FACTORS AFFECTING FIRM VALUE WITH CAPITAL STRUCTURE AS INTERVENING VARIABLE

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Abstract: The objective of this research is to obtain the empirical evidence regarding the effect of dividend policy, firm size, profitability, liquidity, firm growth, managerial ownership, institutional ownership, board of directors, board of commissioners and cash holding towards firm value mediated by capital structure to the effect of dividend policy, firm size and profitability on firm value. The population in this research is non-financial firms listed in Indonesia Stock Exchange from the year of 2018 to 2020. Samples were obtained through purposive sampling method in which 189 data were taken as the sample. This research uses multiple regression method and path analysis to test the hypotheses. The results of this research indicated that profitability, firm growth, institutional ownership, board of directors and capital structure affect firm value, while dividend policy, firm size, liquidity, managerial ownership, board of commissioners and cash holding do not affect firm value. Meanwhile, firm size and profitability affect capital structure, while dividend policy does not affect capital structure. This research also indicated that capital structure mediates the effect of dividend policy and firm size on firm value but does not mediate the effect of profitability on firm value.

Keywords: firm value, firm size, profitability, firm growth, institutional ownership, capital structure


Kata Kunci: nilai perusahaan, ukuran perusahaan, profitabilitas, pertumbuhan perusahaan, kepemilikan institusional, struktur modal
INTRODUCTION

Firm value is the perception of investors about the firm’s success rate which is closely related to the share price (Sutrisno 2020). High demand of shares will increase the share price, which means the firm value also increases. According to Hasanah and Lekok (2019), the main purpose of firms is to increase the wealth of shareholders. A high firm value is the desire of the shareholders because it indicates that the prosperity of shareholders is also high.

One of the current issues related to the decline in the firm value which marked by the decline in share price was experienced by PT Waskita Karya (Persero) Tbk. which has the firm code of WSKT. According to Sudarwan (2020) in Bisnis.com, the share price of WSKT was continued to decline in the stock market since the beginning of 2020. In the current year or year to date (until February 2020), its share price recorded a decline of 27.61 percent. The Head of Equity Trading at MNC Sekuritas Medan, Frankie Wijoyo Prasetio, explained that the decline was due to investors’ attention to the firm’s debt portion because the firm’s total liabilities had increased significantly in the last few years. Another thing that contributed to the decline in WSKT’s share price was the significant decline in profits until the third quarter of 2019.

Decrease in firm value is not something that rarely happens. Besides PT Waskita Karya (Persero) Tbk., there have been many cases of decline in the firm value which experienced by famous big firms such as Intel, Microsoft, Facebook, Exxon Mobil, General Electric and others (Seth 2021). In connection with the emergence of many such cases, there have been a lot of articles that discussed about factors affecting firm value because when a firm wants to maximize its value, the firm should understand the factors affecting the firm value and manage them well. Unfortunately, this case keeps happening.

Based on the discussion above, it can be seen that understanding the factors that affect the firm value will be useful for the firm to obtain fund from investors by increasing its value and also useful for investors to make the right investment decision. For this reason, investigating more closely the factors that affect the firm value remains relevant in the business world that changes from time to time in order to increase the knowledge and awareness in increasing firm value. The research that will be carried out is an effort to develop the research that has been done previously by Husna and Satria (2019).

The objective of this research is to obtain empirical evidence regarding the effect of dividend policy, firm size, profitability, capital structure, liquidity, firm growth, managerial ownership, institutional ownership, board of directors, board of commissioners and cash holding on firm value, the effect of dividend policy, firm size and profitability on capital structure and the effect of dividend policy, firm size and profitability on firm value through capital structure.

The results of this research are expected to give contributions for management, investors, creditors, future researchers and academicians. This research is divided into five chapters, which are introduction, theoretical framework and hypotheses development, research methods, analysis and discussion and closing.

Agency Theory

Agency theory is a concept that explains the relationship between the owner or shareholder as the principal and manager as the
agent (Jensen and Meckling 1976). According to Marceline and Harsono (2017), as the firm grows, separation of functions between the principals and the agents is increasingly needed. Hence, the principals do not manage their firm directly but they hire agents to run the firm. Jensen and Meckling (1976) explained that since the agents represent the principals in running the firm, the agents have the authority of decision-making. Agents are also considered to have more information about the firm's future prospects than parties outside the firm. However, agents tend to maximize their personal wealth rather than their principals' wealth.

According to Jensen and Meckling (1976), since the agents' personal goals are not aligned with the principals' wealth maximization, a conflict will occur. The actions of agents in taking the opportunity to pursue their personal interests without considering the principals' interests can reduce the welfare of principals and firm value. For this reason, the principals believe that the agents will not always act in the best interests of the principals which leads to agency problem.

**Signalling Theory**

According to Zutter and Smart (2019), signalling theory arises from the problem of asymmetric information in markets. To reduce the problem, firms provide information for investors in the form of financial statements, therefore signalling theory explains how a firm gives signal or information to the user of financial statements (Saputra and Fachrurrozie 2015).

According to Pratiwi (2020), investors are less interested to invest in a firm if they do not have sufficient information from the firm. This condition will lead to the decrease in firm value. Thus, according to Hasanah and Lekok (2019) and Sari and Sanjaya (2018), signalling is used because management knows better and more accurate information than investors therefore management uses signals to minimize the asymmetric information between the management and investors. With reduced information asymmetry, the firm value can increase.

**Firm Value**

According to Febrianti (2012), the main objective of a firm is to maximize the shareholders' wealth, which can be interpreted as maximizing the share price in order to increase the firm value. Firm value is the perception of investors to the success rate of a firm that is often related to the share price (Sutrisno 2020, Ngatemin et al. 2018, Estiasih et al. 2019). The share price can be interpreted as the price that potential investors are willing to pay if they want to own shares in a firm, therefore the share price can be used as an indicator of the firm value (Yastini and Mertha 2015, Laili et al. 2019, Soewarno and Ramadhan 2020).

Febrianti (2012) also stated that the firm value can provide clues about what investors think about the firm's past performance and the firm's prospects in the future. A high firm value will make the market believe not only in the firm's current performance but also in the firm's long-term prospects (Saputra and Fachrurrozie 2015).

**Dividend Policy and Firm Value**

According to Ines and Handojo (2017), dividend policy is a firm's decision in determining how much net profit will be distributed as dividends and how much net profit will be reinvested into the firm in the form of retained earnings.

According to Hasanah and Lekok (2019), a high amount of dividend distribution is considered as a positive signal because it shows
that the firm has future profit prospects. This condition will make the firm attractive and get trust from investors because investors have certainty about their investment returns. As the result, the firm value will increase.

**H1.1:** Dividend policy affects firm value.

### Dividend Policy and Capital Structure

Rahmawati (2020) stated that when a firm distributes high amount of dividend to the shareholders, the firm’s internal fund in the form of retained earnings will be lower. Thus, the firm uses more external fund in the form of debt in order to afford its operational activities. The higher the amount of debt, the higher the capital structure.

**H1.2:** Dividend policy affects capital structure.

### Dividend Policy and Firm Value through Capital Structure

Hauteas and Muslichah (2019) stated that the higher the amount of dividend distributed to the shareholders means the lower the amount of retained earnings. This condition will cause the firm to use debt which increase the capital structure in order to fund the firm’s investment in profitable projects. This condition will be responded positively by investors thereby increasing the firm value. Other than that, Khoirianto (2016) stated that the higher the amount of debt will save more tax costs which eventually increase the firm value.

**H1.3:** Capital structure mediates the effect of dividend policy on firm value.

### Firm Size and Firm Value

Firm size is a measure that describes how large a firm is (Lumapow and Tumiwa 2017, Lusiana and Agustina 2017). Endri and Fathony (2020), Suwardika and Mustanda (2017) and Suffah and Riduwan (2016) stated that the larger the firm size which is seen from the higher amount of the total assets of the firm can indicate that the firm has reached its maturity stage. A firm that is in its maturity stage has a positive cash flow and is expected to be generally stable and able in generating profits in a relatively long period of time. Thus, the firm will be able to attract investors to own shares of the firm. This condition causes the firm’s share price to increase in the capital market and increase the firm value. Other than that, it will be easier for the firm to get the trust from creditors to obtain fund that can be used in the process of increasing the firm value.

According to Pratiwi (2020) and Hardian and Asyik (2016), the larger the firm size shows that the firm has larger amount of assets that make the management has many preferences to use the assets. Hence, it will be more flexible for the management in using the existing assets to control the business activity in the firm. From the side of management, the ease of controlling the firm will increase the firm value.

**H2.1:** Firm size affects firm value.

### Firm Size and Capital Structure

According to Triyono et al. (2019), Setiadharmo and Machali (2017) and Anggraini (2019), the greater the size of a firm, the higher the amount of fund needed to afford the firm’s operational activities which cannot be fulfilled if relying only on the firm’s internal fund. Thus, large firms have greater tendency to use external fund. Large firms tend to have good reputation, therefore they choose external funding through debt because it is easy for them to obtain fund from creditors. The higher the amount of debt, the higher the capital structure of the firm.

**H2.2:** Firm size affects capital structure.
Firm Size and Firm Value through Capital Structure

Wibowo et al. (2021) stated that the larger the firm size, the more operational and investment activities owned by the firm, therefore the greater the funds needed to finance those activities. The larger the firm size also indicates the greater the amount of assets that can be used as collateral to obtain debt. Thus, the larger the firm size, the more debt can be obtained by the firm which will increase the capital structure. The higher the amount of debt, the higher the tax savings will be that increase the firm’s profits. This condition will increase the demand of the firm’s shares and will increase the share price and firm value.

H₂.3: Capital structure mediates the effect of firm size on firm value.

Profitability and Firm Value

According to Yastini and Mertha (2015), profitability is the ability of a firm to generate profits at a certain level of sales, assets and capital. Husna and Satria (2019), Endri and Fathony (2020) and Yastini and Mertha (2015) also stated that high profitability shows that the firm has a good performance and the firm’s prospects will also be good. Therefore, investors will respond positively and increase the firm value.

H₃.₁: Profitability affects firm value.

Profitability and Capital Structure

Triyono et al. (2019), Khoirianto (2016) and Wicaksono and Mispiany (2020) stated that when a firm has high profitability, it tends not to use high amount of debt because the firm believes that it is able to fund its operational needs with the profit made by the firm. Thus, the amount of debt will be lower and the capital structure will also be lower.

H₃.₂: Profitability affects capital structure.

Profitability and Firm Value through Capital Structure

According to Wulandari (2013), high profitability will allow the firm to finance its investments and operations from the internal fund. This condition will decrease the amount of debt used which means the lower the capital structure. The low amount of debt will result in lack supervision of managers by outsiders. The lack of supervision allows managers to use funds for their own interests which can be detrimental to shareholders. Thus, the demand of the shares may decrease then followed by decrease in the firm’s share price and also the firm value.

H₃.₃: Capital structure mediates the effect of profitability on firm value.

Capital Structure and Firm Value

According to Hermuningsih (2012), capital structure is a comparison between the amount of total debt with the total shareholders’ equity. According to Febrianti (2012), the greater the proportion of debt used in the capital structure, the greater the firm’s obligation to pay its loans and interest. It will affect the dividends that will be distributed. With a low ability to pay dividends, it is not attractive for investors to buy the firm’s shares. Thus, the firm value will decrease. Besides, the high amount of debt makes the firm’s financial condition becomes unhealthy because it may cause the risk of financial distress due to the inability to pay the principal and interest of the debt. As the result, the firm value will decrease.

On the other side, according to Febrianti (2012), Suwardika and Mustanda (2017) and Ramadhonah et al. (2019), the greater the proportion of debt used in the capital structure can increase the firm value due to higher
reduction in income tax. Income tax expense reductions will increase the firm’s profits which will be responded positively by investors. Thus, the demand of the shares will increase and followed by the increase in share price and firm value.

According to Ramdhonah et al. (2019), the use of debt can accelerate the business of the firm if the firm is able to optimize its business operations to get the expected return, therefore it makes investors assume that firms with high amount of debt indicate that the firm has good business prospects. The creditor should also assess the condition of the firm whether it is feasible for a loan. If it is feasible, then the firm is considered to have good business prospects and therefore capable to fulfill its obligations in the future. Investors will respond positively and increase the firm value.

H₄: Capital structure affects firm value.

Liquidity and Firm Value

Liquidity is a firm’s ability to meet its short-term obligations as they come due (Subramanyam 2014). According to Febrianti (2012), if a firm has a high level of liquidity, it means the firm has a high amount of internal funds. Therefore, the firm will prefer to use its internal funds to finance the operations and investment before using external funds through debt. As the result, a firm with a high level of liquidity will be seen by investors as a firm that has the ability to manage its funding and therefore will increase the firm value.

Other than that, Kusumawati and Setiawan (2019) stated that if a firm has a high level of liquidity and can smoothly repay its obligations to external parties, then the firm will find it easy to cooperate with other parties. This is highly needed to expand the firm in the market network. With the expansion of the firm’s market scope, there will be more investors who are interested to buy the firm’s shares therefore the firm value will increase.

H₅: Liquidity affects firm value.

Firm Growth and Firm Value

Firm growth is defined as the development of a firm that is getting better and bigger from time to time (Kusumawati and Setiawan 2019). According to Ramdhonah et al. (2019), if the firm is able to increase its assets, the firm’s operational results will also increase. Thus, a good firm growth that is indicated by an increase in assets gives a positive signal that the firm has a high potential to generate high cash flows in the future and therefore increase the level of trust of investors. Investors will judge that the firm is able to generate a higher rate of return on the investment made. When there is a good response from the investors, firm value will increase.

H₆: Firm growth affects firm value.

Managerial Ownership and Firm Value

Managerial ownership is ownership of the firm’s shares by managers (Christiawan and Tangan 2007). According to Kusumawati and Setiawan (2019), Dewi et al. (2019) and Damayanti and Suartana (2014), the existence of managerial ownership can reduce the agency conflict between the managers and shareholders. By having a proportion of the firm’s shares, the interest of managers and shareholders are aligned. If managers take a decision that makes the demand of the share increases, the share price will also increase and managers will feel the benefit. If managers take a decision that makes the demand of the share decreases, managers will bear the loss. Thus, managers will be motivated to make decisions that can increase their wealth. This motivation
will get stronger as the amount of managerial ownership increases that makes the interest of managers and shareholders more united. When the share price increases, the firm value will also increase.

**H7:** Managerial ownership affects firm value.

**Institutional Ownership and Firm Value**

Institutional ownership is ownership of shares by institutions, such as financial firms, banks, pension funds and others (Harianto and Agustina 2016). Institutional shareholders have greater resources than other shareholders, therefore they usually hold the majority of the firm's share ownership (Arianti and Putra 2018). Kusumawati and Setiawan (2019), Damayanti and Suartana (2014) and Tambalean et al. (2018) stated that the higher the proportion of institutional ownership, the greater the power of institutional shareholder to monitor the firm performance and affect the decision making of management. The high level of supervision by institutions will also reduce the opportunity for the firm's management to do fraud in order to meet their personal interests. This condition can improve the firm performance and overcome the agency conflict. As the result, investors will respond positively therefore the firm value will increase.

According to Kusumawati and Setiawan (2019) and Damayanti and Suartana (2014), institutional shareholders are also considered more experienced than non-institutional shareholders in using the available information to predict the future value of the firm because they know the firm’s instruments that can increase and decrease the firm value. Thus, institutional shareholders will give input to the firm’s managers to do some efforts that can increase the firm value. Hence, the increase in institutional ownership will increase the firm value because there will be more input from the institutions to the firm’s managers in terms of how to increase the firm value.

**H8:** Institutional ownership affects firm value.

**Board of Directors and Firm Value**

Board of directors is the firm’s organ with full authority and responsibility for the management of the firm in the interests of the firm in accordance with the objectives of the firm and represents the firm in and out of court (IFC and OJK 2014). According to Sutrisno (2020), the more the board of directors, the more mature and planned the considerations in decision-making. Therefore, the more the board of directors, the higher the probability to improve firm performance, then the investors will be attracted to buy the firm's shares. This condition will lead to the increase in the firm’s share price, thereby increasing the firm value.

Febrianti and Dewi (2019) stated that based on agency theory, board of directors as the agent will act on behalf of the shareholders’ interest. The board of directors will give some efforts to generate profits for the firm by creating a good business strategy. The more the members of the board of directors, the easier the process of making the strategies. The business strategies created by the board of directors are expected to generate profits for the firm. As the result, investors will respond positively therefore the demand of the shares will increase which is followed by the increase in share price and firm value.

**H9:** Board of directors affects firm value.

**Board of Commissioners and Firm Value**

The board of commissioners is a firm organ that responsible to supervise the management policy and its implementation and give advise to the board of directors (IFC and
OJK 2014). The more the boards of commissioners, the better the mechanism for monitoring management, therefore the trust of shareholders will also be higher in the firm and leads to the increase in firm value (Wardoyo and Veronica 2013). Besides, when the management of a firm gets supervision and advice from the board of commissioners and the management works effectively, it can increase the profit which leads to the increase in the firm value (Sari and Sanjaya 2018).

H10: Board of commissioners affects firm value.

Cash Holding and Firm Value
Cash holding is an activity to hold a certain amount of cash in the firm (Nisasmara and Musdhollifah 2016). Ifada et al. (2020) stated that cash holding is used as the prevention and problem solving of financial constraints. As the prevention of financial constraints means when a firm holds a high amount of cash, a firm can minimize the use of external funding or debt. As the problem solving of financial constraints means a firm with high external funding or debt should hold a high amount of cash in order to be able to repay it. Hence, firms with high cash holding can minimize the external funding or debt, therefore the firm is more stable. A stable firm is more attractive for investors, therefore a high cash holding will increase the firm value.

Other than that, Ifada et al. (2020) also stated that cash holding at a high amount is highly needed for the potential investment opportunities. The firm can use the cash to invest whenever there is an investment opportunity. The result is the firm can attract investors to become its shareholders and increase the firm value. If the firm does not have sufficient cash, it will eliminate potential investment opportunities that the firm can make, therefore it will reduce the firm value.

Meanwhile, according to Nisasmara and Musdhollifah (2016), the management of the firm should determine the optimal level of cash holding that will maximize the benefits and thus increase the performance of the firm. The increase in the firm performance will attract more investors and increase the firm value.

H11: Cash holding affects firm value.

RESEARCH METHODS
This research object population is all non-financial firms listed in Indonesia Stock Exchange (IDX) from 2018 to 2020. The samples are chosen by using purposive sampling method. 63 non-financial firms have been selected as samples and the total data used in this research are 189 data. The sample selection procedures is shown on Table 1.
Table 1 Sample Selection Procedures

<table>
<thead>
<tr>
<th>Criteria Description</th>
<th>Number of Firms</th>
<th>Number of Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-financial firms that are consistently listed in Indonesia Stock Exchange from 2017 to 2020.</td>
<td>465</td>
<td>1395</td>
</tr>
<tr>
<td>Non-financial firms which the audited financial statements from 2017 to 2020 and annual reports from 2018 to 2020 are not publicly available.</td>
<td>(41)</td>
<td>(123)</td>
</tr>
<tr>
<td>Non-financial firms that do not use December 31st as the ending period in the audited financial statements from 2017 to 2020.</td>
<td>(6)</td>
<td>(18)</td>
</tr>
<tr>
<td>Non-financial firms that do not use IDR in the audited financial statements from 2017 to 2020.</td>
<td>(80)</td>
<td>(240)</td>
</tr>
<tr>
<td>Non-financial firms that reported net loss from 2017 to 2020.</td>
<td>(179)</td>
<td>(537)</td>
</tr>
<tr>
<td>Non-financial firms that do not consistently distribute dividend from 2018 to 2020.</td>
<td>(65)</td>
<td>(195)</td>
</tr>
<tr>
<td>Non-financial firms that do not consistently have managerial ownership from 2018 to 2020.</td>
<td>(31)</td>
<td>(93)</td>
</tr>
<tr>
<td>Number of sample firms</td>
<td>63</td>
<td>189</td>
</tr>
</tbody>
</table>

Source: Data are obtained and processed from IDX

**Firm value** is the perception of investors about the firm's success rate in managing the resources (Putranto and Kurniawan 2018). According to Husna and Satria (2019), PBV is often used to determine the firm value by comparing the market price per share with the book value per share. Firm value is calculated using ratio scale and the measurement is as follows:

\[
FVALUE = \frac{\text{Market Price Per Share}}{\text{Book Value Per Share}}
\]

According to Husna and Satria (2019), book value per share is calculated by comparing the total equities with the total of distributed shares. Book value per share is calculated using ratio scale and the measurement is as follows:

\[
\text{Book Value Per Share} = \frac{\text{Number of Equities}}{\text{Number of Distributed Shares}}
\]

**Dividend policy** is a firm's decision in determining what percentage of profit is given to shareholders (Zulkifli et al. 2017). According to Husna and Satria (2019), dividend policy is measured by dividend payout ratio which compares the shared cash dividend with the earnings after tax. Dividend policy is calculated using ratio scale and the measurement is as follows:

\[
\text{DIPO} = \frac{\text{Shared Dividend}}{\text{EAT}}
\]

**Firm size** is an assessment of how large a firm is that is indicated from the firm's assets (Endri and Fathony 2020). According to Endri
and Fathony (2020), firm size is measured by the value of natural logarithm (Ln) of the firm’s total assets. Firm size is calculated using ratio scale and the measurement is as follows:

$$ \text{FSIZE} = \text{Natural log of Total Assets} $$

**Profitability** is the ability of a firm to generate profits and an overview of the firm’s performance (Daeli and Endri 2018 in Endri and Fathony 2020). According to Husna and Satria (2019), profitability is measured by return on assets (ROA) which compares the amount of the firm’s net income with its total assets. Profitability is calculated using ratio scale and the measurement is as follows:

$$ \text{PROF} = \frac{\text{Net Profit}}{\text{Total Assets}} $$

**Liquidity** is measured by current ratio (CR) which measures the ability of a firm to meet its short-term obligations with its total current assets available (Husna and Satria 2019). According to Husna and Satria (2019), liquidity is calculated using ratio scale and the measurement is as follows:

$$ \text{LIQ} = \frac{\text{Total Current Assets}}{\text{Total Current Liabilities}} $$

**Firm growth** is the ability of a firm to maintain its position in line with the economic and industrial developments (Endri and Fathony 2020). According to Endri and Fathony (2020), firm growth is measured by the growth rate of the firm’s assets which compares the difference between the total assets of the current year and the total assets of the previous year with the total assets of the previous year. Firm growth is calculated using ratio scale and the measurement is as follows:

$$ \text{FGROWTH} = \frac{\text{Total Asset}_t - \text{Total Asset}_{t-1}}{\text{Total Asset}_{t-1}} $$

Where:
- Total Asset$_t$: Total assets of the current year
- Total Asset$_{t-1}$: Total assets of the previous year

**Managerial ownership** is ownership of shares by board of directors, board of commissioners and management who actively participate in the firm’s decision making (Putranto and Kurniawan 2018). According to Putranto and Kurniawan (2018), managerial ownership is calculated using ratio scale and the measurement is as follows:

$$ \text{MOWN} = \frac{\text{Number of shares owned by Board of Directors + Management + Commissioner}}{\text{Total of shares outstanding}} $$

**Institutional ownership** is the proportion of share ownership in a firm that is owned by institutional parties (Sukmawardini and Ardiansari 2018). According to Sutrisno (2020), institutional ownership is calculated using ratio scale and the measurement is as follows:

$$ \text{IOWN} = \frac{\text{Number of shares owned by the Institution}}{\text{Total of shares outstanding}} $$

**Board of directors** is a group who will determine the policies to be taken or the firm’s strategy in the short term and long term (Riana and Iskandar 2017). According to Sutrisno (2020), board of directors is calculated using ratio scale and the measurement is as follows:

$$ \text{BOD} = \text{Sum of Board of Director} $$
**Board of commissioners** is the organ of the firm that is in charge of conducting general or specific supervision in accordance with the articles of association and providing advice to the board of directors (Susetyowati and Handayani 2020). According to Sutrisno (2020), board of commissioners is calculated using ratio scale and the measurement is as follows:

\[
BOC = \text{Sum of Board of Commissioner}
\]

**Cash holding** is the cash available within a firm that can be used as an internal funding when there are external funding difficulties (Cheryta et al. 2018). According to Cheryta et al. (2018), cash holding is calculated using ratio scale and the measurement is as follows:

\[
CH = \frac{\text{Cash} + \text{Cash Equivalent}}{\text{Total Assets}}
\]

**Capital structure** is measured by debt to equity ratio (DER) which measures the capital composition used as the funding sources of a firm (Rahmawati 2020). According to Irawati and Komariyah (2019), capital structure is calculated using ratio scale and the measurement is as follows:

\[
\text{CAPSTRUC} = \frac{\text{Total Liability}}{\text{Total Equity}}
\]

Empirical models used to test the hypotheses are shown below:

\[
\text{CAPSTRUC} = a + b_1\text{DIPO} + b_2\text{FSIZE} + b_3\text{PROF} + e \tag{1}
\]

\[
FVALUE = b + c_1\text{DIPO} + c_2\text{FSIZE} + c_3\text{PROF} + c_4\text{LIQ} + c_5\text{FGROWTH} + c_6\text{MOWN} + c_7\text{IOWN} + c_8\text{BOD} + c_9\text{BOC} + c_{10}\text{CH} + c_{11}\text{CAPSTRUC} + e \tag{2}
\]

**RESEARCH RESULT**

Statistic descriptive is shown on the Table 2. The residual normality test results before outlier (n=189) and after outlier (n=185) show the residual values of data for CAPSTRUC model and FVALUE model are not normally distributed. Thus, the data before outlier are used for further data processing.

<table>
<thead>
<tr>
<th>Table 2 Descriptive Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Variable</strong></td>
</tr>
<tr>
<td>-------------</td>
</tr>
<tr>
<td>FVALUE</td>
</tr>
<tr>
<td>DIPO</td>
</tr>
<tr>
<td>FSIZE</td>
</tr>
<tr>
<td>PROF</td>
</tr>
<tr>
<td>LIQ</td>
</tr>
<tr>
<td>FGROWTH</td>
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<tr>
<td>MOWN</td>
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<tr>
<td>IOWN</td>
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<tr>
<td>BOD</td>
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<tr>
<td>BOC</td>
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<tr>
<td>CH</td>
</tr>
<tr>
<td>CAPSTRUC</td>
</tr>
</tbody>
</table>

Source: Data Output
### Table 3 t Test Result: CAPSTRUC Model

<table>
<thead>
<tr>
<th>Variable</th>
<th>Unstandardized Coefficients B</th>
<th>Sig.</th>
<th>Conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>-5.775</td>
<td>0.000</td>
<td></td>
</tr>
<tr>
<td>DIPO</td>
<td>-0.023</td>
<td>0.309</td>
<td>$H_{1.2}$ rejected</td>
</tr>
<tr>
<td>FSIZE</td>
<td>0.244</td>
<td>0.000</td>
<td>$H_{2.2}$ accepted</td>
</tr>
<tr>
<td>PROF</td>
<td>-3.663</td>
<td>0.001</td>
<td>$H_{3.2}$ accepted</td>
</tr>
</tbody>
</table>

Source: Data Output

### Table 4 t Test Result: FVALUE Model

<table>
<thead>
<tr>
<th>Variable</th>
<th>Unstandardized Coefficients B</th>
<th>Sig.</th>
<th>Conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>-3.540</td>
<td>0.696</td>
<td></td>
</tr>
<tr>
<td>DIPO</td>
<td>0.030</td>
<td>0.755</td>
<td>$H_{1.1}$ rejected</td>
</tr>
<tr>
<td>FSIZE</td>
<td>-0.334</td>
<td>0.279</td>
<td>$H_{2.1}$ rejected</td>
</tr>
<tr>
<td>PROF</td>
<td>79.973</td>
<td>0.000</td>
<td>$H_{3.1}$ accepted</td>
</tr>
<tr>
<td>LIQ</td>
<td>0.036</td>
<td>0.077</td>
<td>$H_5$ rejected</td>
</tr>
<tr>
<td>FGROWTH</td>
<td>-7.492</td>
<td>0.001</td>
<td>$H_6$ accepted</td>
</tr>
<tr>
<td>MOWN</td>
<td>5.740</td>
<td>0.233</td>
<td>$H_7$ rejected</td>
</tr>
<tr>
<td>IOWN</td>
<td>7.062</td>
<td>0.005</td>
<td>$H_8$ accepted</td>
</tr>
<tr>
<td>BOD</td>
<td>0.811</td>
<td>0.000</td>
<td>$H_9$ accepted</td>
</tr>
<tr>
<td>BOC</td>
<td>0.049</td>
<td>0.772</td>
<td>$H_{10}$ rejected</td>
</tr>
<tr>
<td>CH</td>
<td>-7.925</td>
<td>0.050</td>
<td>$H_{11}$ rejected</td>
</tr>
<tr>
<td>CAPSTRUC</td>
<td>2.032</td>
<td>0.000</td>
<td>$H_4$ accepted</td>
</tr>
</tbody>
</table>

Source: Data Output

### Table 5 Path Analysis Result

<table>
<thead>
<tr>
<th>Variable</th>
<th>Standardized Coefficients of Independent to Intervening (CAPSTRUC)</th>
<th>Standardized Coefficients of Intervening to Dependent (FVALUE)</th>
<th>Indirect Effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>DIPO</td>
<td>-0.068</td>
<td>0.324</td>
<td>-0.022032</td>
</tr>
<tr>
<td>FSIZE</td>
<td>0.358</td>
<td>0.324</td>
<td>0.115992</td>
</tr>
<tr>
<td>PROF</td>
<td>-0.218</td>
<td>0.324</td>
<td>-0.070632</td>
</tr>
</tbody>
</table>

Source: Data Output
The t test result for CAPSTRUC model is shown on Table 3. According to the t test result for CAPSTRUC model, the significant value of dividend policy is 0.309 which is above 0.05. Thus, $H_{1.2}$ is rejected, which means dividend policy does not affect capital structure.

The significant value of firm size is 0.000 which is below 0.05. Thus, $H_{2.2}$ is accepted, which means firm size affects capital structure. The coefficient of 0.244 means that the effect of firm size on capital structure is positive which can be interpreted as the greater the firm size, the higher the capital structure will be and vice versa. Triyono et al. (2019) stated that the greater the firm size, the higher the amount of fund needed to afford the operational activities. Large firms tend to have good reputation, therefore they choose external funding through debt because it is easy to obtain fund from creditors. The higher the amount of debt, the higher the capital structure of the firm.

The significant value of profitability is 0.001 which is below 0.05. Thus, $H_{3.2}$ is accepted, which means profitability affects capital structure. The coefficient of -3.663 means that the effect of profitability on capital structure is negative which can be interpreted as the higher the profitability, the lower the capital structure will be and vice versa. Triyono et al. (2019) stated that firms with high profitability will use less amount of debt because the firm feels that it is able to fund its operational needs using the generated profit. The lower the amount of debt, the lower the capital structure of the firm.

The t test result for FVALUE model is shown on Table 4. According to the t test result for FVALUE model, the significant value of dividend policy is 0.755 which is above 0.05. Thus, $H_{1.1}$ is rejected, which means dividend policy does not affect firm value.

The significant value of firm size is 0.279 which is above 0.05. Thus, $H_{2.1}$ is rejected, which means firm size does not affect firm value.

The significant value of profitability is 0.000 which is below 0.05. Thus, $H_{3.1}$ is accepted, which means profitability affects firm value. The coefficient of 79.973 means that the effect of profitability on firm value is positive which can be interpreted as the higher the profitability, the higher the firm value will be and vice versa. Husna and Satria (2019), Endri and Fathony (2020) and Rahmawati (2020) stated that high profitability indicates that the firm has good prospects that can attract investors to buy the shares of the firm. The increase in the demand of the shares will increase the share price and thus increase the firm value.
The significant value of liquidity is 0.077 which is above 0.05. Thus, H₅ is rejected, which means liquidity does not affect firm value.

The significant value of firm growth is 0.001 which is below 0.05. Thus, H₆ is accepted, which means firm growth affects firm value. The coefficient of -7.492 means that the effect of firm growth on firm value is negative which can be interpreted as the higher the firm growth, the lower the firm value will be and vice versa. Suwardika and Mustanda (2017) stated that the higher the growth rate of a firm, the greater the internal and external funds used by the firm to invest because the firm wants to maintain its growth. Thus, the firm will allocate its profits for reinvestment activities rather than for paying dividend. This condition will cause a negative response from the investors, therefore the demand of the shares will decrease which is followed by the decrease in share price and firm value.

The significant value of managerial ownership is 0.233 which is above 0.05. Thus, H₇ is rejected, which means managerial ownership does not affect firm value.

The significant value of institutional ownership is 0.005 which is below 0.05. Thus, H₈ is accepted, which means institutional ownership affects firm value. The coefficient of 7.062 means that the effect of institutional ownership on firm value is positive which can be interpreted as the higher the institutional ownership, the higher the firm value will be and vice versa. Rofiananda et al. (2019) and Damayanti and Suartana (2014) stated that the higher the proportion of institutional ownership, the greater the power of institutional shareholders to monitor the firm performance and affect the decision making of management. The high level of supervision by institutions will also reduce the opportunity for the firm’s management to do fraud in order to meet their personal interests. This condition can improve the firm performance and overcome the agency conflict. As the result, investors will respond positively therefore the firm value will increase.

The significant value of board of directors is 0.000 which is below 0.05. Thus, H₉ is accepted, which means board of directors affects firm value. The coefficient of 0.811 means that the effect of board of directors on firm value is positive which can be interpreted as the more the board of directors, the higher the firm value will be and vice versa. Sutrisno (2020) stated that the more the directors involved, the more mature and planned the decisions taken because the directors have expertise and skills in their own field. Eventually, the performance of the firm will improve and investors will be attracted to buy the firm’s shares. The increase in the demand of shares will increase the share price and firm value. Other than that, Febrianti and Dewi (2019) stated that the board of directors will act on behalf of the shareholders therefore the board of directors creates business strategies that can generate profits for the firm. The more the members of the board of directors, the easier it will be to make business strategies that are expected to create profits for the firm. As the result, investors will respond positively the firm value will increase.

The significant value of board of commissioners is 0.772 which is above 0.05. Thus, H₁₀ is rejected, which means board of commissioners does not affect firm value.

The significant value of cash holding is 0.050 which is equal to 0.05. Thus, H₁₁ is rejected, which means cash holding does not affect firm value.

The significant value of capital structure is 0.000 which is below 0.05. Thus, H₄ is accepted, which means capital structure affects
The coefficient of 2.032 means that the effect of capital structure on firm value is positive which can be interpreted as the higher the capital structure, the higher the firm value will be and vice versa. Febrianti (2012), Suwardika and Mustanda (2017) and Ramdhonah et al. (2019) stated that the greater the proportion of debt used in the capital structure, the higher the income tax expense reductions, therefore the firm’s profits will increase. As the result, firm value will increase. Ramdhonah et al. (2019) also stated that the use of debt can accelerate the business of the firm, therefore the investors assume that firms with high amount of debt indicate that the firm has good business prospects. Furthermore, the firm’s ability to get a loan shows the creditor’s assessment that the firm is considered to have good business prospects. Consequently, investors respond positively to this signal and ultimately increase the firm value.

The path analysis result is shown on Table 5 and the path analysis figure is shown on Figure 2. According to the result of path analysis, the coefficient of indirect effect ([0.115992]) is above the coefficient of direct effect (0.014). Thus, H1.3 is accepted, which means capital structure mediates the effect of dividend policy on firm value. Pramitasari (2021) stated that when there is high amount of dividend distributed to the shareholders, the shareholders will respond positively and invest more funds into the firm. This condition makes it easier for the firm to use more equity financing through the issuance of shares rather than debt financing. However, the less amount of debt used will decrease the tax savings therefore the firm’s profits will be lower which eventually decrease the firm value (Febrianti 2012).

The coefficient of indirect effect (0.115992) is above the coefficient of direct effect ([0.078]). Thus, H2.3 is accepted, which means capital structure mediates the effect of firm size on firm value. Wibowo et al. (2021) stated that the larger the firm size, the more funds needed to support the firm’s operational and investment activities. Large firms have high amount of assets that can be guaranteed to obtain debt from creditors, therefore large firms tend to use debt as the source of external funding. The high amount of debt used in the capital structure, the greater the tax savings that benefit the firm. As the result, investors will respond positively which in turn will increase the firm value.

The coefficient of indirect effect ([0.070632]) is below the coefficient of direct effect (0.758). Thus, H3.3 is rejected, which means capital structure does not mediate the effect of profitability on firm value.

**CLOSING**

This research is done to get empirical evidence about the effect of dividend policy, firm size, profitability, liquidity, firm growth, managerial ownership, institutional ownership, board of directors, board of commissioners, cash holding and capital structure on firm value, the effect of dividend policy, firm size and profitability on capital structure and the effect of dividend policy, firm size and profitability on firm value through capital structure. This research is done to non-financial firms listed in Indonesia Stock Exchange from 2018 to 2020.

The result of this research shows that profitability, capital structure, institutional ownership and board of directors have positive effect on firm value, firm growth has negative effect on firm value, firm size has positive effect
on capital structure and profitability has negative effect on capital structure. Meanwhile, dividend policy, firm size, liquidity, managerial ownership, board of commissioners and cash holding do not affect firm value, dividend policy does not affect capital structure, capital structure mediates the effect of dividend policy and firm size on firm value but does not mediate the effect of profitability on firm value.

REFERENCES:


