, size, profitability, tangibility, growth, liquidity along with macro variables of growth in gross domestic product and inflation by applying pooled OLS, fixed effects and random effects models. The study revealed that there existed significant relationship of firm value with firm quality, leverage, liquidity, size and economic growth.
7. **Panda A.K., Nanda, S., Hegde, A., and Paital, R. R. (2024)** investigated the key determinants of firm value along with contribution of each factor for the firm value of eight major Indian manufacturing firms for the period from 2009 to 2020 with the help of the variables such as enterprise value, effective tax rate, firm size, profitability, firms' growth rate, financial leverage, asset tangibility, and non-debt tax shield employing linear, non-linear, and non-parametric panel regression models. The study showed that the capital structure is found to be significantly and positively affect the value of firms in the lower percentile, profitability across all the quantiles and sales having no impact on the value.
8. **Sayanth Sudheer and Vishnu N S (2022)** analysed the impact of capital structure on the firm value of IT companies listed in the Bombay Stock Exchanges using data for the period of 2012 to 2021. The results of the study indicated that long term debt has no impact on the firm value, the short term debt has a negative relationship, Equity has significant positive impact, Size and profitability has significant positive relationship. But Liquidity has a negative relationship with the firm value and recommended that Indian IT companies should try to decrease the debt in their capital structure and increase the equity to maximize the firm value.
9. **Elsa and Sheila (2017)** through their study found that there exists a significant relationship between capital structure and ownership structure and value of the firm with growth opportunity as mediating variable.

10. Indah Ayu Johanda Putri, Budiyanto and Triyonowati (2023) studied the impact of company size, company growth, and intellectual capital on financial performance on company value using quantitative method. The results showed that company size, company growth, and intellectual capital have an effect on financial performance and Firm size and intellectual capital, and financial performance have a significant effect on firm value.

11. CA Rucha Pinakin Sheth Dr. Sanjay Ajmeri (2022) studied the impact of capital structure on firm value of ten B2C companies in India with the help of financial variables and macroeconomic factors. The study found that Size, Age, ROA, Inflation and Tangible Assets have impact on Firm Value and ROE, GDP, Financial Leverage, Growth Rate, Debt Equity Ratio and Current Ratio have no impact on Firm Value.

12. Luu HuuDuc(February, 2021) has analysed impact of capital structure of 23 chemical companies listed under Vietnam Stock Exchange on the value of firm for the period of 8 years from 2012- 2019. The study used quantitative research method taking firm value as a dependent variable and revenue growth rate, capital structure, assets turnover, solvency, firm size, firm age, return on assets and fixed tangible assets as independent variables. Regression model was used by the study and it concluded that capital structure of a company has a major impact on value of firm and also these chemical companies have to take care about the firm size and assets turnover ratio.

METHODOLOGY

This type of research is explanatory research. This research type determines the effect of each variable on one another. The population for the study consisted steel companies in

India listed in Bombay Stock exchange. The sample for the study is part of this population taken using purposive sampling method. The criteria for selecting the research sample are listing in on the Bombay Stock Exchange and market capitalization. The study period was 2019-20 to 2023-24 covering five years. Based on the sample selection procedure, the number of samples obtained is six companies. The type of data is quantitative data in numerical form that can be processed and analyzed using statistics. The data used for the study was taken from the secondary data sources available in the form of evidence, records or historical reports that are arranged for publication or not. The research data source of the current study is the financial statements of the sampled companies, website of money control.com and other records and evidences where the needed data and information are available.

The variables have been selected based on the objectives of the study ensuring the right value of the variable based on the measurement determined. The variables selected for the present study covered the following:

- a. The value of the company revealing the company's performance based on demand and supply of the stock market expressing the public assessment which is represented by price to book value (PBV). This is calculated by using the formula, the price per share divided by the book value per share.
- b. Leverage ratio is a ratio used to measure the method of financing the company's assets. The study used Debt to equity ratio (DER) to represent leverage. It is the proportion of total liabilities on total equity.
- c. The profitability ratio measure the level of efficiency of net-worth of the shareholders and profitability achieved and it is proxied by return on networth (RONW). It is calculated using the formula of net

income after tax divided by total net worth.

- d. Dividend policy is a strategy used by the company to distribute its profits. Dividend policy is represented by dividend payout ratio (DPR) of the selected companies. It is calculated by the formula as dividends per share divided by earning per share.

RESULTS AND DISCUSSION

Table 1 Descriptive Statistics of Selected Variables on Performance

Variables	N	MEAN	MIN	MAX	SD
RONW	6	15.01	9.14	21.6	4.33
DER	6	0.51	0.07	0.9	0.29
DDPOR	6	17.62	0	33.98	14.53
PB	6	1.53	0.69	2.85	0.77

Source: Calculated by the author from secondary data

The amount of data is 6 samples studied during the period of 2019-2020 to 2023-24. The dependent variable is firm value (PBV) and the independent variables considered for the study are leverage (Debt equity ratio), profitability (Return on Equity), and dividend policy (Dividend Pay out Ratio).

1. The leverage variable has the lowest value of 0.07%, meaning that the lower the DER value, the smaller the debt owned, and the highest value of 0.9% indicating higher amount of debt exposing the company to higher risk. With an average of 0.51%, it describes the high own capital owned and the minimum debt is below 1 i.e., 50% of the own capital and the standard deviation of 0.29%. The value of standard deviation is less than the mean value, indicating that there is a gap between the highest and lowest DER.
2. The profitability variable has the lowest value of 9.14, meaning that the lower the RONW value, the smaller the net profit generated by the company from the capital owned, and the highest value of 21.6% indicates higher the net profit generated by the company. With an

average 15.01%, the company's net profit generated from its own capital is very high and the standard deviation is 4.33%. The standard deviation is lower than the mean value indicating that there is a gap between the highest and lowest RONW.

3. The dividend payout ratio variable has the lowest value of 0.00%, meaning that the amount of dividends distributed by the company is small, and the highest value of 33.98% means that the amount of dividends distributed is large. With an average of 17.62%, the dividend distribution is good enough because and the standard deviation is 14.53 and this value is lesser than the mean value. It indicated that there is gap between the highest and lowest DPR.
4. The variable value of the company which is taken as Price-book value per share has the lowest value of 0.69%, which means the moderate market trust in the company, and the highest value of 2.85% describes the company as having a high value and gaining the trust of investors. With an average of 1.53%. It showed that the company has good value and there is demand from the investors to invest because it is more than 1 and the standard deviation is 0.77%. A standard deviation is lower than the mean value indicated a gap between the highest and lowest PBV.

Application of Multiple Regression Analysis

Multiple regression measures the strength of relationship between two or more variables. It speaks about the impact of independent variables on the dependent variable and highlighted the extent of impact. This analysis was performed to know the strength or the extent to which the selected independent variables impacted the dependent variable viz., price book value. The outcome of test is presented as tables in the following pages.

Table 2 Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.915	0.837	0.593	0.496

Source: Calculated by the author from secondary data

Model summary indicated that the coefficient of determination (R square value) explains the extent to which changes in the dependent variable can be explained by the change in the independent variables or the percentage of variation in the selected dependent variable (price book value per share) as explained by three independent variables (debt equity ratio, return on net-worth ratio and dividend payout ratio). R-Square is used to quantify the variation of the independent variable to the dependent variable expressed as the proportion of the influence of all independent variables on the dependent variable. The results of the coefficient of determination (R²) in the above table obtained the number R² of 0.837 or 83.7%. This shows that DER, ROE, and DPR have an influence on firm value of 83.7%, while the remaining 16.3% is influenced by other variables that are not included in this model. It may be other factors that are internal or external to the company.

Table 3 Result of Application of ANOVA Test

	df	SS	MS	F	Sig F
Regression	3	2.545	0.848	3.43	0.233
Residual	2	0.493	0.246		
Total	5	3.0389			

Source: Calculated by the author from secondary data

In general, the result of significant value 0.000 indicate that the model is good predictor of the relationship between the dependent and independent variables. The ANOVA test in the above table showed that significance value of the selected ratios of the study showed debt equity ratio, return on net-worth ratio and dividend payout ratio 0.233 which is more than alpha value 0.05 thus the model is not statistically significance in predicting how the said ratios influenced profitability of firm value of selected steel companies in India.

Table 4 Results of Co-efficient

Variables	Co-efficient	Standard error	t-stat	p-value
Intercept	-2.11316	1.234057	-1.71237	0.228961
RNOW	0.159399	0.058283	2.734907	0.11173
DER	2.379837	0.875503	2.71825	0.11288
DDPOR	0.002086	0.015936	0.13088	0.907847

Source: Calculated by the author from secondary data

The result of the multiple regression as showed in the above table in terms of the co-efficient value of all the selected variables viz., return on net-worth ratio, debt equity ratio, and dividend payout ratio. The P-values of all the said selected independent variables are compared with the selected significant value ie. 95 % level and it revealed the following.

The Effect of Leverage on Company Value

Based on the results of hypothesis testing in table 2 it is showed that the value of t count (2.718) > t table (2.571) with a significance level of 0.112 > 0.05 and so H₁ is rejected indicating the fact that the independent variable (debt to equity ratio) has no effect on firm value.

The Effect of Profitability on Firm Value

Based on the results of hypothesis testing in table 2 shows the value of t count (2.734) > t

table (2.571) with a significance level of $0.111 > 0.05$. Based on the comparison test in terms of the significance value, H2 is rejected. This means that the independent variable (return on networth) has no effect on firm value.

The Effect of Dividend Policy on Firm Value

Based on the results of hypothesis testing in the above table 2 showed the value of t count ($0.130 < t$ table (2.04227) with a significance level of $0.907 > 0.05$. Based on this test, H3 is rejected, meaning that the independent variable (dividend payout ratio) has no effect on firm value.

CONCLUSION

This study was conducted to examine the impact of leverage, profitability and dividend policy impacted firm's value. Based on the analysis, it can be concluded that the selected variables ie., debt equity ratio, return on net-worth and dividend payout ratio have no significant impact on firm value. Various internal factors related to individual companies may be contributing to having no significant impact on firm value. So while taking decisions on funding, the management shall be careful in decisions having in mind the proper combination of debt capital and equity capital and measures relevant to increasing profitability by assessing the reasons by individual companies which enable the company to ensure good dividend to the investors. The study also contributed to the existing literature.

Declaration by Authors

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