#### **CHAPTER II**

#### LITERATURE REVIEW

# 2.1 Theory

#### 2.1.1 Firm Value

Firm value, as defined by Hermuningsih & Wardani (2009), is an investor's assessment of a company's success, which is directly related to its share price. Stock with high prices raise the firm's value and enhance the market confidence in the current performance as well as its future possibilities of the company. According to Fama (1978), the firm value is assessed by the firm's success as measured by the stock price, and the greater the share price, the higher the firm value. The stock price is a better value in terms of fulfilling the company's long-term goal of increasing the stock's value. Companies that can provide a good signal about the value of the company will be considered suitable for potential investors as an investment opportunity.

According to Christiawan & Tarigan (2007:3), firm value has a variety of theories that describe that the firm value is nominal, market, intrinsic, book, and liquidation value.

#### Nominal Value

The nominal value is the value specified in the articles of company, which is formally declared precisely in the company's balance sheet and clearly written on the collective share certificate.

#### Market value

The value that occurs at the price of the bargaining process in the stock market is known as market value or exchange rate. This value can only be determined if the company's stock is traded on the stock exchange.

#### • Intrinsic Value

Intrinsic value refers to a company's actual worth, and the concept of intrinsic value is the most abstract concept of value. The intrinsic value of a company is determined not only by the price of a group of assets but also by the value of the company as a commercial entity that can make profits in the future.

#### Book value

The book value of a firm is the value determined using accounting concepts. The difference between total assets and total debt is divided by the number of shares outstanding to calculate firm value.

#### Liquidation Value

Liquidation value is the selling value of all company assets after deducting all obligations that must be fulfilled and the results will be distributed to company shareholders. Determining liquidation value is similar to calculating book value.

The valuation ratio can be used to calculate firm value. According to Sutrisno (2009), proportion used to assess an ability of the company to create value for the community, investors, or shareholders is the valuation ratio. Price Earning Ratio, Price to Book Value, and Tobin's Q represent approximately the assessment ratio.

Price to Book Value (PBV) is the assessment ratio utilized in this study. The ratio of a company's stock market value to its equity book value is known as the price to book value. In turn, assets value reflected on the balance sheet is the book value of equity. The difference between the book values of assets and liabilities is the book value.

The formula used to calculate Price to Book Value ratio is as follows:

$$PBV = \frac{Market\ Price\ per\ Share}{Book\ Value\ per\ Share}$$

PBV ratio analysis is a critical component of the entire value investing strategy. Price to Book Value is a very steady and intuitive value measure that may be compared to market pricing. The PBV ratio reflects market participants' assessment of equity of company concerning its book value. For investors seeking growth at a reasonable price, the PBV ratio is also a crucial reality check. Investors find the PBV ratio helpful because the book worth value gives a somewhat steady and natural measurement that can be effectively contrasted with market costs. The PBV ratio can also be used for companies with positive book values but negative earnings because negative earnings make the price-to-earnings ratio meaningless. A PBV ratio with lower esteem, particularly one under one, can be a sign to investors that stock might be undervalued. All in all, stock costs are exchanged at a lower value compared with the worth of the firm's resources. In the interim, a PBV ratio greater than one implies that stock prices are trading at a premium to the company's book value.

### 2.1.2 Capital Structure

Funding decisions concern the source of finances used to run and improve the efficiency of the firm's operations. The company's capital structure reflects the sources of funds utilized to fund it, which include equity and debt. The capital structure refers to the numerous sources of finances used funding the operational activities to fulfill the strategic goals (Suardi and Noor, 2015). Firm capital structure is the combination of several financial sources, which include equity capital, preferred stock, and debt. Furthermore, capital structure refers to the method of financing the company's general operations and expansion, consists of retained earnings, short-term debt, long-term debt, equity capital, and preferred shares (Awais, Laber, Rasheed, & Khursheed, 2016; Wu, 2019).

Most firms fail due to the difficulties that confront while making financial decisions. The massive problems that managers and owners face when making funding decisions cause the majority of businesses and organizations to fail or perform poorly. (Migliori, Maturo, & Paolone, 2018). Capital decision-making is crucial in funding activities because it is directly tied to the company's risk and return. According to Margaretha (2007), the ideal capital structure strikes a balance between risk and reward, where high risk reduces stock prices while the low-risk increases stock prices. Every business desire an optimal capital structure to enhance the firm's value while minimizing the cost of capital (Ayem and Nugroho, 2016).

#### 2.1.2.1 Modigliani dan Miller Theory

A perfect capital market is a competitive capital market where there are no taxes, bankruptcy fees, or transaction fees. Investors have the option of borrowing at the same interest rate as the company, have the same information, and the costs of debt have no effect on profit before interest and taxes. As an investment consideration, the company's funding decisions become irrelevant, which means that the use or addition of debt and own capital has no impact on shareholder wealth (Kusumawati and Rosady, 2018). Modigliani and Miller stated several assumptions put forward to build the theory that there is no ideal capital structure for the company because the firm's value is changed by its own performance (Sudana,

2011). In other words, changes in capital structure have no effect on company value growth.

The MM theory without taxes was considered unrealistic. In 1963, Modigliani and Miller incorporated the tax factor into their theory. The Capital Structure Theory from Modigliani and Miller (1963) states that funding decisions become relevant to the existence of corporate taxes, which will increase firm value. MM's theory with taxes reveals that the increase in debt is followed by company value because debt can help companies save taxes. The interest payments incurred by debt reduce the tax charges incurred by the firm, resulting in a lower cash outflow and an increase in the company's income, where the earnings are distributed to shareholders.

#### 2.1.2.2 Trade-Off Theory

When a company's capital structure includes a lot of debt, problems with bankruptcy are more likely to emerge. As a result, bankruptcy expenses restrict businesses from incurring excessive debt. According to the trade-off theory, firms trade off the advantages of debt financing or preferential treatment of corporate tax for high interest rates and bankruptcy costs. In trade-off approach, the company leveraged value equals the unleveraged value plus any side effects value, such as tax and expense protection owing to financial difficulty. According to the trade-off hypothesis, the debt must be used optimally so that it does not have a detrimental influence on firm value.

### 2.1.2.3 Signalling Theory

Signalling theory is a management theory which is describes the company situation. According to Jama'an (2008), signaling theory proposes how businesses should convey signals or instructions to interested parties regarding the company's financial reports. The sign or instruction takes the form of information concerning the management activities of the organization. The company's signal can take the shape of an announcement or advertisement indicating the company is superior to competitors. According to Ross (1977), firm executives that have better company information would be encouraged in sharing the information with potential investors to improve the firm's share price. The quality of information given by the

company through its financial statements influences investor decisions. The quality of this information aims to reduce information asymmetry that will arise if there is a lack of information submitted by internal parties and a lack of knowledge regarding internal information and prospects from external parties so that the information provided by the company can be a signal (Maria Immaculata, 2006).

Atmajaya (2008:14) states that generally, managers will be motivated to deliver important information about their firm out to the public as soon as possible. If the company can provide a conceivable signal, the public will be impressed and can increase investor interest so that it can reflect stock prices. Can be concluded that the existence of information asymmetry, providing signals to the public and investors, is very important because it affects investments made by external parties. Signal theory can be applied to the level of company leverage, where massive companies will generate incentives for companies to take on high levels of debt. Conversely, small companies have the potential to go bankrupt and create a balance that separates where low company values tend to use more debt while larger companies tend to use equity. Thus, the signal theory will serve as the foundation for investors in separating high-value companies from low-value companies by watching capital structure ownership and identifying high valuations for high-level companies and a steady balance in low-value organizations.

#### 2.1.2.4 Pecking Order Theory

Donaldson in 1961 established the pecking order theory, which is relevant to the company's funding and capital structure. This theory was later popularized by Myers and Maljuf in 1984. According to the pecking order theory, companies have a certain preference for the capital utilized to finance their business (Myers and Majluf, 1984). The principle of asymmetric information gives rise to the pecking order theory. When one party has more information than the other, information asymmetry, also known as information failure, arises, resulting in an imbalance of transaction power. Company executives typically have a better understanding of the company's performance, risks, and prospects than external users such as creditors and investors.

In Pecking Order Theory, there is a tendency for companies to make funding decisions based on the preferred source of funds, managers follow a hierarchy in determining the company's resources. Myers revealed that companies tend to prefer internal funding sources and if there is external funding, the company will choose to use debt funding sources because it is considered safer than issuing new shares (Sofyaningsih and Hardiningsih, 2011). Generally, companies that use debt funding sources will have lower costs compared to issuing new shares. Debt funding also involves risk, but if the company manages it properly, it will avoid negative consequences and have no influence on the company's value.

#### 2.1.2.5 Market Timing Theory

Company management typically do not know when the best time for capital structure is. This challenge can become more challenging if management must decide on the factors that will determine the best timing to establish the company's capital (Setyawan, 2015). Market Timing Theory by Barker and Wurgler (2002) is expected to answer the optimal timing problem for capital structure. However, it is not as easy as it seems. Generally, the Market Timing Theory proxy is the market-to-book ratio, or what is used for the IPO case. Numerous academics as cited by Huang and Ritter (2005), criticized the market-to-book ratio as a proxy for investment decisions, namely, to determine whether the stock is undervalued or over-valued. According to Barker and Wurgler (2002), market timing is " the accumulated consequence of previous attempts to time equities markets".

Share prices must include all existing information in an efficient market because stock prices are neither too low nor too high except for the period of time necessary for prices to adjust to a new equilibrium brought about by the newly discovered information. According to the market timing concept, managers think that interest rates and stock prices can occasionally be excessively high or too low in comparison to their genuine fundamental values. According to the theory, managers issue equity when they think stock market values are extraordinarily high and debt when they think interest rates are extraordinarily low. To put it another way, they are attempting to time the market. Unlike signal theory, market timing

theory does not involve asymmetric information. Managers do not base their beliefs on inside information, only on opinions that differ from the market consensus.

## 2.1.2.6 Asymmetric Information

The three proponents' economists who established the theory of asymmetric information, which was formalized in 2001, are Joseph Stiglitz (1961), George Akerlof (1970), and Michael Spence (1973). Asymmetric information commonly referred to as "information failure" is when one party to an economic transaction has more in-depth knowledge of the relevant subject matter than the other party. In a perfect market situation, with optimal and costless information available to both parties and no uncertainty about current and future trade conditions, the parties do not suffer from market failure of information. Myers and Majluf (1984) proved that if investors are less aware of the valuation of assets of the firm than current corporate insiders, the market may misprice equity. This is common when the vendor of an item or service has greater knowledge than the client. The inverse dynamic is also feasible. Almost all economic interactions feature information asymmetries. The issue with asymmetric information begins before any transaction takes place. Moral hazard is an example of asymmetric information in a larger economic sense. Moral hazard arises from unequal information. In a moral hazard situation, one side commits to know that the other party will compensate their actions. As a result, they aren't bothered with how unsafe the situation is and are encouraged to take risks because they won't face any potential consequences.

### **2.1.3** Firm Size

According to Riyanto (2010), the company size can be determined by the quantity of total equity, total sales, or total asset. According to Longenecker (2001), there are numerous methods to characterize a company's size or scale, including asset value, number of employees, and sales volume. Firm size is one metric used to assess a company's performance. Large companies normally have a lot of assets and are careful concerning their financial data since they are more visible to the public. The assets controlled by the company, the level of corporate revenues, and the market capitalization all reflect the firm size. If the assets increase, the firm's

sale is presumed to be in good form. If the company's sales improve, the firm's operations will be more efficient. (Purnama and Nurdiniah, 2019).

A large company size might reflect if the company is committed to consistently improving its performance because they believe the company will generate a profitable return, investors will pay more for their shares (Meidiawati and Mildawati, 2016). The larger the size, the more plausible it is that investors will pay attention to it because large companies tend to operate in more optimal conditions (Hermuningsih & Wardani, 2013). This stability draws investors' attention to owning firm shares, causing the stock value to rise in the capital market. Investors also anticipate company dividends. Increased demand for firm shares will drive up share prices in the financial market. The larger the size, the higher the tendency of investors to own the shares, causing the share price to rise.

### 2.1.4 Profitability

Profitability is a critical supporting factor for investment decisions. The company's profitability level can be used as a basis for investors to consider investing their funds in the company. Furthermore, profitability level can indicate the business performance through the capability to make profits. According to Ayu and Suarjaya (2017), profitability is essential since it is used as a tool to measure the firm's financial performance, which can then be used as a reference in appraising the firm. Companies that have good performance and a record of profitability and stability will have easier access to capital markets and other forms of funding. According to Harahap and Jiwana (2009), profitability represents the company's ability to make profits using all existing performance and company resources such as sales, equity, number of employees, number of company branches, and so on.

Profitability is calculated using many relevant criteria. Financial ratios are one of the measures used in measuring a company's financial situation, operating outcomes, and profitability level (Brigham and Houston, 2006). According to Sawir (2009), the profitability ratio provides an overview of the company's management's effectiveness. Profitability ratios examine a firm's capability to generate profits from its total assets, equity, or sales generated. Profitability is frequently used to

evaluate a company's capital utilization performance by comparing earnings to capital invested in operations.

Return on assets is a financial ratio that measures the amount of profit or return created by all of the company's assets. According to Home and Wachowicz (2005), Return on Assets (ROA) is a statistic ratio that assesses a company's capacity to generate net earnings from its available assets. A high return on assets ratio indicates the company's potential to increase earnings. The higher a firm's ROA, the higher its profit level and the better its position in terms of asset utilization. The Return on Assets (ROA) ratio is calculated using the following formula:

$$Return on Assets = \frac{Net Income}{Total Asset} x 100$$

ROA indicates that ongoing operational activities can be enhanced to increase the likelihood of a return on investment. ROA is used to analyze how efficiently a firm empowers its assets, and the proportion of ROA owned by the company reflects the company's satisfactory or inadequate management. Furthermore, the findings of the ROA analyses can be tool to compare the company's performance in the same industry, such that ROA is one of the elements that investors consider when investing. A high ROA value shows that the company is profitable.

### 2.1.5 Corporate Governance

Corporate governance is a mechanism that companies implement to oversee and control their operations. Berle and Means (1933) defined a modern corporation as a limited liability firm (the owner is not personally liable for the company's debts or other legal obligations) with management distinct from ownership and control. Many people are reconsidering conventional wisdom regarding the function of markets and the need for private ownership as a result of the separation of ownership from management and the resulting lack of direct owner engagement in the organization. Financial capitalism or bank control over corporations began to wane in the 1920s, so the development of dispersed ownership finally began to receive the most attention. What happens is that the company raises capital from a scattered investor base. In other words, many investors own a small number of shares, leaving individual public shareholders in a powerless position to influence

managerial decisions. As a result, managers and insider control groups (big block holders) can run the company for their benefit and not in the public interest or the public shareholders themselves. This spread of ownership also means that any link between property ownership and the development of the civil and social responsibilities of citizens (shareholders) has been severed. As a consequence, implementing good corporate governance is critical for every business.

Corporate governance is a set of regulations that govern the relationship between interested parties such as shareholders, firm management, creditors, the government, and employees, as well as other internal and external interested parties, in order to maximize value for all parties (Forum for Corporate Governance in Indonesia, 2000). The philosophy of corporate governance is founded on agency theory, which states that there are problems caused by the interaction between shareholders and firm managers, and corporate governance is anticipated to be utilized as a tool to give investors with confidence in the return on their investment (Shleifer and Vishnny, 1997). The benefits that can be obtained by companies by implementing corporate governance as stated by the Indonesian Corporate Governance Forum (2004):

- 1. Improve the company's performance by developing a better decision-making process, increasing operational efficiency, and providing better services to stakeholders.
- 2. Make it easier to obtain less stringent and less expensive financing sources (because to the trust factor), which would ultimately increase the company's value.
- 3. Restore investor trust to invest in Indonesia.
- 4. Shareholders will be pleased with the company's performance because it will raise shareholder value and dividends at the same time.

#### 2.1.6 Agency Theory

Corporate management is a collaborative effort involving many parties, including managers, employees, shareholders, and bondholders. For a long time, economists assumed without question that all of these parties were acting in the best interests of the public, but they had a lot more to say about potential conflicts of interest and how businesses try to resolve those conflicts. These concepts are referred to as the agency theory of the shareholder-manager relationship. Shareholders (principals) expect management to maximize corporate value.

Companies seek to relate managers' compensation to the value they have added to motivate them to lift their burdens. Managers that consistently disregard shareholder interests' risk having their company taken over and dismissed. Some companies are owned by several major shareholders and therefore the gap between ownership and control is smaller.

Enhance company value can be realized through collaboration between shareholders and stakeholders in developing financial strategies that maximize working capital. If the engagement between the management and the other party goes well, there will be no conflicts between the two parties. The merger of managers' and shareholders' interests frequently leads to agency conflicts (Sukirni, 2012). One of the company's initiatives to address this issue is to match the interests of the management with the objectives of the company's owners. These activities can be carried out with the help of a solid corporate governance structure. Several strategies, including management ownership and corporate institutional ownership, are frequently utilized in studies on good corporate governance (Nuraina, 2012).

#### 2.1.7 Ownership Structure

The ownership structure refers to the number or portion of shares owned by the company. The ownership structure includes institutional and managerial ownership. Other than managerial ownership, institutional ownership is a structure in the good corporate governance system, defined as the ownership of firm shares by particular institutions or institutions that have a position within the company in capital and policy determination. In comparison to non-institutional investors, institutional investors are believed to be capable of estimating future earnings using current period earnings information. Because expanding institutional ownership means that all corporate actions will be regulated by institutions and can raise the firm value by utilizing available knowledge and can resolve agency conflicts (Damayanti & Suartana, 2014).

## 2.1.7.1 Managerial Ownership

Managerial ownership refers to shares owned by managers who serve as company managers in the company so that the company managers' aims are congruent with the goals of shareholders for the benefit of the company's

shareholders. Managers have an important role in decision-making in businesses. Managers who obtain company stock prefer to maximize and optimize the stock value. This aligns with the interests of corporations that anticipate high company value if share value is high (Kusumawati and Setiawan, 2019).

Managerial ownership shows the dual role of a manager, as manager and share ownership. Managers will strive to keep the company moving forward and growing and will not let the company go bankrupt because it will harm them as managers and shareholders in the company. Managerial ownership can reduce the risk of conflict whereas managers will act in dual roles as managers and shareholders or company owners. When potential agency managers do not own majority ownership in the company, they are more likely to follow their interests rather than maximize the value of corporate funding in decision-making. This is frequently a source of conflict between the manager and the owner. The large size of the company allows shareholders to benefit, and management decisions that have been taken will be carried out according to plan, with the hope of ending successfully and smoothly. If all decisions go smoothly, the company's operations and the economy will automatically develop and managers who have been involved in it will get praise from the owners (Purnama and Nurdiniah, 2019).

#### 2.1.7.2 Institutional Ownership

Institutional ownership refers to share ownership held by institutions or groups with a role in defining regulations or company financing. The primary function of institutional ownership in a business is that it is believed to be capable of minimizing agency conflicts between agents and owners. Institutional ownership existence is assume can monitoring managers' performance in all managerial decisions. The control exercised by institutional ownership will provide a full guarantee for the company's growth because institutional ownership can directly monitor managers' performance and check financial statements regularly to minimize fraudulent actions committed by managers. Institutional ownership can change the management structure of the company so that it is very possible for the welfare of shareholders to increase. And institutional ownership is considered

capable of overcoming other agency costs to minimize agency costs and increase firm value (Permanasari & Kawedar, 2010).

## 2.2 Empirical Study

Besides discussing theories relevant to the problem under study, this research also reviews previous research. This research wants to develop previous research to get the same or different results from previous research. The review of prior research is extremely helpful for this research in reviewing and discussing the problems studied with various approaches. Through the results of previous research, it can help provide an inclusive and comprehensive understanding.

Table 2.1 Empirical Study

No	Author(s)/ Year/ Country	Methodology		Research Result		
1	Rita Kusumawati & Irham Rosady	This study used 4 years from 2013-2016 of 96	1.	Capital structure and profitability has a significant positive relationship on		
		manufacturing companies		firm value.		
	(2018)	listed on the Indonesia	2.	Ownership moderates the managerial		
		Stock Exchange with		relationship of capital structure on		
	Indonesia	Moderated Regression		firm value.		
		Analysis (MRA) or	3.	Profitability moderated by managerial		
		interaction test analysis		ownership has a significant negative		
	3.61.7	technique	1	relationship on firm value.		
2	Md. Imran Hossain	This study used 13 years annual data from 2002-	1.			
	поѕѕаш	2014 of 81 Bangladeshi		the return on assets whereas positively influence the return on		
	(2016)	manufacturing companies		equity of the firms.		
	(2010)	listed under 10 industries	2.	<b>1</b> •		
	Bangladesh	in Dhaka Stock Exchange		influence on profitability compared		
		(DSE) with 1053		to long-term debt ratio		
		observations		-		
3	Christine	This study used 4 years	1.	CSR has insignificant and positive		
	Herawati	from 2013-2016 of		influence on firm value.		
	Limbong, Khaira	mining companies listed	2.	, C 1		
	Amalia,	in the Indonesia Stock		effect on firm value.		
	Narumondang	Exchange with total 128	3.	Firm size has negative insignificant		
	Siregar	observations and used the	4	influence on firm value.		
	(2019)	ordinary least squares	4.	Managerial ownership could not moderate the correlation between		
	(2018)	(OLS) regressions		CSR, Profitability, and Firm size on		
	Indonesia			Firm value.		
	maonesia			i ii ii vaiuc.		

Table 2.1
Empirical Study (Continue)

No	Author(s)/	Methodology	Research Result
	Year/ Country		
4	Ahmad Mohammad Obeid Gharaibeh and Ahmad Mohammad Obeid Gharaibeh (2017) Arabic	This study used 10 years from 2013-2016 of 40 companies were selected from petrochemical, retail, agriculture and food, cement, industrial investment, and building and construction sector of the Saudi Stock Exchange (TADAWUL).	<ol> <li>Size of the firm, efficiency an tangibility have positive an insignificant relationships with firm value.</li> <li>leveraging and dividend policy hav an insignificant negative relationshi with the firm value.</li> </ol>
5	Wenjuan Ruan, Gary Tian, Shiguang Ma (2011) China	This study used 6 years from 2002-2007 of 197 China's civilian-run listed firms on the Shanghai Stock Exchange and the Shenzhen Stock Exchange. This study is an unbalance panel dataset with 723 observations	<ol> <li>Capital structure cannot mediate the variable between manageria ownership and corporate value.</li> <li>There is a negative relationshim between leverage ratios and managerial ownership.</li> <li>Managerial ownership has no impact on the firm's value.</li> <li>Managerial ownership has significant impact on capital structure, and capital structure has direct effect on the company performance.</li> </ol>
6	Panji Putranto and Elan Kurniawan 2018 Indonesia	This study used 4 years of food and beverage industry companies listing on the Indonesia Stock Exchange with Multiple linear regression analysis	<ol> <li>Managerial ownership has significant positive impact on firm value.</li> <li>Profitability has insignificant negative impact on firm value.</li> </ol>
7	Mohammad Alipour, Mir Farhad Seddigh Mohammadi, Hojjatollah Derakhshan (2015)	This study used 5 years of manufacturing firms listed on Tehran Stock Exchange Iran with 1918 observations and used the ordinary least squares (OLS) regressions	<ol> <li>All the measures of capital structur have negative relationships on size.</li> <li>There is significantly negative relationship between financial flexibility, share price performance sales growth, expected growth of assets and return on assets and capital structure</li> </ol>

Table 2.1
Empirical Study (Continue)

No	Author(s)/ Year/ Country	Methodology	Research Result
8	Afi Virna Noviani, Apriani Dorkas Rambu Atahau, and Robiyanto  (2019) Indonesia	This study used 3 years from 2014-2016 of 27 companies listed in index Business 27 with panel data regression	<ol> <li>Capital structure has a significant negative influence on firm value.</li> <li>Profitability has a significant positive influence on firm value.</li> <li>Good Corporate Governance does not moderate the relationship of capital structure on firm value.</li> <li>Good Corporate Governance moderate the relationship of profitability on firm value.</li> </ol>
9	Mishelle Doorasamy (2021) Africa	This study used 10 years from 2009-2018 of 65 listed firms in East Africa with 536 observations and employed a GMM estimation technique	<ol> <li>The capital structure measured by firms' leverage has a significantly negative relationship with the value of firms.</li> <li>Managerial ownership significant negatively moderates the relationship between capital structure and the value of the firms.</li> </ol>
10	Chenchuramaiah T. Bathala (1996) America	This study used 281 firms listed on the New York Stock Exchange with OLS method	<ol> <li>The proportion of the CEO's equity ownership is related positively to the firm's debt level, diversification potential of the firm's common stock, free cash flows, and earnings volatility.</li> <li>The proportion of the CEO's equity ownership is related negatively to the firm size.</li> </ol>

# 2.3 Relationship Among Variables and Hypothesis

## 2.3.1 Relationship between Capital Structure and Managerial Ownership

The company's funding decisions are critical. The company's funding can come from either equity or debt. The financial structure of the company reveals the source of its finance. Capital structure is a balance of debt and equity (Agustina, 2018). Capital structure is critical since it has a direct impact on a company's financial state. Firm funding necessitates the use of an optimal capital structure

because the optimal capital structure allows the organization to employ the best combination of debt and equity.

Companies that struggle to pay their obligations until they go bankrupt demonstrate the necessity of policies in managing a company's capital structure. According to Susanto (2016), good capital structure management helps keep organizations from going bankrupt by preventing them from having problems paying debt and interest installments. According to agency theory, management ownership is used to lower agency costs (Nuswandari, 2013). Companies require a large amount of capital to make high profits hence they require outside funding. According to the trade-off theory, the corporation will finance itself through debt. Debt is utilized not only to cover financial demands but also to obtain profits or tax reductions (Ferlina and Agustina, 2018). This is related to the research of Alipour, Mohammadi, and Derakhshan (2015) and Tarus and Ayabei (2016), who discovered that appropriate leverage and ownership structures can be used to lower total agency costs and that capital structure formation can improve corporate governance.

H1: Capital Structure has a positive effect on Managerial Ownership

## 2.3.2 Relationship between Firm Size and Managerial Ownership

The size of a company reveals its performance. Machfoedz (1999) divides company size into three categories: large, medium, and small. The size of the company can impact management's ability to operate the company in a variety of settings and conditions. According to Ali, Salleh, & Hassan (2008), One of the most important aspects impacting the management ownership and agency conflict connection is the size of the company. In the concept of effective corporate governance, managerial ownership is used to reduce conflicts that may arise between shareholders and company managers as a result of shareholders' skepticism of company managers' ability to manage company finances.

Previous research on management ownership found more in small companies than in large companies (Bathala, Moon, & Rao, 1994). According to Mahadwartha (2003), size has a significant negative impact on managerial ownership. Whereas a small firm size increases the option of including managerial ownership, a small

company size increases corporate profitability to raise managerial ownership. The findings of the study are congruent with the study result of Wahidahwati (2002), who found that the larger the company, the less managerial ownership since the corporation inhibits managers' ability to hold company shares. Vidyantie and Handayani (2006) discovered that firm size had a negative impact on management ownership. Meanwhile, Putri and Nasir (2006) and Popoola, Ratnawati & Hamid. (2016) discovered a significant value and a positive sign between managerial ownership and firm size. The proportion of shares, including managerial shares, will increase as the company's size grows.

H2: Firm Size has a positive effect on Managerial Ownership

## 2.3.3 Relationship between Profitability and Managerial Ownership

Profitability is a measure of a firm's performance based on sales profits generated by maximizing the company's current resources. Firm profitability is essential to investors since it is one of the factors they examine when investing. Investors believe that companies with high profitability will also deliver high returns (Kusumawati & Rosady, 2018). Managerial ownership is an example of a good corporate governance system that is expected to reduce agency conflicts so that conflicts between shareholders and firm management do not hinder the organization's success in achieving company goals. This condition will occur as a result of firm managers' and shareholders' control. Firm managers will be motivated to maximize the company's performance in order to maximize earnings for shareholders if they have management ownership. This is relevant to research by Almilia and Silvy (2006); Taswan (2003) demonstrating the positive impact of profitability on managerial ownership, where the managers can raise managerial ownership since they are attracted by profits as shareholders. Meanwhile, according to Nuringsih (2010), profitability does not affect managerial ownership, whereas organizations with low profitability tend to give dividends in small amounts, reducing the returns received by shareholders and, as a result, share ownership in low quantity.

H3: Profitability has a positive effect on Managerial Ownership

### 2.3.4 Relationship between Capital Structure and Firm Value

The capital structure of the company is critical. The ratio of long-term debt to the firm capital structure is related to its long-term expenditure (Hertina & Sulandari, 2020). The corporation will select the ideal capital structure with the lowest possible cost of capital to achieve significant earnings and firm value. Understanding the capital structure is the company's method of analyzing its financing by comparing the use of its capital and debt. The company can grow its value by managing an optimal capital structure, which reduces taxes and bankruptcy costs (Jensen & Meckling, 1976). Long-term debt management according to the Trade-off Theory, will result in lower taxes.

Tax reductions will raise the company's profit, and with high profits, investors will be attracted to invest. The company's stock price will also increase if many investors invest so a high capital structure will increase company value. According to the trade-off theory model, increasing the amount of long-term debt saves taxes and bankruptcy expenses, resulting in a gain in business value (Jensen & Meckling, 1976). This is consistent with research by Sitorus (2021), Ruan, Tian, Ma (2009), Apriliyanti, Hermi, and Herawaty (2019), and Hertina & Sulandari, (2020), which shows that the higher the company's capital structure, the higher the firm's value. A high capital structure indicates that the company can fund itself through long-term debt. However, Noviani, Atahau, Robiyanto (2019), and Doorasamy (2021) discovered that capital structure had a significant negative impact on the firm's value.

H4: Capital Structure has a positive effect on Firm Value

#### 2.3.5 Relationship between Firm Size and Firm Value

Company size reflects the firm's valuation, with total assets used to operate the company's activities. According to Jensen & Meckling (1979), a company's size might affect its value. The larger the company, the easier it is to raise funds from internal as well as external sources. Large companies are presented as having a great capacity to run a business thus investors will be more interested in investing in them. Firm size, according to signaling theory, is a positive signal that investors can receive, indicating that the company has high possibilities.

Large companies are more desired by investors because they are perceived to have promised futures, resulting in higher stock prices and a high firm value (Hidayah, 2014). According to Chabachib et al. (2020), and Lubis (2019), the overall assets or size of the company will improve the company's worth. An increase in firm reliability, according to signaling theory, is considered a positive signal for investors that the company has high prospects. Increased investor confidence and interest will result in higher stock prices, increasing the company's worth. Meanwhile, research by Hertina & Sulandari (2020) shows firm size does not affect firm value. Also, research by Pangesti, Mahmudi, & Hakim (2020) found that company size has a significant and negative impact toward firm value.

H5: Firm Size has a positive effect on Firm Value

## 2.3.6 Relationship between Profitability and Firm Value

The level of profitability generated by the company can be used to assess its success. The greater the amount of profitability, the better the company's success in resource management. A significant profit indicates success in managing corporate finances, which can improve the company's value (Putranto & Kurniawan, 2018). Profit maximization is one of the company's goals, achieving these goals can increase the company's value at the same time. A high level of firm profitability can indirectly provide guarantees and a strong incentive for investors to invest in the company, this condition will have an effect on the firm's value. This happens because companies with rising earnings, showing that the company is doing well, become a positive signal for investors. According to Kusumawati and Rosady (2018), Umam (2018), Noviani (2019), Limbong, Amalia, & Siregar (2018), and Novari & Lestari (2016), High profitability indicates positive corporate prospects, which drives investor demand for shares. Investors' positive reactions will drive up the stock prices and increase the firm's value.

H6: Profitability has a positive effect on Firm Value

### 2.3.7 Relationship between Managerial Ownership and Firm Value

The proportion of firm shares provided to managers is referred to as managerial ownership. The objective is to achieve a balance between the objective goals of shareholders and company managers. According to agency theory,

managerial ownership is a strategy for minimizing agency costs and avoiding conflicts between managers and shareholders. If company managers own stock in the company, they will perform as both company managers and shareholders. Managers will make choices with the interests of shareholders in mind, which is to maximize profit so that the share price as the reflection of firm value, can rise (Ferlina & Agustina, 2018). According to Putranto & Kurniawan, (2018), being the company manager and the company shareholder will motivate the managers to do all possible to raise the company value because the value of their wealth as a shareholder will increase as a result. This is relevant to research conducted by Sofyaningsih and Hardiningsih (2011), Kusumawati and Setiawan (2019), and Putranto & Kurniawan, (2018) show that managerial ownership affects value of firm.

H7: Managerial Ownership has a positive effect on Firm Value

# 2.3.8 Managerial Ownership as Intervening variable

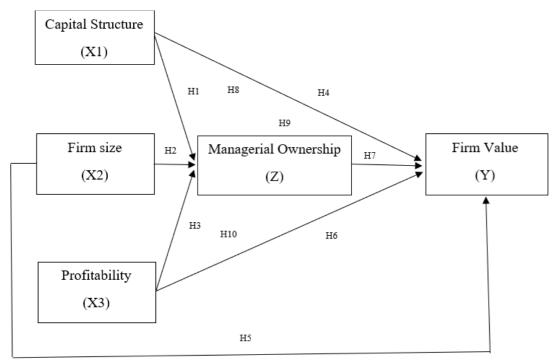
Agency conflicts occurs because of the dissociation of managerial ownership and firm management. Agency issues develop as a result of information imbalances, which necessitate the completion of internal working mechanisms. A concept of ownership can be used to solve the agency's problem (Farooque, Zijil, Dunstan, Karim, 2007). Agency problems often lead to agency costs. Agency costs are unavoidable in the mechanism of the relationship between owners and managers as agents. Agency costs consist of monitoring, bonding, and residual lost costs. Monitoring costs occur to measure, observe and control agent behavior, including auditing financial statements, preparing operational rules, building compensation plans for management, and so on. Bonding costs are incurred for installing or implementing mechanisms to assure that decisions made by agents are in the best interest of the principles. Usually, monitoring and bonding costs are estimated through reduced remuneration (in managerial contracts) or higher interest rates (in debt contacts). The difference between the two is called residual loss. This difference could be even bigger because several monitoring activities are not considered cost-effective when implemented.

One way to control these costs is to issue debt. The use of debt financing sources within the company can reduce cash flow and waste that may be carried out by managers. Managerial ownership has the potential to restrain the company's management's excessive behaviors. The number of share ownership can also affect the actions of managers who are more involved in the company's management, causing the firm value to rise. Managers with large shareholdings are more motivated to engage in actions that benefit the company. Size has a strong detrimental effect on managerial ownership, according to Mahadwartha (2003). Small firm size enhances firm profitability to increase managerial ownership, whereas small firm size increases the choice to include managerial ownership. As a result, the following hypothesis is proposed:

- H8: Managerial Ownership as an intervening variable mediate the relationship between Capital Structure and Firm Value
- H9: Managerial Ownership as an intervening variable mediate the relationship between Firm Size and Firm Value
- H10: Managerial Ownership as an intervening variable mediate the relationship between Profitability and Firm Value

## 2.4 Conceptual Framework

Based on the theoretical review and previous research described in this study, the framework used in this research explains the effect of capital structure, firm size, and profitability on firm value in technology, heavy construction, and civil engineering companies listed on the Indonesia Stock Exchange in 2015-2021, with managerial ownership as an intervening variable. To help understand the principles in this study, the framework of thought in this study is described below.



**Figure 2.1 Conceptual Framework**