CHAPTER II

THEORETICAL FRAMEWORK

In this chapter, we will explain more about the grand theory that the author chooses and explain all the variables for this research. This chapter also consists of previous research, conceptual framework, and research hypothesis.

2.1 Agency Theory

Agency theory is considered the foundation theory in this research. Jensen and Meckling (1976) explain the agency relationship in theory agency that the company is a nexus of a contract between owners of economic resources (principle) and the manager (agent) who takes care of the use and control of these resources.[7] This agency relationship results in two problems that are information asymmetry and conflict of interest. The implications of agency theory are to address the principal-agent problem and to reduce agency costs[8]. According to this theory, CSR disclosure could be considered as a resource or means for enterprises to make proper relationships with stakeholders so that information asymmetry could be reduced and investment efficiency could be reached.

Agency problems and information asymmetry are the two problems that affect corporate investments adversely. Prior research shows that severe information asymmetry and agency conflicts between insiders and external investors are prevalent in emerging Asian markets.[9] An agency problem arises due to a mismatch of the interests of shareholders with managers.[10] Under agency

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[7] Michael C. Jensen and William H. Meckling, 'Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure', *Journal of Financial Economics*, 3.4 (1976) <https://doi.org/10.1016/0304-405X(76)90026-X>.

[8] Cao Thi Mien Thuy and others, 'Corporate Social Responsibility Disclosure and Financial Performance: The Mediating Role of Financial Statement Comparability', *Sustainability (Switzerland)*, 13.18 (2021) <https://doi.org/10.3390/su131810077>.

[9] Zamir, Shailer, and Saeed.

[10] Muhammad Kaleem Khan and others, 'Financing and Monitoring in an Emerging Economy: Can Investment Efficiency Be Increased?', *China Economic Review*, 45 (2017), 62–77 <https://doi.org/10.1016/j.chieco.2017.05.012>.

theory, there are various control mechanisms, which help to alleviate the opportunistic behavior of managers and to mitigate asymmetric information, such as CSR activities.[11] It may be used to monitor both underinvestment and overinvestment problems in investment efficiency.

2.2 Investment Efficiency

Investment efficiency is a function of the risk, return and total cost of an investment management structure, subject to the fiduciary and other constraints within which investors must operate.[12] Investment efficiency will be created if the level of information asymmetry is low so that managers can make appropriate investment decisions and avoid underinvestment and overinvestment situations.

According to Modigilani and Miller (1958), in a perfect world with no market frictions or capital constraints, firms take up all projects with positive net present value and reject all projects with negative net present values.[13] However, both theoretical and empirical literature indicates that there are frictions that lead to investment inefficiency. The most common frictions (problems) are moral hazards and adverse selection caused by information asymmetry between managers and investors. This problem can cause companies to under-invest (invest less than the optimal level) or over-invest (invest higher than the optimal level). A moral hazard is a situation where the level of supervision of managers is weak so that, it can trigger management to maximize their interests by making investment decisions that differ from those of shareholders.[14] In adverse selection situations, better-informed managers may experience overinvestment problems if they sell securities above the average price and receive excess funds. Meanwhile, companies with high levels of leverage tend to experience underinvestment problems. A leverage ratio is a ratio used to measure the extent to which the company's assets are financed

[11] Marwa Samet and Anis Jarboui, 'How Does Corporate Social Responsibility Contribute to Investment Efficiency?', *Journal of Multinational Financial Management*, 40.June (2017), 33–46 <https://doi.org/10.1016/j.mulfin.2017.05.007>.
[12] R C Urwin, '[Presented to the Institute of Actuaries, 28 February 2000]', 545 (2000), 451–545.
[13] Zamir, Shailer, and Saeed.
[14] Samet and Jarboui.

with debt.[15] If the company has high leverage, it means the company is very dependent on loans to finance its assets. Thus, the amount of leverage will have an impact on decreasing the level of investment made by the company which then causes underinvestment.

Previous research by Zhong and Gao (2017) found that CSR disclosure contributes to increasing investment efficiency, where this is because CSR disclosure has effective information that can reduce information asymmetry and help companies achieve investment efficiency.[16] So, it can be concluded that investment efficiency is the optimal level of investment that avoids overinvestment and underinvestment conditions, and it is a type of investment that can bring benefits to the company.

2.3 Corporate Social Responsibility (CSR)

Corporate Social Responsibility (CSR) is a responsibility carried out by the company to its stakeholders with the intention that the company can be better in operating its operational activities to not give a negative impact on the environment and surrounding community. Corporate Social Responsibility (CSR) is a form of activity is carried out by companies in improving the company's economy and improving the quality of life of employees and their families as well as the quality of life of the surrounding community.

Gokulsing (2011) states that CSR can be defined as a concept that suggests organizations, especially (but not only) corporations, must consider the interests of customers, employees, shareholders, communities, and ecological considerations in all aspects of their operations.[17] By doing CSR, companies can build a good reputation such as improving the image of the company as well as its shareholders and building consumer loyalty. These days,

[15] M. Jihadi and others, 'The Effect of Liquidity, Leverage, and Profitability on Firm Value: Empirical Evidence from Indonesia', *Journal of Asian Finance, Economics and Business*, 8.3 (2021), 423–31 <https://doi.org/10.13106/jafeb.2021.vol8.no3.0423>.
[16] Ma Zhong and Lucia Gao, 'Does Corporate Social Responsibility Disclosure Improve Firm Investment Efficiency? Evidence from China', *Review of Accounting and Finance*, 16.3 (2017) <https://doi.org/10.1108/RAF-06-2016-0095>.
[17] Roshni Deepa Gokulsing, 'CSR Matters in the Development of Mauritius', *Social Responsibility Journal*, 7.2 (2011), 218–33 <https://doi.org/10.1108/17471111111141503>.

information about CSR is considered an important component because CSR disclosures can contribute to a reduction in information asymmetry and therefore contribute to a reduction in the cost of capital.[18]

2.4 CSR Disclosures

In this modern era where competition is very tight, companies compete with each other to attract investors, and one of the ways is by disclosing CSR. A company certainly attempts to be initiative to do the documentation and CSR disclosure of both its annual report and other media to get a positive response from the stakeholders.[19] By disclosing CSR, the company will not get a direct profit, but what is expected from these activities is a benefit in the form of an image or company image. CSR disclosure has a major impact on stakeholders' trust and, if used properly, supports organizational sustainability.[20]

Non-financial reporting disclosures, such as CSR reporting are considered important to reduce the information asymmetry that exists between management and stakeholders and allow investors to assess performance better and more broadly.[21] A previous study by Zhong and Gao (2017) stated that CSR disclosure contributes to increasing investment efficiency and causes a decrease in the level of information asymmetry. This is due to the additional information provided in CSR disclosures beyond that provided in the financial statements which can contribute to better investment efficiency of the company. This is in line with the research of Samet and Jarboui (2017), which states that a high level of transparency facilitates efficient capital allocation which allows managers to make better investment decisions.

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[18] Fernando.

[19] Isnalita and I Made Narsa, 'CSR Disclosure, Customer Loyalty, and Firm Values (Study at Mining Company Listed in Indonesia Stock Exchange)', *Asian Journal of Accounting Research*, 2.2 (2017), 8–14 <https://doi.org/10.1108/ajar-2017-02-02-b002>.

[20] Amina Buallay and others, 'Corporate Social Responsibility Disclosure and Firms' Performance in Mediterranean Countries: A Stakeholders' Perspective', *EuroMed Journal of Business*, 15.3 (2020), 361–75 <https://doi.org/10.1108/EMJB-05-2019-0066>.

[21] Xiaobei Beryl Huang and Luke Watson, 'Corporate Social Responsibility Research in Accounting', *Journal of Accounting Literature*, 34 (2015), 1–16 <https://doi.org/10.1016/j.acclit.2015.03.001>.

Companies generally usually use GRI (Global Reporting Initiatives) as the standard for their CSR disclosures. Based on GRI-G4, the reporting framework is divided into three main components, namely economic, environmental and social. Where the social category includes human rights, labor practices, work environment, product, and community responsibility. The total indicators contained in GRI-G4 reach 150 items.

2.5 Leverage

Leverage is a measure of how much of the assets owned by the company are financed by assets. Leverage is a tool to measure how far a company relies on creditors to finance company assets, where if the company has high leverage it means the company is very dependent on loans to finance its assets. By previous research by Zhong and Gao (2017), in this study, the leverage variable was measured using the ratio of total liabilities to total assets.

The research result by Lenger et al (2011) found that there is a significant influence between leverage on investment efficiency[22]. However, this is different from the results of research by Zhong and Gao (2017) which found that leverage does not have a significant effect on investment efficiency.

2.6 ROA

ROA is a measurement that measures the company's ability to generate profits with all assets used. The higher ROA, the more effective the company is because the amount of ROA is influenced by the amount of profit that the company generates. In accordance with previous research by Zhong and Gao (2017), in this research, the ROA variable was measured using the ratio of profit before tax to total assets.

Zhong and Gao (2017) state that there is no significant effect between ROA variables on investment efficiency. However, research by Benlemlih and Blitar (2016) reveals that the ROA variable has a significant effect on investment efficiency.

[22] Stephanie Lenger, Jürgen Ernstberger, and Joel Stiebale, 'The Impact of IFRS on Firms ' Investment Efficiency – European Evidence on Private and Public Firms'.

2.7 Size

Company size describes how big or how small the size of a company is. Company size can affect management's ability to operate the company with various situations and conditions that they face. The size of the company can be seen from the number of employees owned, or from the market value of the company's shares, and also from the total assets owned by the company. In accordance with previous research by Zhong and Gao (2017), in this study, the size variable was measured using the natural logarithm of total assets.

Based on the results of research by Zhong and Gao (2017), the size variable has a significant influence on the company's investment efficiency. However, this is different from the research by Lenger et al (2011) which revealed that the variable size does not affect investment efficiency.

2.8 Tangibility

Companies with a high level of tangibility mean that they have more collateral assets that can be used to obtain their external sources of funds in the form of debt. Tangibility is one of the important variables in determining funding decisions because fixed assets owned by a company can be used as collateral for creditors in making loans. In accordance with previous research by Zhong and Gao (2017), in this study, the tangibility variable was measured using the ratio of fixed assets to total assets.

In a study conducted by Li and Liao (2014), it was found that the tangibility variable had a significant effect on investment efficiency. However, this finding is different from research by Zhong and Gao (2017) which reveals that the tangibility variable does not affect investment efficiency.

2.9 Slack

Slack is a savings fund owned by a company that is prepared for conditions if there is a decline in sales, revenue, and company profits. In accordance with previous research by Zhong and Gao (2017), in this study, the slack variable was measured using the ratio of cash to fixed assets. In the research conducted by Zhong and Gao (2017), the slack variable has a significant effect on investment efficiency.

2.10 Previous Research

No	Writer's Name	Research Title	Result of the Research
1.	Khediri (2021)	CSR and investment efficiency in Western European countries	There is a positive link between CSR and investment efficiency. The relation between CSR and investment efficiency is stronger when country-level investor protection is higher.[23]
2.	Zamir (2020)	Do corporate social responsibility disclosures influence investment efficiency in the emerging markets of Asia?	CSR disclosures are positively associated with investment efficiency. There is no evidence that CSR disclosures are related to overinvestment.
3.	Zhong (2017)	Does Corporate Social Responsibility Disclosure Improve Firm Investment Efficiency? Evidence from China	The empirical analysis shows a significant positive association between CSR disclosure and investment efficiency. This relationship is more pronounced for the sub-sample of firms that overinvest.

[23] Karim Ben Khediri, 'CSR and Investment Efficiency in Western European Countries', *Corporate Social Responsibility and Environmental Management*, May, 2021 <https://doi.org/10.1002/csr.2151>.

2.11 Conceptual Framework

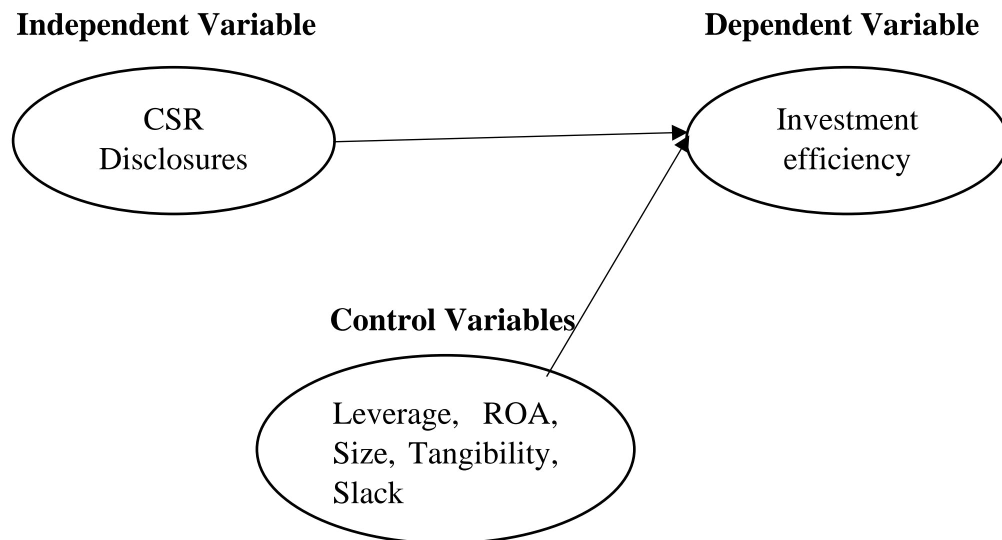

Fig 1. Research Model 1

2.12 Research Hypothesis

Corporate social responsibility is the responsibility of the company for the impact on the environment due to the company's business activities. CSR is an important and major contribution to economic development and how companies reflect their commitment to the environment. The existence of investment inefficiency in the company occurs due to various internal conflicts, the most important of which is the existence of a moral hazard and adverse selection that occurs due to information asymmetry between managerial and outside investors. This can be avoided by increasing the extent of the company's financial and non-financial disclosures, namely corporate social responsibility reports. The positive influence of CSR disclosure on company investment efficiency has been investigated by Benlemlih & Girerd-Potin (2017), Samet & Jarboui (2017), and Zhong & Gao (2017). This gives us an idea that Corporate Social Responsibility Disclosure has an effect on investment efficiency and investor assessment.

Companies with a high level of CSR are generally more open in disclosing their financial activities than companies with a low level of CSR.[24] This will give a

[24] Dan S. Dhaliwal and others, 'Voluntary Non-Financial Disclosure and the Cost of Equity Capital: The Case of Corporate Social Responsibility Reporting', *SSRN Electronic Journal*, 2011 <https://doi.org/10.2139/ssrn.1343453>.

positive image in the eyes of investors and stakeholders.[25] Information related to CSR can be complementary to financial information, especially in terms of reducing information asymmetry between companies and non-financial stakeholders.[26] Non-financial disclosures such as CSR can provide additional information that can be used by rational market participants and therefore, it can contribute to reducing information asymmetry.[27] Hung et al (2013) compared the level of information asymmetry of companies listed in China around the beginning of the period when the mandatory CSR disclosure policy was implemented and found that information asymmetry decreased significantly after the enactment of the mandate it is relevant in the emerging markets.[28] This is in line with research by Zhong and Gao (2017) who said that CSR disclosure has effective information in reducing information asymmetry. From this evidence, the first hypothesis of this research is:

H_1 : There is a positive effect between CSR disclosures on the company's investment efficiency.

CSR reporting provides additional information that contributes to reducing information asymmetry and generating funds from the capital suppliers. By doing CSR activities, it will improve the company's image in the eyes of the community. Frequently, the impact of CSR disclosures activities will lead to additional demand from external parties. The impact of additional demand on CSR activities resources is different in underinvestment and overinvestment scenarios. The effect of CSR disclosure is a double-edged sword in an underinvestment scenario. On one side, CSR disclosure will generate additional funds from outside and on the other hand, this funding will also

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[25] Mohammed Benlemlih and Mohammad Bitar, 'Corporate Social Responsibility and Investment Efficiency', *Journal of Business Ethics*, 148.3 (2018) <https://doi.org/10.1007/s10551-016-3020-2>.
[26] Dhaliwal and others.
[27] Zhong and Gao.
[28] Mingyi Hung, Jing Shi, and Yongxiang Wang, 'The Effect of Mandatory CSR Disclosure on Information Asymmetry: Evidence from a Quasi-Natural Experiment in China', *SSRN Electronic Journal*, 2013 <https://doi.org/10.2139/ssrn.2206877>.

result in increased CSR demands from non-stakeholders (Zhong and Gao, 2017).

Meanwhile, in the overinvestment scenario, expenditures in CSR activities that occur as a result of additional CSR can contribute to reducing excess investment, and moving towards an optimal level of investment.[29] In the underinvestment scenario, although the resolution of information asymmetry related to CSR disclosure will move to the optimal level of investment, this additional expenditure may cause the investment rate to move in the opposite direction, offsetting some of the initial increase in investment efficiency (Zhong and Gao, 2017). Therefore, the study hypothesizes that CSR disclosure is positively associated with higher levels of investment efficiency, but this relationship is stronger in the overinvestment scenario. The second hypothesis is:

H_2 : There is a negative effect between CSR reporting on investment efficiency in the overinvestment scenario.

[29] Ma Fuensanta Cutillas Gomariz and Juan Pedro Sánchez Ballesta, 'Financial Reporting Quality, Debt Maturity and Investment Efficiency', *Journal of Banking and Finance*, 40.1 (2014) <https://doi.org/10.1016/j.jbankfin.2013.07.013>.