Types I, II, III Agency Problems, Firm Value, and National Governance Quality A Case Study of Indonesian and Singaporean Companies

Septiana Sihombing(✉), Isfenti Sadalia, and Amlys Syahputra Silalahi

Universitas Sumatera Utara, Medan, Indonesia
septianasihombing123@gmail.com

Abstract. Corporate governance is mostly studied in developed countries such as the US, UK, and some developed countries in Europe, which focuses on Type I agency problems (shareholder-manager), and there is a dearth of types of agency problems such as type II problems (shareholder-shareholder) and type III problems (shareholder-creditor). Furthermore, the modern financial literature has turned to national governance quality in influencing firm value. So, this research is interested in exploring agency problems I, II, and III affecting firm value with national governance quality as a moderating variable. The research sample was manufacturing companies listed on the Indonesia Stock Exchange and Singapore Exchange from 2016–2020. The findings show that type I agency problem has a significant negative effect and Types I and II agency problem have an insignificant negative effect on firm value in Indonesia. While Types I and II agency problem have a significant negative effect. Still, Type III agency problem has an insignificant negative effect on firm value in Singapore. Moreover, national governance weakens the negative influence of the Type II agency problem on firm value in Singaporean manufacturing companies. Generally, types I, II, and III agency problems give rise to different agency cost levels in companies of a country, so the government needs to reform national governance quality to increase firm value.

Keywords: Agency problem · National governance quality · Firm value

1 Introduction

The increase in firm value is a perception of stakeholder trust in investing [1, 2], which is often associated with its share price [3, 4]. The execution of corporate governance relates to managing the interaction between management, shareholders, creditors, and other stakeholders, impacting the increase in firm value in the economy and business [5]. One application of corporate governance is to reduce agency problems [6] to explain leadership behavior in making decisions that incur agency costs [2].

Figure 1 shows that Southeast Asian capital markets (Singapore and Indonesia) have higher returns than capital markets in other developed countries from 2016 to 2020. In developing countries, such as Southeast Asia, agency problems are more complicated due to poor institutions and investor protection [7]. Although Types I, II, and III agency

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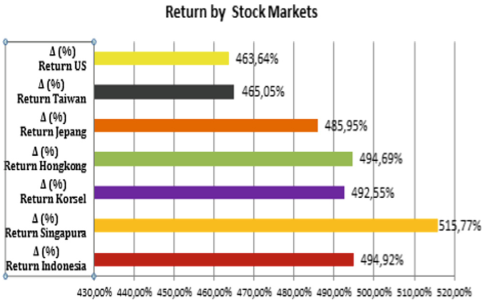

Fig. 1. Return by Global Stock Markets 2016–2020. Source: OJK (Financial Services Authority, 2020).

problems can cause large agency costs, the level of the agency costs will be different in one company [8].

Focusing on traditional agency problems (Type I agency problem), i.e., conflicts of interest in terms of misalignment, management can act in ways that are in the interests of the manager but against the interests of the owners [9, 10]. The existence of risk preferences, information asymmetry, and moral hazards in the company as the cause of type I agency problem between principals and agents [11]. The majority shareholder has the power to make decisions within the company [12–15]. Initially, the majority shareholder's role is to monitor and control managers' decisions that increase firm value. However, when the concentration of ownership gets higher, the majority of shareholders can lead to a conspiracy of managers and majority shareholders to make decisions to withhold company earnings for risky projects that are profitable in the future rather than distributing profits as dividends to all shareholders and thus impacting negatively on firm value [15, 16]. This indicates an empirical finding (OECD, 2021) which shows that concentrated ownership of Indonesian companies is more than 60% in one shareholder, followed by Singapore concentrated ownership with 58% likely to be faced with Type II agency problem.

In addition, Type III agency problem (shareholders and creditors) is due to debt to firm value. Debt was thought to be unrelated to company performance early on in the formation of theory, as Modigliani & Miller [17] suggested. However, based on the agency theory proposed by Jensen & Meckling [6], investigating debt can cause agency problems, which can have an impact on the firm value. In addition to specific internal risks, such as corporate governance [15], external risks can affect firm value [18]. For example, country-specific factors such as national governance quality in the country where the company operates [4, 19]. Recent research observing national quality governance can also moderate the relationship between Type II agency problem and firm value [20–23]. In other words, good national governance quality shapes the implementation of regulations to protect minority shareholders.

Figure 2 shows that national governance quality based on Worldwide Governance Indicators (WGI) developed by [19] and the World Bank's Doing Business Project places Singapore with well-quality governance at a score of (31.27) and Indonesia achieved a score (−1.30) with under-quality governance as of December 31, 2020. Differences

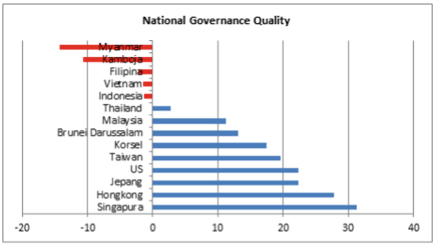

Fig. 2. Worldwide Governance Indicators 2016–2020. Source: World Bank, 2020.

in national governance quality will affect the investors' perception of investing in the company's country [20]. Corporate governance is mostly studied in developed countries such as the US, UK, and some developed countries in Europe and focuses on Type I agency problem (shareholder-manager). There is a dearth of agency problem types, such as Type II (shareholder-shareholder) and Type III (shareholder-creditor) agency problems [11]. Although there were several studies conducted in Indonesia, such as [23–25] that used one or two measures of agency problems, only Kusumadewi & Wardhani [23] research examines Indonesia's three types of agency problems. Therefore, the authors develop research by looking at the impact of Types I, II, and III agency problems and national governance quality variables in moderating the effect of Type II agency problem on firm value in Indonesia and Singapore.

Shareholders tend to expect dividends and capital gains. At the same time, firm managers who know information about the firm's actual financial position and future firm prospects want to retain earnings to purchase assets that increase company value, or there are other motives to increase the personal wealth that leads to moral risk [9] causing inefficiency, even loss for the company [20]. Differences in the importance of information asymmetry can use the asset utilization ratio indicator in measuring Type I agency problem [9, 10, 23, 26]. The higher the value of the asset utilization ratio, the lower the occurrence of agency problem due to the efficiency of management's assets to maximize firm value [9, 10, 26].

Hypothesis 1. Type I agency problem has a negative and significant effect on firm value in Indonesia and Singapore.

The more concentrated share ownership will cause Type II agency problem [15, 23]. Concentrated ownership will trigger dominant shareholders to make decisions that harm other shareholders, such as private corporations, the public sector, institutional investors, and individuals, to benefit their interests with the result that it can affect the firm value [20, 27–29] and dividend-related policies [30–32]. As a consequence of the entrenchment by the majority shareholder, the minority shareholder will likely attract investment in a company by selling the company's shares they own. The more minority shareholders sell their shares, the value of the company, as reflected in the company's share price, decreases [33, 34].

Hypothesis 2. Type II agency problem has a negative and significant effect on firm value in Indonesia.

According to Myers' [35], firms with more leverage will forego positive net present value projects in the future in order to pay all debt obligations. From another point of view, the literature Burunciuc & Gonenc [36] said that debt could also cause financial distress "bankruptcy effect". Increased leverage increases the agency conflict between shareholders and creditors, which decreases the company's market value. The company will try to choose the optimal loan level to reduce the risk of bankruptcy, which the lender will consider. As a result, the company will attempt to control the associated risks with the potential agency cost of borrowing.

Hypothesis 3. Type III agency problem has a negative and significant effect on firm value in Indonesia and Singapore.

Good governance can affect the value of companies operating in the country. For example, in countries where government effectiveness can affect production input costs, in countries where the government has policies that are not market-friendly, implement price controls, regulatory quality can create open and healthy competition, and the good rule of law has an impact on operating activities company [18, 37]. In general, excellent national governance quality is thought to provide quality protection for minority shareholders [23] and play a role in forming and implementing legislation that reduces the danger of majority shareholder takeovers [20, 38, 39]. Minority shareholders are more loyal to the company when they are better protected. This impacts the company's market value, as it eliminates the possibility of a decrease in the company's market value due to minority shareholder share sales—the lower the level of minority shareholder protection, the lesser the risk of expropriation. Good national governance quality will mitigate the detrimental impact of ownership concentration on business value.

Hypothesis 4. National governance quality significantly weakens the effect of Type II agency problem on firm value in Indonesia and Singapore.

2 Research Methods

The dependent variable was firm value (TOBIN'S Q), which is the market value of equity and the total book value of debt, then divided by the total book value of assets [8]. National governance quality uses a score based on the Worldwide Governance Indicators (WGI) developed by Kaufmann et al., [19]. This study only used three indicators related to the company's business operations from 6 existing indicators, namely Government Effectiveness, Regulatory Quality, and Rule of Law, following the research [20]. Type I agency problem was measured by the asset utilization ratio (annual sales divided by total annual assets) based on Ang et al., [9], Singh & Davidson [10], McKnight & Weir [40] Type II agency problem was measured by ownership concentration (total ownership of shareholders above 5% divided by the number of outstanding shares) based on Thomsen et al., [41], Nguyen et al., [20]. Leverage was used to assess the Type III agency problem (dummy variable with a value of 1 if leverage is greater than the industry median and 0 if it is lower) [8, 42].

The equation of the research model is as follows (Eq. (1):

$$\begin{aligned}\text{Tobin's Qi, t} &= \alpha + \beta 1(\text{AP1i, t}) + \beta 2(\text{AP2i, t}) + \beta 3(\text{AP3i, t}) \\ &\quad + \beta 4(\text{AP2i, t} * \text{NGindexi, t}) + \varepsilon\text{it}\end{aligned} \tag{1}$$

3 Results and Discussion

According to the statistical description in Table 1, the mean value of Indonesian manufacturing companies (3.1263) is greater than Singaporean companies (1.0349). This means that the stock exchange of Indonesian manufacturing companies is valued at three times higher than the book value of the company's assets (overvalued) than Singaporean manufacturing companies. Moreover, the mean of Type I agency problem for Indonesian manufacturing companies (1.0368) is greater than that of Singaporean manufacturing companies (0.8274) indicating that the Type I agency problem tends to be greater in Singapore. The mean of Type II agency problem in Indonesian manufacturing companies (0.5725) is bigger than Singapore (0.3859) indicating Type II agency problem tends to be higher in Indonesia. The mean of Indonesian and Singaporean manufacturing companies is (0), indicating that Indonesian and Singaporean manufacturing companies have regular debt below the industry median debt and small Type III agency problem. The mean of national governance quality in Indonesian manufacturing companies (−0.26) is smaller than in Singapore (6.25), indicating the Singapore government's ability to carry out the formation and implementation of regulations that minimize the occurrence of adverse risks for companies or investors better than the Indonesian government country.

The results of the variable regression test on firm value based on Table 2 for Indonesian manufacturing companies obtained that the Type I agency problem variable has a significant negative influence on firm value, but the types II and III agency problem variables have an insignificant negative influence on firm value. The interaction variable Type II agency problem with national governance quality has a positive and insignificant effect on firm value, so it has not been able to weaken the influence of Type II agency problem on firm value. Furthermore, for Singaporean manufacturing companies, the Types I and II agency problem variables have a significant negative effect on firm value,

Table 1. Descriptive Statistics.

Indonesia					
Variable	N	Max	Min	M	Std Dev
Tobins' Q	200	23,2858	0,422	3,1263	3,7137
AP1	200	3,1048	0,0013	1,0368	0,5325
AP2	200	0,925	0,082	0,5725	0,2567
AP3	200	1	0	0	0,4994
National Governance Quality	200	0,11	−0,46	−0,26	0,2
Singapura					
Tobins' Q	125	4,3753	0,1048	1,0349	0,6859
AP1	125	3,1144	0,0267	0,8274	0,5501
AP2	125	0,7393	0,1064	0,3859	0,1552
AP3	125	1	0	0	0,4987
National Governance Quality	125	6,42	6,17	6,25	0,09

Table 2. Regression Results.

Dependent: Tobins' Q					
Country	Var	Coeff	Prob	R-Sq	Prob (F)
Ind	AP1	−0,2535	0,0178	0,076	0,0037
	AP2	−0,0492	0,3652		
	AP3	−0,2297	0,1162		
	AP2 * NGQ	0,2812	0,1077	0,145	0,0007
Sin	AP1	−0,2696	0,0313		
	AP2	−0,2291	0,0063		
	AP3	−0,0061	0,9715		
	AP2 * NGQ	0,0608	0,0864		

Description: level of significant, α = 10% (*), α = 5% (**), α = 1% (***).

but Type III agency problem has an insignificant negative effect on firm value. The interaction variable type II agency problem with national governance quality has a significant positive effect (α = 10%) on firm value weakening the effect of Type II agency problem on firm value. The negative value results indicate that this study's low asset utilization ratio is considered a problem that can cause Type I agency problem. A low asset utilization ratio can be a bad signal for investors, which raises suspicions that managers may make unilateral decisions (using company money) for transactions that ultimately benefit them), overinvesting (investment is unnecessary because it would be cheaper to buy from other sources), doing empire building (the temptation that managers should run a bigger business because it is more prestigious and higher payouts are related to size), overspending (expenditures that are not made for profit for the company but personal gain), and self-image (which builds a barrier that helps managers to take positions where they are difficult to fire or lay off [43].

4 Conclusion

These results are different from the research findings. In Indonesia, with a high asset utilization ratio, Type I agency problem should be small and increase firm value. Researchers suspect that efficient asset management by managers does not trigger an increase in stock prices or dividends to be distributed by the company so that the level of investor confidence in the company decreases, which has an impact on decreasing stock prices [44].

The results of a negative Type II agency problem value indicate that a company with a concentrated ownership structure can be a bad signal for investors due to a high concentration of ownership, which can lead to serious agency problems, from the presence of voting power allowing the risk of expropriation or the process of using control to maximize one's welfare by control management decisions according to their interests rather than the interests of minority shareholders [33]. The results obtained are not in accordance with the hypothesis that was built. This is apparent in descriptive statistics results, which differ from the researchers' findings [8, 20, 45]. This is supported by Yosi & Yuningsih [46], who revealed that the concentration of ownership by institutional ownership and managerial ownership does not affect firm value. A negative Type III agency problem value indicates that increasing debt is considered a problem that can cause type III agency problem. It can also be a bad signal for investors and creditors because if the company has excessive debt, there is a possibility of bankruptcy, making creditors give fewer loans to the company [47]. The results obtained are in line with the results of descriptive statistics and hypotheses because low debt below the industry median debt minimizes agency problems between shareholders and creditors. The positive value results denote that national governance quality weakens the negative effect of Type II agency problem on firm value. The negative effect of Type II agency problem on firm value weakens when the level of national governance quality increases. When the level of national governance quality falls, the positive effect of Type II agency problem on firm value grows so that the good effect may be described, and national governance quality increases minority shareholders' positions by safeguarding them from management and restraining shareholders' abuse. The positive value results imply that every increase in national governance quality can increase the firm value. Therefore, it proves that good national quality governance will increase firm value because national governance quality can influence the policies and operational designs adopted by the company. So that the government's ability to carry out the formation and implementation of regulations that minimize the occurrence of adverse risks for companies or investors [39].

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