

CHAPTER II

LITERATURE

2.1 Literature Review

2.1.1 Agency Theory

In the agency theory, the principal is the owner of the capital, and agents are the person hired to carry out the task on the principal's behalf. The agency theory focuses on the relationship between the principal and agents. The agency theory aims to explain the complex behavior between the principal and agents (Moloi & Marwala, 2020).

Agency theory arises based on the problem between the principal and agents, where each party has different stakes. In addition, information asymmetries also took place. Principals are the company owner or Investors that invest in the company. The principal, in this case, might invest in more than one company or do not have the time to run the company directly. Thus, the principal will hire agents to decide for the company. The agency theory focuses on the relationship between the principal and the agents—investors' objective in creating more capital gain to earn more gain. On the contrary, factors that influence the effort can affect the agent's action. That might not result in the decision always acting in the principal's best interest (Ali, 2020). As the agents have more superior information of the farm operation, that might tempt the agents to work against the principal's best interest. Furthermore, unlike the principal, the agents pursue high rewards with as minimal effort as possible, which maximizes the owner's return. (Elsayeh & Elbardan, 2018).

Therefore, the principal needs to monitor the agent's resulting agency cost. The agency cost could be resolved by giving appropriate compensation to the agents. Furthermore, the principal can also monitor actions such as hiring an auditor to check agents' performance and building bonds with the agents to

encourage the agents to decide on in the principal's best interest (Pepper, A. 2019).

2.1.2 Leverage

Based on the basic accounting equation, assets are financed by leverage and equity. If the company doesn't have enough equity to fund the business activity or/and investment, the company could borrow money to fulfill the needs. Leverage can be acquired in businesses that provide capital; for example, a bank can lend money to a company with additional interest to be paid. For example, Campus Pizza borrows from First National Bank to purchase the delivery truck (Weygandt, Kimmel, & Kieso, 2015). The company could also use equity financing by selling part of the ownership to the public or directly. Contrary to leverage, which gives a guaranteed return of interest, equity financing has a higher risk since there are no guaranteed returns to investors with an exchange of the company ownership.

According to Hayes (2021), there are four advantages of leverage financing: (1) the lending company has no control of the company decisions contrary to equity financing, (2) the relations between the lender and the company end once the leverage is paid. As the company has more valuables, (3) interest paid are considered business expenses, so it is a tax deduction, (4) the monthly payment or the payment breakdown has a clear schedule; thus, it can be predicted accurately in forecasting financial statements. However, the company must maintain the optimal structure as too much debt could increase the risk of bankruptcy. Furthermore, leverage can reduce the agency cost by restraining the agents causing the risk of liquidation. Thus, this encourages agents to act in the principal's best interest by regulating the investment choice. Consequently, as the agency cost decreases, it will positively affect the firm's performance (Dawar, 2014).

The debt to asset ratio is a tool to compare the total debt to the company's total assets. It shows how much of the assets are funded by debt (Mulyono &

Saraswati, 2020). The higher the ratio means more of the assets are funded through debt; the lower the ratio means the assets are funded through less debt.

2.1.3 Trade-Off Theory

The trade-off theory argues that the firm must take advantage of the tax shield as maximum as possible with as little bankruptcy cost as possible to reach the optimal capital structure (Le & Bich, 2017). Thus, by maximizing the leverage, the firm market value would increase. Because by using leverage, the firm has the potential to invest in more assets, which is expected to increase the firm performance. In addition, because the interest paid on debt tax is deductible, it will also increase the firm profitability, consequently increasing the firm performance (Dalci, 2018). However, there is no exact number of optimal capital structures because there are different conditions in each country that result in inconsistent results (Rahman et al, 2020).

2.1.4 Pecking Order Theory

On the other hand, the pecking order theory argues that profitable firms rely more on internal financing than external financing (Zeitun & Saleh, 2015). The firm will only use external financing if the retained earnings are insufficient. Thus, the firm would resort to leverage and then equity as its last resort (Mishra & Dasgupta, 2019). The order according to pecking order theory is as follows:

1. Firms prefer internal funding or finance.
2. The firms will adjust the dividend payout ratios target according to the investment opportunity available.
3. Because of adjustable dividend policy, uncertainty and fluctuation in the firm's profitability and investment opportunity, firms might generate higher or lower cash flow than the investment chance. Thus if the cash flow generated is less, the firm would draw down its cash balance or marketable securities.

4. The firm will first start with the safest securities if external funding is needed. The firms then will start with debt, bond, and equity as the last resort.

2.1.5 Firm Size

Firm size is a fundamental factor that can be measured using sales, assets, and market capitalization (Dang, Li, & Yang, 2018). The firm size becomes an important part of measuring the firm's performance because a larger size can produce goods at a lower cost. Firms with large total assets also consider having a better outlook and being more stable in their performance (Meiryani, Olivia, Sudrajat, & Daud, 2020). In trade off-theory, larger firms have more access to external funding than the smaller firm. It is because larger firms have more assets as collateral if they fail to pay the debt compared to smaller firms (Le & Bich, 2017).

2.1.6 Firm Performance

The firm performance is crucial as a measurement and assessment of the result targeted for the firm. Thus, performance is the dependent indicator for higher efficiency and effectiveness (Taouab & Issor, 2019). Because of this, firms might have different performance indicators adjusting to the firm's importance. The profitability ratio and market value ratio is the common measurement for the firm performance, as profitability is used to measure the company's ability to generate profit, and market value ratio is used to measure the company's value in the market (Meiryani, Olivia, Sudrajat, & Daud, 2020).

A profitability ratio is a ratio that shows the company's capacity to generate profit (Mulyono & Saraswati, 2020). The higher the ratio measures, the higher the company's capacity to generate profit. According to Mulyono and Saraswati (2020), there are four profitability ratios as follows:

1. Profit Margin

A ratio that shows the company's net profit compared to sales. The higher the ratio means, the higher the revenue generated from sales.

2. Return on Assets

A ratio shows the company's net profit compared to its total assets. The higher the ratio means the company generated more revenue from its assets. It could also be referred to as the company's capacity to utilize its assets.

3. Return on Equity

A ratio that measures the company's net profit compared to its equity. The higher the ratio means the company could utilize its equity to generate more revenue.

4. Earning Per Share

A ratio that measures the earnings earned for each company's outstanding share; the higher the ratio means, the higher the earning earned for each outstanding share. It means the Investor got more value to its share.

Tobin's Q is an indicator to measure the firm's market performance. Tobin's Q is counted by dividing the firm market value with the book value of the firms (Danson, Lartey, Gyimah, & Adu-Ameyaw, 2020). Tobin's Q contains the market value of debt in the book value and the market value of equity in the firm market value (Le & Bich, 2017).

Tobin's Q was first proposed in research created by Nicholas Kaldor in 1966. Then it became popular when James Tobin of Yale University hypothesized that all companies' market value should be equal compared to their replacement cost (Halfiyah & Suriawinata, 2020). Tobin's Q ratio of between 0-1 means that it costs more to replace the firm's asset than its worth. If the value of Tobin's Q is greater than one means that the firm is worth more than the cost of its assets (Hutabarat & Senjaya, 2016).

2.2 Research Model

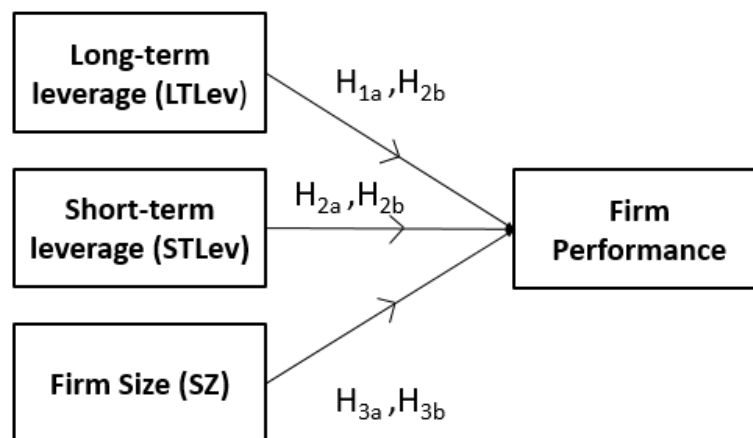


Figure 2.1 Research Model

2.3 Hypothesis

2.3.1 Long-term Leverage Impact on Firm Performance

Long-term leverage is debt that has a maturity date of over one year. Long-term leverage is more suitable for financing an investment such as machines, acquisitions, and building expansion (Bontempi, Bottazi, & Golinelli, 2020). Because long-term leverage has a longer period to pay off the principles, it lessens the company's financial burden. However, it also carries higher interest than short-term leverage (Tuovila, 2020). Trade-off theory argues that to reach the optimal capital structure, the companies must take advantage of leverage as maximum as possible (Le & Bich, 2017). By taking advantage of the tax shield from the interest expenses, the companies would have less tax cost. Furthermore, with leverage, the companies could take an unavailable investment opportunity because of limited

funds before. Thus, the companies could take more opportunities, resulting in more sales, consequently affecting the firm performance.

Weighted Average Cost of Capital (WACC) is a tool to measure the cost of capital or the required return rate from the financing cost. The higher the WACC means, the higher the required return rate. Because WACC is used as a discount rate in financial forecasting methods like Discounted Cash Flow (DCF), a higher WACC would result in a lower expected company cash flow that degrades the company's value. (Hargrave, 2022). To keep the optimum capital structure, the companies must mix the leverage and the equity. The leverage has a lower capital cost because the tax shield's interest rate return is fixed and reduced. Contrary, equity is more expensive because the investor does not have a fixed return. Thus, investors expect a higher return rate for their risk (Budhathoki & Rai, 2020). In this case, if the firm used leverage, it would lower the WACC, increasing the expected cash flow. Consequently, it is expected to raise the firm performance.

Ibhagui & Olokoyo (2018), A et al. (2018), Bhattarai (2020), Iqbal and Usman (2018), and Egbunike & Okerekeoti (2018) found a significant positive effect on long-term leverage from the past research in Nigeria, Nepal, and Pakistan. In addition, Angkasajaya et al. (2020) and Bawazir et al. (2019), who did research with the firm's object in Indonesia Stock Exchange, also found that long-term leverage has a significant positive impact on the firm performance. Thus, this research hypothesis are as follows:

**H_{1a}: Long-term leverage has a significant positive impact on IDX
Energy firm performance**

**H_{1b}: Long-term leverage has a significant positive impact on NYSE
Energy firm performance**

2.3.2 Short-term Leverage Impact on Firm Performance

Short-term leverage is debt that has a maturity date of under a year. Thus, it is more common for the firm to adjust the short-term leverage than the long-term

leverage. Short-term leverage is usually used to fulfill the firm's working capital, such as inventories and wages. It also includes bank loans and leases payment under one year (Ganti, 2020). The short-term leverage is a trade-off between the sales brought by the working capital and its costs. Because the short-term leverage has a lower cost than the long-term leverage, it is used to bring working capital to exchange higher sales for the company as it is productive leverage (Bawazir et al. 2019). The trade-off theory also supports the maximum use of leverage. Thus, it is expected that the increase of short-term leverage would result in higher sales for the companies, consequently increasing the firm performance.

Ibhagui & Olokoyo (2018), A et al. (2018), Bhattarai (2020), Iqbal and Usman (2018), and Egbunike & Okerekeoti (2018) research found that short-term leverage has a significantly positive effect on firm performance in Nigeria, Nepal, and Pakistan. This finding is also supported by Bawazir et al. (2019) and Haslinda et al. (2020), which research Indonesia Stock Exchange Companies. Thus, this research hypothesis are as follows:

**H_{2a}: Short-term leverage has a significant positive impact on IDX
Energy firm performance**

**H_{2b}: Short-term leverage has a significant positive impact on NYSE
Energy firm performance**

2.3.3 Firm Size Impact on Firm Performance

As the firm size grows over time, the firm could be more ineffective in the operations resulting in scale diseconomies. Diseconomies of scale happen when the firm experiences a higher cost in its production, contrary to the economy of scale (Ross, 2019). Diseconomies of scale happen because of the coordinator problems as the firm become larger. The coordinator of a larger firm is more complex than a smaller firm (Mankiw, 2017). Furthermore, the firm would face more agency problems; consequently, it costs larger to monitor the agent's performance. Thus, it expected to reduce the firm performance

The past research by Danson, Lartey, Gyimah, & Adu-Ameyaw (2020), Dalci (2018), and Mishra & Dasgupta (2019) found that firm size has a significant negative correlation to firm performance in India, China, Germany, France, Japan, Argentina, and Sri Lanka. In addition, Bawazir et al. (2019), Haslinda et al. (2020), and Sukmayanti and Triaryati (2018), which research object is Indonesia Stock Exchange Firm, also found the same result. Thus, the hypothesis for the research are as follows:

H_{3a}: Firm size has a significant negative impact on IDX Energy firm performance

H_{3b}: Firm size has a significant negative impact on NYSE Energy firm performance



2.4 Past Research

Table 2.1 Past Research

No	Researcher	Journal	Research Title	Findings
1.	Danson, Lartey, Gyimah, & Adu-Ameyaw (2020)	Managerial Finance Vol. 47 No. 5, pp. 635-655	Leverage and performance: do size and crisis matter?	Overall leverage, long-term leverage, short-term leverage, and firm size have significant negative effects on the firm performance
2.	Egbunike & Okerekeoti (2018)	Asian Journal of Accounting Research Vol.3 No. 2, pp. 142-168	Macroeconomic factors, firm characteristics and financial performance A study of selected quoted manufacturing firms in Nigeria	Leverage has a significant positive effect on the firm performance
3.	Supriati, Kananto, & Kusriananda (2018)	5 th Annual International Conference on Accounting Research (AICAR 2018)	The Effects of Intellectual Disclosures Capital, Debt to Assets Ratio, Debt Equity Ratio, Company Size And Assets Turnover on Company Profitability	The debt to asset ratio has a significant negative impact on firm performance. Firm size has a significant positive impact on firm performance.

4.	Ibhagui & Olokoyo (2018)	Journal of Capital Markets Studies Vol. 5 No. 1, pp. 96-107	Leverage and firm performance: New evidence on the role of firm size	Long-term leverage, short-term leverage, and firm size have a significant positive impact on firm performance.
5.	Dalci (2018)	Pacific Accounting Review Vol. 30 No. 4, pp. 410-432	Impact of financial leverage on profitability of listed manufacturing firms in China	Short-term leverage have a significant negative impact on firm performance.
6.	Dawar (2014)	Managerial Finance Vol. 40 No. 12, pp. 1190-1206	Agency theory, capital structure and firm performance: some Indian evidence	Long-term leverage, and short-term leverage have a significant negative impact on firm performance
7.	Mishra & Dasgupta (2019)	Managerial Finance Vol. 45 No. 8, pp. 982-1000	Cross-impact of leverage and firm performance: developed vs frontier bank-based economies	Firm size have a significant negative impact on firm performance.
8.	Zeitun & Saleh (2015)	EuroMed Journal of Business Vol. 10 No. 2, pp. 147-162	Dynamic performance, financial leverage and financial crisis: evidence from GCC countries	Firm size has a significant positive impact on firm performance.

9.	Le & Bich (2017)	Research in International Business and Finance Vol. 42, pp. 710-726	Capital Structure and Firm performance: Empirical evidence from a developing country	Long-term leverage, and short-term leverage have a significant negative impact on firm performance
10	Connelly, Limpaphayom, & Nagarajan (2012)	Journal of Banking & Finance Vol. 36, pp 1722-1743	Form versus substance: The effect of ownership structure and corporate governance on firm value in Thailand	Leverage has no significant impact on firm performance. Firm size has a significant positive impact on firm performance.
11	Rahman, Kakuli, Parvin, & Sultana (2020)	Business and Economic Research Vol. 10 No. 1, pp. 40-54	Debt Financing and Firm Performance: Evidence from an Emerging South-Asian Country	Long-term leverage has a significant negative impact on firm performance. Short-term leverage does not have a significant correlation with firm performance.
12	A et al. (2018)	Journal of Research in International Business and Management Vol. 5(1) pp. 81-89	Capital structure and financial performance of listed manufacturing firms in Nigeria	Long-term and short-term leverage on firm performance significantly positively impacts firm performance.

13	Angkasajaya et al. (2020)	The 2nd International Conference on Business and Banking Innovations (ICOBBI) 2020	The Impact of Capital Structure Towards Firm Performance Moderated by Corporate Governance in LQ-45 Company in BEI at 2013-2018	Long-term leverage has a significant positive impact on firm performance Short-term leverage has a significant negative impact on firm performance
14	Bawazir et al. (2019)	Jurnal Administrasi Dan Manajemen Vol. 9 No. 2 pp 113-119	Analisis Pengaruh Kebijakan Hutang Terhadap Kinerja Keuangan Perusahaan	Long-term and short-term leverage have a significant positive impact on firm performance. Firm size has a negative significant impact on firm performance.
15	Haslinda et al. (2020)	Jurnal Muara Ilmu Ekonomi dan Bisnis Vol. 4, No. 1, pp 10-20	Hubungan Antara Hutang dan Kinerja Perusahaan Manufactur Di Indonesia Yang Go Public Tahun 2016 – 2018	Short-term leverage has a significant positive impact on firm performance. Firm size has a significant negative impact on firm performance.

16	Sukmayanti and Triaryati (2018)	E-Jurnal Manajemen Universitas Udayana Vol. 8 No. 1, 7132-7162	Pengaruh Struktur Modal, Likuiditas dan Ukuran Perusahaan Terhadap Profitabilitas Pada Perusahaan Property dan Real Estate	Leverage has a significant negative impact on firm performance. Firm size has a significant negative impact on firm performance.
17	Bhattarai (2020)	International Journal of Accounting and Financial Reporting Vol. 19 No. 3, 35-46	Effects of Capital Structure on Financial Performance of Insurance Companies in Nepal	Leverage has a significant positive impact on firm performance
18	Iqbal and Usman (2018)	SEISENSE Journal of Management, Vol. 1 No. 2, 70-78	Impact of Financial Leverage on Firm Performance	Leverage has a significant positive impact on firm performance