

Determinants of Firm Value in Vietnam: A Research Framework

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Abstract: Firm value is especially critical to more organizations and investors since it represents the true value of the company. This paper attempts to present a proposed a research framework for investigating the determinants of firm value. In the study, the determinants of firm value consist of firm size, capital structure, earning per share, profitability and liquidity. Data on annual financial reports of industrial companies listed on Ho Chi Minh Stock Exchange (HOSE) from 2014 to 2018 is gathered to determine the relationship among independent and dependent variables. The current study also includes return on asset, dividend payout ratio, market to book value ratio, and tangibility as control variables.

Keywords: Determinants of Firm Value, Firm Value, Industrial Company, HOSE, Vietnam

1. Introduction

An investor, before deciding to make an investment in the capital market, must believe in having the correct information. It is necessary to have trust and to have no manipulating information in the trading system. Financiers are certainly afraid to buy any offered securities by the company (or traded in the exchange) without trust. In 2009, Pinuji stated: "Indicator of investor trust at capital market is reflected by some issues, among which is public fund collected in capital market. Capital market is considered as efficient in an informational manner when there are factors supporting the capital trust such as perception on security price. An "efficient in an informational manner" capital market has its security price reflected all relevant information. The faster and more appropriate information is given to the prospective investors and is reflected in the stock price, the more efficient capital market is in concerned (Imron, 2002 and Pinuji, 2009).

According to Munawir (2007), to measure a company performance, financiers mostly use the earnings growth (such as profit) as a tool to provide information relating to management responsibilities so that prospective investors base on the company financial performance to determine their investment. To have its stock exist and interested by any investors, a company must frequently maintain and improve the financial performance – a great requirement for any company listed in the stock exchange. Moreover, the financial information plays an important role as not only information facility and management accountability tool to company owners, description on company success indicators but a consideration in decision making as well (Harapan, 2004).

One of the common manners used to analyze the financial statement of a company is ratio analysis, which can explain and illustrate the good or bad condition or financial position of a company. When it comes to the consideration in

investment decision, investors seem to base on some financial ratios such as company liquidity, leverage, and profitability.

Vietnam is an emerging market, which is highly evaluated about economics and political stability (quoted by Luoc, Institute of Economics and World Politics). Also, some stable macroeconomic policies such as monetary policy, fiscal policy and exchange rate policy were issued and effective form April 2012. Vietnam is considered to draw a lot of attention from investors in over the world in the future. However, it is not easy for foreign investors to put their money into a company. Their main target is to choose a firm that will surely bring profits to them as much as possible. This means each company must have a good performance to show that it is wealthy, stable and trustworthy so that more and more investment will come to company.

Notwithstanding, how can investors know that a firm is operating well or not? By what factors can investors base on to rate a firm? What can a firm do to improve its performance to attract internal and external investment? What factors will support a firm to control its financial activities? In fact, firm performance or firm value depends on many aspects such as leverage, export activity, location, size, effective management, inflation rate, interest rate, government policies and other macroeconomic factors... a number of studies about this problem have been conducted by researchers around the world for the same purpose which is to best understand and rightly evaluate a firm. Most of those studies focus on the samples which include the top companies listed on stock exchanges, which means there are different companies with diversification of industry. Additionally, in Vietnam, there has been a study conducted by Dang et al. to examine the influences of firm size, firm growth, capital structure and profitability on the value of enterprise with 1,070 observations at 214 companies over a period of 2012-2016. However, this current study concentrates on a specific group in Vietnam, namely

industrial company, to better bring an overview of its characteristics, to find out the determinants of the firm value, and then, to have a comparison with the previous research findings mentioned above. The industrial is one of the most developing and attractive group in Vietnam, and it plays an important role in economics as well since this group takes account for the most significant number of listed companies on Ho Chi Minh Stock Exchange (HOSE).

2. Literature Review and Hypothesis Development

2.1 Firm Value

According to Sartono (2010), companies with a long-term target of maximizing revenue and expanding properties of shareholders tend to optimize its own value (firm value). In 2015, Winarto stated that a company can take a lot of advantages thanks to the growth of firm value, such be accessible to the capital market's funding source or at competitive/high selling price in case of merge. Quoted by Hermuningsih (2013), firm value is crucial since it can be a sign of company's performance and one of the main factors influencing in investor perception of the company.

Corporate value is an economic measure which reflects the market value of a business. It can be measured by following the fluctuation of share price in the secondary market, in other words, if the share price increases, then the corporate value increases. Public have a better trust/belief on a corporate thanks to the increased share value, leading to the fact that investors are willing to pay higher with the expectation of high returns.

2.2 Firm Size and Firm Value

There are two types of companies including small companies and large-scale enterprises. Financial analysts use the size of a firm to reflect its own total assets, total capital and total sales. Firm size reflects the size or amount of assets owned by the company and has an influence on the value of the company (Horne & Wachowicz, 2009). Companies with large size indicate that investors will have positive response and the firm value will enhance. The total assets and sales have positive relationship with the company's size. The bigger the size/scale of a firm, the less difficult it is for a firm to attract the internal and external funding. Bigger companies are considered to be greatly sensitive and in capability of transferring larger wealth in comparison with smaller companies. Companies with more and more sales seem to have the money reached faster.

Several studies have been conducted to find out the relationship between firm size and firm value. To be more specific, Suffah & Riduwan (2016) and Niesh & Velnampy (2011) prove that firm size has no effect on firm value. The research results made by Khumairo et al (2016) and Haryadi also pointed out the contrary that firm value has a negative effect of firm value. In the year of 2014, Niesh & Velnampy showed the result of their research that the size of the company negatively affects the value of the company. On the other hand, in 2016, Manoppo & Arie through their findings,

conclude that firm size has a positive effect on company value. Some following researchers also admitted that firm size is a positive and significant effect on the firm value: Gill & Obradovich (2012); Prasetyorini (2013); Maryam (2014); and Rachmawati & Triatmoko (2007).

The size of firm plays a crucial role in maximizing firm value. Large firms rarely face against the financial difficulty and usually have a good economic growth rate in future. Quoted by Pantow et al. in 2015, the positive effect of firm size on the access to the funding source may improve the investors' confidence of the increase in the firm value reflected in the stock exchange price.

2.3 Liquidity and Firm Value

Liquidity can be defined as the ability of a firm to pay its current liabilities. It is also shown by the current assets which can be easily and quickly changed into cash. According to Ross et al. (2010), liquidity can be interpreted as the level of company's ability to pay its debts. Each company needs to maintain their level of liquidity since corporate funding activities will be influenced. Quoted by Jacob and Taslim (2017), a firm is considered to be liquid as long as it can fulfill the obligation at the period of maturity. Current Ratio (CR) is one of financial ratios that can be applied to make the measurement of a company's ability to its pay short term debt (Gitman et al., 2010).

Several researchs have been conducted to determine relationship between liquidity and firm value. Annisa and Chabachib (2017) argued that liquidity has no significant negative effect on firm value. While Umayyah and Salim (2018) stated that Current Ratio has an insignificant positive effect on corporate value. Jacob and Taslim (2017) stated that the current ratio has a significant effect on firm value. The bigger the current ratio shows the higher company's ability to fulfill obligations in short terms and increase the firm value.

2.4 Capital Structure and Firm Value

Capital structure is one of important factors to improve the productivity and firm performance. In the capital structure theory, it is explained that companies tend to determine the capital structure (combination between debt and equity) in their financial policy with an aim to maximize the companies' value. Ross et al. (2013) stated that since the firm's stockholders are most advantageous by the capital structure, managers ought to select the type of capital structure offering the highest value of firms.

Debt to Equity Ratio (DER) speculates how flexible a firm can fulfill its allegiance denoted by capital considered as debt, which will influence in not only the belief of investors in the company but the firm's value as well. In Manoppo and Aries (2016) study and Ahmad et al. (2015) study, they refer to this alternative and use DER as a variable of capital structure.

Capital structure describes how much percentage of corporate financing with debt, also called the ratio of firm leverage. In accordance with the Trade-off theory, the higher the Debt to Equity Ratio (DER) gets, the higher the firm value becomes on the assumption that the DER no longer reaches its optimum point. In addition, this theory shows that a growth in the value of DER (by the debt increased) can lead to an increase in the profitability as long as that debt is used reasonably. The Trade-off theory of leverage gives out an explanation that harmonizing the advantages of debt financing with high interest rates and bankruptcy (Brigham and Houston, 2011) creates the optimal capital structure. However, according to the Pecking Order theory, companies which have high profitability rates do not always face with high debt levels thanks to the generous internal resources of funding. In 2007, Megginson et al. stated that for most firms, internal funding is more favorable compared to external one because of the hierarchy of scenarios in selecting funding sources.

The results of Ahmad et al. (2015) and Antwi et al. (2012) showed that there was no significant relationship between capital structure and firm value. Nevertheless, Hermuningsih (2013), Priya et al. (2015), Rahman's (2014), Suffah & Riduwan (2016), and Manoppo and Arie (2016) Purwohandoko (2017), Sunarto and Agus (2009), and Hirdinis M (2019) pointed out that capital structure has a positive effect on firm value.

2.5 Profitability and Firm Value

Profitability is considered to become one of the crucial factors that has important influence on investor decisions making. This is because profitability shows the capacity of the firm to create net income from accounting activities. Nowadays, most investors base on the companies' financial performance (financial ratios) to evaluate and measure its value, which leads to profit-oriented paradigm applied in many companies. It is believed that companies with huge profits or good financial performance should be successful and wealthy.

Quoted by Megawati (2010), profitability describes a firm's ability to generate profit. The stock price will increase when the profitability is high. The higher the stock price leads to the higher firm value, attracting people to have more investment in that firm. Modigliani and Miller (Brigham, 1999) states that profitability is one of the determinants of firm value, to be more specific, higher and higher profits encourage the dividends to be highly shared, which helps to create firm value. Additionally, according to the Signaling theory, companies with high profitability give description of trustworthy companies' prospects. This will make not only the investor have positive responses but firm value has significant increases as well.

In the current study, Return on Equity (ROE) is used as the measurement of profitability since this ratio is closely related to the capital structure used by the company, whether influenced by the proportion of long-term debt or own capital, (Sucuahi and Cambarihan, 2016, Manoppo and Arie, 2016). Companies with high profitability ratios will draw a lot of attention from investors and manage to attract the investment to the company because high returns will be

generated. There seem to be a positive relationship between ROE and firm's value (defined as share price). Some researches were carried out by Hamidah and Umdiana (2017), Sucuahi and Cambarihan (2016), Suffah and Riduwan (2016), Sucuahi and Cambarihan (2016), and Tiska (2015) showed that profitability has effect on the value of the firm. Moreover, Annisa and Chabachib (2017), Winarto (2015) stated that profitability affects positively and significantly on firm value.

2.6 Earnings per Share and Firm Value

Earnings per share (EPS) is one of the most important financial statistics that is considered by investors and financial analysts. Earnings per share represents the profit that is gained for per ordinary share and often is used to evaluate the profitability and the risk associated with profits and making judgments about stock prices. Also, information about earnings per share is widely used in evaluating the executive operations of companies. Earnings per share compared to the previous period and the process of earnings per share are all important measures of the success or failure of a company.

A company with strong earnings per share might have the market price of its stock rise. This higher stock price might create a positive impression of the company's products in the minds of investors, resulting in greater demand, increased sales and ultimately higher earnings. Low EPS might decrease share prices, which leads to lower consumer confidence, fewer sales and ultimately lower earnings per share. But these relationships are circular and not direct. However, according to Shabani and Aghaei (2013), there is a relationship between earnings per share and stock price. On the basis of the preceding review of related literature, the research hypotheses are proposed as the followings.

H1: Liquidity has positive effect on firm value.

H2: Capital structure has positive effect on firm value.

H3: Earning per share has positive effect on firm value.

H4: Profitability has positive effect on firm value.

H5: Firm size has positive effect on firm value.

3. Methodology

3.1 Sample

To be better and efficient at analyzing and determining the research purpose, the industrial companies are chosen among other industry groups. The sample consists of 171 industrial companies registered on the Ho Chi Minh Stock Exchange (HOSE) in the period of five years from 2014 to 2018. In the present study, HOSE is chosen since HOSE is considered sufficient enough to present the examined group.

The necessary requirement for the study sample is that industrial companies must be registered on HOSE for 2014-2018 and have already published complete annual reports during 2014-2018, clearly presenting the company's financial condition in the form of assets, debt, equity, and sales.

3.2 Measurement of the Variables

3.2.1 Independent and Dependent Variables

Following the related studies mentioned previously, the formulas for measuring the independent and dependent variables in this research are described as follows.

Table 1: Measurement of Variable

Variable	Measurement
Firm value	Share Price
Firm size	Logarithm of Sales
Liquidity	Current Assets/Current Liabilities
Capital structure	Total Debt/Total Equity
Profitability	Net Income/Total Shareholder Equity
Earnings per share	(Net Income – Preferred Dividend)/Outstanding Shares

3.2.2 Control Variables

Based on the related studies on firm value, several variables considering as control variables in the regression model are Return on asset (ROA), Dividend payout ratio (DIV), Market to book value ratio (MB), and Tangibility (TANG). The control variables are measured as the followings.

Table 2: Measurement of Control Variables

Variable	Measurement
Return on Asset	Net Income/Total Asset
Dividend Payout ratio	1 – Dividend per Share/Earnings per Share
Market to Book value ratio	Market Capitalization/Total Book Value

3.3 Regression Model

Multiple regression analysis tools will be used to make it easier to determine the relationship among the variables where dependent variable is the firm value (FV) – share price and independent variables are Firm size (FS), Liquidity (LIQU), Capital structure (CAP), Profitability (PROF), Earning per share (EPS).

The regression model used for hypothesis testing is as follows

$$FV = \alpha + \beta_1(CAP) + \beta_2(FS) + \beta_3(PROF) + \beta_4(LIQU) + \beta_5(EPS) + \beta_6(ROA) + \beta_7(DIV) + \beta_8(MB) + \beta_9(TANG) + \varepsilon$$

where,
FV is firm value

$\beta_1, \beta_2, \beta_3, \beta_4, \beta_5$ are coefficients of independent variables

$\beta_6, \beta_7, \beta_8, \beta_9$ are coefficients of control variables

α is constant; ε is residual term

CAP: Capital structure

FS: Firm size

PROF: Profitability

LIQU: Liquidity

EPS: Earning per share

ROA: Return on asset

DIV: Dividend payout ratio

MB: Market to book value ratio

TANG: Tangibility

3.4 Data Collection, Process and Analysis

In this current research, necessary data is gathered from the annual report of the industrial companies, which were

published in HOSE in the period from 2014 to 2018. Descriptive statistics, Pearson correlation analysis and Regression analysis are three significant methods of data process used to test data and the relationship of examined variables. First of all, the descriptive statistics to give out a brief overview of the characteristics of the data set. This primary step is essential because it offers an overall description of sample's main characteristics and through descriptive analysis, outliers and abnormalities in the data set will be identified. Secondly, Pearson correlation is applied to test whether among the examined variables in the model, there exist correlation. The independent variables may be removed from the model or the whole model will be restricted to mainly serve the purpose of the study since through this correlation analysis, some problems lying in the model will be displayed. Lastly, to find out the relationship between dependent and independent variables, we use regression analysis called Ordinary Least Square (OLS). This is a linear regression technique used for large data set and it will support the researchers in investigating, testing and analyzing the results of the study.

4. Conclusion

Firm value is going to become more relevant to organizations as well as investors to find the actual value of the company. The purpose of this study is to propose a study on the determinants of firm value of industrial sector companies registered in HOSE. In this study, firm size, capital structure, earning per share, profitability and liquidity are the key determinants of firm value. Beside the main determinants above, several control variables consisting of return on asset (ROA), market to book value ratio (MB), dividend payout ratio (D/P) and tangibility are also examined in this study. The study sample consists of 171 industrial companies operating over five years from 2013 to 2017 with annual financial report already published in HOSE. Descriptive statistics, Pearson correlation and multi linear Regression are utilized to analyze collected data.

References

- [1] Akhtar MW, Khan FA, Shahid A, Ahmad J, "Effects of Debt on Value of a Firm", Journal of Accounting and Marketing, Vol. 5, Issue 4, 2016.
- [2] Annisa, Rizka and Mochammad Chabachib, "Effect Analysis of Current Ratio (CR), Debt to Equity Ratio (DER), Return on Assets (ROA), To Price To Book Value (PBV), With Dividend Payout Ratio As Intervening Variables", Diponegoro Journal of Management. Vol. 6, No. 1, 1-15, 2017.
- [3] Cheng, Y.-S., Liu, Y.-P. and Chien, C.-Y., "Capital Structure and Firm Value in China: A Panel Threshold Regression Analysis", African Journal of Business Management, 4, 2500-2507, 2010.
- [4] Cheung, W. M., Chung, R., Fung, S., "The effect of stock liquidity on firm value and corporate governance: Endogeneity and the REIT experiment. Journal of Corporate Finance", 35, 211-231, 2015.
- [5] Dang et al, , "Study the Impact of Growth, Firm Size, Capital Structure, and Profitability on Enterprise Value:

- Evidence of Enterprises in Vietnam”, *Journal of Corporate Accounting & Finance*. Published online in Wiley Online Library, 2019.
- [6] Faozi A. Almaqtari, Eissa A. Al-Homaidi, Mosab I. Tabash, Najib H. Farhan &, “The determinants of liquidity of Indian listed commercial banks: A panel data approach”, *International Journal of Finance & Economics*, 24(1), 168-185, 2019.
- [7] Erwin, Umayyah, and M. Noor Salim, “Financial Ratio, Firm Size, Capital Structure and The impact on the Firm Value Non Perbankan Kategori LQ45”, *Journal Ilmiah management and Bisnis Vol. 2 No. 3*, 2018.
- [8] Gill, A., & Obradovich, J., “The impact of corporate governance and financial leverage on the value of American firms”, *International Research Journal of Finance and Economics*, 91, 46–51, 2012.
- [9] Hermuningsih, Sri., “Profitability, Growth Opportunity, Capital Structure and The Firm Value”, *Bulletin Of Monetary Economics and Banking Vol 16 No. 2*, 2013.
- [10] Hidayati, Eva Eko., “Analysis of the Effect of DER, DPR, ROE and Size on Manufacturing Company PBVs that are listed on the Indonesia Stock Exchange 2005-2007”, Tesis. Program Study Magister Manajemen Program Pascasarjana Universitas Diponegoro. Semarang, 2010.
- [11] Hirdinis M. Capital Structure and Firm Size on Firm Value Moderated by Profitability. *International Journal of Economics and Business Administration*, Volume VII, Issue 1, 201, 2019.
- [12] Idah Zuhroh, “The Effects of Liquidity, Firm Size, and Profitability on the Firm Value with Mediating Leverage”, *The 2nd International Conference on Islamic Economics, Business, and Philanthropy (ICIEBP) Theme: “Sustainability and Socio Economic Growth”*, KnE. Social Sciences. DOI 10.18502/kss.v3i13.4206, 2019.
- [13] Jacob, Jufri and Taslim, Fadli Ali., *The Impacts of The Ratio of Liquidity, Activity And Profitability Towards Company Value With Dividend Policy As Intervening Variables. IOSR Journal of Business and Management (IOSR-JBM)*. ISSN: 2319-7668. Volume 19, Issue 10. Ver. IV. (October. 2017), PP 01-07, 2017.
- [14] Khumairoh, H. Mulyati, dan N. Kalbuana, “Pengaruh Leverage, Profitabilitas, dan Ukuran Perusahaan Terhadap Nilai Perusahaan (Studi Empiris pada Perusahaan Garment dan Textile yang terdaftar di Bursa Efek Indonesia Tahun 2011-2015)”, *Seminar Nasional dan The 3rd Call for Syariah Paper*, 2016.
- [15] M. Noor Salim, and Rina Susilowati, “The effect of internal factors on capital structure and its impact on firm value: empirical evidence from the food and beverages industry listed on Indonesian stock exchange 2013-2017”, *International Journal of Engineering Technologies and Management Research*, 6(7), 173-191, 2019.
- [16] Mahfuzah Salim and Dr.Raj Yadav, “Capital Structure and Firm Performance: Evidence from Malaysian Listed Companies”, *Procedia - Social and Behavioral Sciences*, 65 (2012), 156 – 166, 2012.
- [17] Manoppo, H., Arie, F.V., “The Influence of Capital Structure, Company Size and Profitability towards Automotive Company Value of IDX Period 2011-2014”, *Journal EMBA*. Vol. 4, No. 2, 485-497, 2016.
- [18] Md. Rashidul Islam, “How Earning Per Share (EPS) Affects on Share Price and Firm Value”, *European Journal of Business and Management*, Vol. 6, No. 17, 2014.
- [19] Modigliani, F., Miller, M.H., “The Cost of Capital, Corporate Finance and the Theory of Investment”, *American Economic Review*, Vol. 48, 261-297, 1958.
- [20] Moeljadi. “Factors Affecting Firm Value: Theoretical Study on Public Manufacturing Firms in Indonesia”, *South East Asia Journal of Contemporary Business, Economics and Law*, Vol. 5, Issue 2, 2014.
- [21] Mulyani, S., D. Amboningtyas, dan A. Fathoni, “The Influence Of Liquidity, Profitability, Leverage On Firm Value With Capital Structure As Intervening Variable In Plantation Sub Sector Company 2012-2016 Listed In BEI”, *Journal of Management*, Vol. 3, No. 3, hlm:1-11., 2017.
- [22] Myers,S.C, “The Capital Structure Puzzle”, *Journal of Finance*, 39, 575-592, 1984.
- [23] Niesh, A.J. and Velnampy, T., “Firm Size and Profitability: A Study of Listed Manufacturing Firms IN Sri Lanka”, *International Journal of Business and Management*, Vol. 9, No.4, 57-64, 2014.
- [24] Prasetyorini, B. F., “Pengaruh Ukuran Perusahaan, Leverage, Price Earning Ratio, dan Profitabilitas Terhadap Nilai Perusahaan”, *Jurnal Ilmu Manajemen*, Vol. 1, No. 1, 183-196, 2013.
- [25] Priya, K, Nirmalathan B, and Piratheepan T., “Impact of Capital Structure on the Firm Value Case Study of Listed Manufacturing Companies in Sri Lanka”, *Scholar World-IRMJCR*. Volume. III, Issue I, 2015.
- [26] Purwohandoko, “The Influence of Firm’s Size, Growth, and Profitability on Firm Value with Capital Structure as the Mediator: A Study on the Agricultural Firms Listed in the Indonesian Stock Exchange”, *International Journal of Economics and Finance*; Vol. 9, No. 8, 2017.
- [27] Rahman, S., “The role of intellectual capital in determining differences between stock market and financial performance”, *International Research Journal of Finance and Economics*, Vol. 89, 46-77, 2014.
- [28] Rifai, M., Arifati, R., Minarsih, M.M., “Effect of Company Size, Capital Structure, and Company Growth on Profitability of Studies in Manufacturing Companies on the IDX in 2010-2012”, *Journal of Pandanaran University Semarang*, Volume 1, No. 1, 329-336, (2012).
- [29] Suffah, R. & Riduwan, A., “Effect of Profitability, Leverage, Company Size and Dividend Policy on Firm Value”, *Ilmudan Journal of Accounting Research*, Vol. 5, No. 2, 1-17, 2016.
- [30] Sunarto, P. and Agus, B., “Effect of Leverage, Size and Growth of Companies on Profitability”, *TEMA Journal*, Volume 6 edition 1, 86-103, 2009.
- [31] Tiska, S., “Effect of profitability and investment opportunity on firm value”, *Bakrie University Scientific Journal*, Vol. 3, No. 01, 1-7, 2015.
- [32] Winarto, Jacinto, “The Determinants of Manufacturing Firm Value in Indonesia Stock Exchange”, *International Journal of Information, Business and Management*, Vol 7, No. 4, 2015.

- [33] Zuhro, Idah., “The Effects of Liquidity, Firm Size, and Profitability on the Firm Value with Mediating Leverage, “The 2nd International Conference on Islamic Economics, Business, and Philanthropy (ICIEBP) Theme: “Sustainability and Socio Economic Growth”, 2019.