# Risk And Return, Debt Policy, Agency Cost, Firm Value During Covid 19: A Case Study On Public Companies

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#### **Abstract**

The influence of risk and return on debt policy, agency costs, and firm value in Indonesian public companies is investigated in this study. The research is based on quarterly data from companies in the LQ45 index. There are 180 observations in all. Partial Least Squares Structural Equation Modeling is used to analyze the data (SEM-PLS). The data analysis demonstrates that the company's sales decreased during the COVID-19 pandemic, resulting in an increase in risk and a decline in the company's return. Even though the company's agency charges have failed to increase the sales value, the company's debt is nevertheless covered by its assets and capital. More findings will be presented in-depth. The findings might help researchers identify characteristics that impact business values. These characteristics may then be utilized to identify which strategies and policies a management team should employ to maintain a company's value.

**Keywords**: risk and return, debt policy, agency costs, firm value, covid 19 pandemic, economic growth

### 1. INTRODUCTION

The Capital Market is an organized market where entities can mobilize funds, either domestically or abroad. The presence of the capital market increases the choice of sources of funds, especially long-term funds. For companies that need funds, the capital market is an alternative source of funding outside banks to provide cheap funds. Meanwhile, for those who have funds, the capital market can be used to invest funds in financial assets. The presence of the capital market will increase investment options so that investors have the opportunity to optimize the funds they have.

To prevent the spread of Covid 19, Indonesia has imposed Large-Scale Social Restrictions. However, this restriction causes limited mobility of people and domestic demand goods, as well as production and investment activities. According to data, the Covid-19 pandemic caused a 5.32% contraction in economic growth in the second quarter of 2020 compared to the first quarter of 2020 of 2.97% (Bappenas, 2021).

The impact of the COVID-19 pandemic on the economy is significant. The rupiah rate against the dollar has been weakened resembling the monetary crisis in 1997-1998. LQ45 index, Kompas100 index, and IDX30 index on the Indonesia Stock Exchange all experienced a decline at the beginning of the covid19 pandemic and began to plague Indonesia, precisely in March 2020. This can be seen in the graph in Figure 1 below.

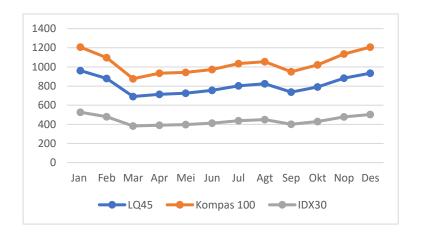


Figure 1 Fluctuations in the LQ45, Kompas100, and IDX30 indices in 2020

**Source: IDX (2021) (processed 2021)** 

The performance of public companies is represented in the stock exchange's share price, which reflects the match between supply and demand for these shares. Stock price increases indicate that investors value the company and vice versa. After the phenomena of the separation of firm ownership from management in modern major companies, agency theory arose to replace classical company theory as a framework for company analysis. The separation of "ownership" and "management" has given rise to the so-called agency problem (Jensen & Meckling, 1976). This separation allows for conflicts of interest between owners and managers. The conflict is expected to be a creative power as a mechanism for balancing power. From the business owner's point of view, the agency problem concerns how to ensure that executive managers always act in the interests of the shareholders.

The purpose of this study is to examine the risk, return, debt policy, and agency costs of public companies on the Indonesia Stock Exchange during the covid 19 pandemic. The study also aims to examine indicators that are the best measuring instruments for debt policy variables and agency costs. As well as examining whether the company's risk and return variables have a significant effect on debt policies and agency costs of public companies on the Indonesia Stock Exchange during the covid 19 pandemic. In addition, the study also

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examines whether debt policy variables and agency costs have a significant effect on the value of public companies on the Stock Exchange during the COVID-19 pandemic.

### 2. LITERATURE REVIEW

Roy (1952) proposed the first risk theory, based on the premise of minimizing the upper bound probability of the feared event when knowledge about the combined probability distribution of future occurrences is known. Following that is Markowitz's (1952) and (1959) portfolio theory, which was the first to discuss the amount of return and risk. Markowitz, on the other hand, is more concerned with investors' preferences for risk and rate of return. Markowitz constructs this theory on the premise that investors would always select a high rate of return over a low risk. The portfolio's philosophy is that investors will always make decisions based on the portfolio's risk.

In general, risk refers to the likelihood of an event and its repercussions (Siahaan, 2009). The two types of risk that a corporation faces are business risk and financial risk (Mardiyanto, 2009). The standard deviation of profits before interest and taxes, or EBIT, is used to quantify business risk, which is a risk associated with the unpredictability of a company's future investment decisions. The operating leverage, or the degree of operating leverage, can be used as a technique for assessing business risk (Istiono, 2010). The more a company's operating leverage, the greater its business risk. Financial risk, on the other hand, is the danger of using long-term sources of funding with fixed expenses (debt and preferred stock).

According to the trade-off hypothesis, the optimal capital structure is obtained when the advantages and sacrifices associated with loan utilization are balanced. The advantages of debt come in the form of a tax shelter. Debt interest expenses, bankruptcy costs, and agency charges are all costs associated with using debt (Brealey & Myers, 1991). Pecking order theory defines a hierarchy in the quest for corporate money, in which corporations choose to pay dividends and use internal equity as a growth opportunity. If the firm needs additional capital, debt will be preferred above external equity (Donaldson, 1961; Myers, 1984; Myers & Majluf, 1984).

Signal theory discusses the company's encouragement to provide information to external parties. This encouragement is due to the occurrence of information asymmetry between management and external parties (Connelly et al., 2011). Good companies can differentiate themselves from bad companies by sending reliable signals about their quality to the capital market. Signaling theory provides information signals needed by investors to consider and determine whether or not investors will invest their shares in the company concerned (Spence, 1973).

This agency theory was born as a response to the disparity of views in developing every organization, including companies whose management is handed over to other parties. When the principal/owner/shareholder appoints another person (agent) to manage the company, it is called an agency relationship (Jensen & Meckling, 1976). Agency relationships can range from single-principal-single-agent relationships to more complex multiple-principal-single-agent or single-principal-multiple-agent relationships (Waterman & Meier, 1998).

In accounting studies and research, a variety of criteria have been used to analyze and quantify the performance of business units, which may be divided into two categories: market-based criteria and accounting data-based criteria. In comparison, while market-based criteria are more objective, they are impacted by several significant elements that management cannot control (Gani & Jermias, 2006). The market price of its shares will reflect market-based criteria (Fama, 1978). Meanwhile, some studies used Tobins q as a proxy for evaluating firm value (Al-ahdal et al., 2020; Balasubramanian et al., 2009; Varshney et al., 2013).

Chen & Chen (2011) explain that the pecking order theory holds that profitable corporations are not too dependent on external funds, and therefore profits have a significant negative effect on leverage. Husna & Wahyudi's (2016) research on manufacturing companies shows that business profits and risks have a significant effect on debt policy. Research conducted by Handoo & Sharma (2014) and Murtiningtyas (2012) states that profits have a significant negative effect on debt policy. Furthermore, research conducted by Murtiningtyas (2012) and Datta et al., (2005) states that business risk has a significant negative effect on debt policy.

Companies with a high possibility of survival, according to Abor et al., (2009), will have greater debt. Turvey and Kong (2009), on the other hand, argue that risk reduction through insurance schemes can stimulate the use of better debt policies. Furthermore, according to Bokpin et al., (2010), the management of a business and financial risk influences capital structure regulation, specifically debt policy, and profitability is also a crucial driver of the company's financial policy. Low business risk, according to Lemma et al. (2020), makes managing firm debt easier. The results of research by Rahayu et al., (2020) show that profitability has a significant negative effect on capital structure, this indicates that profitability is a determining factor for the company's capital structure. According to Basdekis et al., (2020), the results of his research on average company profitability have a relationship with low debt levels.

Fadah's research (2009) on the effect of risk on agency costs shows that risk has a significant effect on the direction of a positive relationship to agency costs. The findings in this study support previous findings of agency theory, namely that agency costs are effectively used to reduce the actions of managers who tend to make risky investments and are often not following the wishes of shareholders. According to Jensen & Meckling (1976), agency costs in the form of monitoring costs or bonding costs can reduce the manager's consumption desires which are carried out without the knowledge of the owner. Khaw's research (2019) shows that risk has a relationship with agency costs incurred by the company. According to ElKelish (2017), the results of his research show that the relationship between risk and agency costs is more visible in the non-financial sector than in the financial sector. The results of the research by H. Chen et al., (2020) show that the effect of business risk plays an important role in agency costs. Jelinek & Stuerke's (2009) research shows that profitability is nonlinearly related to agency costs. Research by Chong et al., (2017) shows that profitability dynamically influences the company's agency costs.

Pratiwi et al., (2016) conducted a test of the effect of managerial ownership, institutional ownership, and leverage on firm value, where the results show that leverage has a significant positive effect on firm value. L. J. Chen & Chen (2011) explain that the pecking order theory holds that profitable corporations are not too dependent on external funds, and therefore profitability has a significant negative effect on leverage. However, as leverage

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increases, agency and bankruptcy costs increase rapidly as a result. Using Tobin's q as a proxy for firm value Cheng & Tzeng (2011); Sudiyatno et al., (2012); Wellalage & Locke (2014) recommend the positive effect of leverage on firm value.

The results of Qureshi's research (2007) show that low debt capital structure plays a dominant role in maximizing firm value. Additionally, research by Rahayu et al., (2020) shows that capital structure has a significant effect on firm value. According to Iona et al., (2020) corporate debt policy and firm value have a significant relationship. The free credit market makes it easy for companies to access external sources of funds.

The impact of agency costs on firm value is investigated by Baek et al., (2004), specifically the effect of event risk covenants on bond transaction costs of debt and equity and shareholder wealth. Finally, the existence of risk agreements increases shareholder wealth primarily by lowering the agency's cost of debt. The research results of He et al., (2016) show that the value of the company first increases and then decreases as government control weakens. Moreover, the research of Osasere & Olowe (2020) shows that agency costs have a positive and significant relationship to firm value. According to Khan et al., (2020), the results of his research show a relationship between agency costs and firm value.

Based on the above-mentioned empirical studies, some hypotheses are formulated:

Hypothesis 1: risk has a significant effect on debt policy.

Hypothesis 2: return has a significant effect on debt policy.

Hypothesis 3: risk has a significant effect on agency costs.

Hypothesis 4: return has a significant effect on agency costs.

Hypothesis 5: debt policy has a significant effect on firm value.

Hypothesis 6: agency costs have a significant effect on firm value.

### 3. METHODOLOGY

The type of study is explanatory research. The sample of this research is 45 companies that are included in the LQ 45 index, namely the group of leading companies and the group of companies with the largest capitalization. The amount of data that was observed was 180 with details from 45 companies that were the object of research during the first quarter to the fourth quarter of 2020. Based on the purpose of the study, which applied one-way path analysis, the data analysis method used in the study was structural equation modeling partial least squares analysis (SEM-PLS). The latent variables of the study consisted of two exogenous variables and three endogenous variables. Exogenous latent variables are risk and return. Risk is measured by the manifest variables of business risk (RB) and financial risk (RK), while the return is measured by gross profit margin (GPM) and operating profit margin (OPM). The endogenous latent variables are debt policy, agency costs, and firm value. Debt policy is measured by the manifest variables of total debt to total assets (TDTA) and total debt to total equity (TDTE). Agency costs are measured by total assets turnover (TATO) and selling and general administrative (SGA). Firm value is measured by the ratio of share price (HS), excess value (EV), and tobins'q (TOB). The research model is as follows:

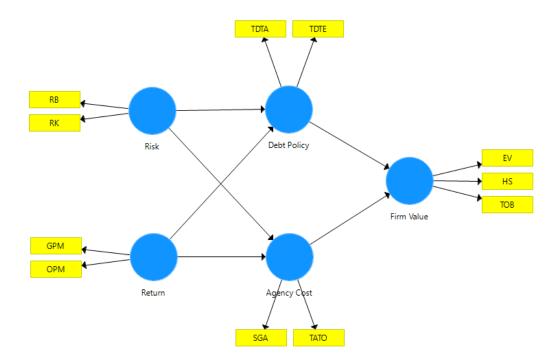


Figure 2 Research Model

### 4. RESULT AND DISCUSSION

Based on the first phase of the research model (Figure 2), the outer model was tested with validity tests (convergent validity and discriminant validity) and model reliability. The convergent validity test is carried out by seeing that the outer loading (OL) value of the manifest variable must be greater than 0.5 and seeing that the average variance extracted (AVE) value of the latent variable must be greater than 0.5. The discriminant validity test is carried out by comparing the value of the cross-loading (CL) of the manifest variable, which must be greater than the cross-loading value of other manifest variables on these variables, then it is also seen that the AVE of the latent variable must be greater than the cross-loading value of other manifest variables on the variable. The reliability test is carried out by looking at the composite reliability (CR) value and the Cronbach's alpha (CA) value must be greater than 0.6. The test results show that there are three indicators with an outer loading value of less than 0.5, namely RB, OPM, and HS, so they must be removed from the model. Based on testing on the model that has been repaired, there are variables with formative indicators, namely the latent variable exogenous risk and latent variable exogenous return, so that apart from looking at the outer loading value, it is also necessary to look at the P Values outer loading (PVOL) and P Values outer weight (PVOW) values. must be less than 0.05. The results of the validity and reliability tests can be seen in Table 1. Based on Table 1 the outer loading (OL) value of all manifest variables is greater than 0.5; P Values outer loading (PVOL) and P Values outer weight (PVOW) is less than 0.05; the average variance extracted (AVE) value of all latent variables is greater than 0.5; the value of the cross-loading of the manifest variable (CL) on the variable and the value of AVE of the latent variable is greater than the value of the crossloading of the manifest variable of other variables on the variable so that the research model is Webology (ISSN: 1735-188X) Volume 19, Number 2, 2022

declared valid. The value of composite reliability (CR) and the value of Cronbach's alpha (CA) for latent variables is greater than 0.5 so that the model is declared reliable.

Table 1. Validity and Reliability Test Results of the Research Model

Latent	Manifest	OL	PVOL	PVOW	AVE	CL	√AVE	Decision	CR	CA	Decision
Variable	Variable										
Risk	RK	1,000	0,000	0,000	1,000	1,000	1,000	Valid	1,000	1,000	Reliable
Return	GPM	1,000	0,000	0,000	1,000	1,000	1,000	Valid	1,000	1,000	Reliable
Debt	TDTA	0,924	0,000	0,000	0,557	0,924	0,746	Valid	0,799	0,551	Reliable
Policy	TDTE	0,510	0,004	0,041	0,337	0,510	0,740	Valid	0,799	0,331	Reliable
Agency	TATO	0,939	0,000	0,000	0,886	0,939	0,941	Valid	0,939	0,871	Reliable
Cost	SGA	0,944	0,000	0,000	0,880	0,944	0,941	Valid	0,939	0,871	Reliable
Firm	EV	0,914	0,000	0,000	0,664	0,914	0,802	Valid	0,779	0,578	Reliable
Value	TOB	0,673	0,000	0,000	0,004	0,673	0,002	Valid	0,119	0,576	Reliable

The second stage is testing the inner model by looking at the R2 value of the endogenous latent variable and the Rm2 value of the model. The classification of the Rm2 value of the model is if 0.6 is substantial, 0.3 is moderate and 0.1 is weak. The R2 value of the debt policy variable is 0.038, meaning that the effect of risk and return on debt policy is 3.8%. The R2 value of the agency cost variable is 0.043, meaning that the effect of risk and return on agency costs is 4.3%. The R2 value of the firm value variable is 0.202, meaning that the effect of debt policy and agency costs on firm value is 20.2%. The Rm2 value of the model is 0.266 which indicates a moderate research model.

Table 2 Results of Research Hypothesis Testing

Hypothesis	Influence	Influence	P	Decision	
	Between	Coefficient	Values		
	Variables	Value			
1	Risk – Debt Policy	-0,069	0,354	No Significant	
				Effect	
2	Return Debt	-0,177	0,033	Significant Effect	
	Policy				
3	Risk – Agency	0,196	0,029	Significant Effect	
	Cost				
4	Return Agency	0,057	0,481	No Significant	
	Cost			Effect	
5	Debt Policy – Firm	0,239	0,000	Significant Effect	
	Value				
6	Agency Cost -	-0,312	0,000	Significant Effect	
	Firm Value				

Risk has no substantial impact on the company's debt policy, according to hypothesis testing. The pandemic has resulted in travel restriction rules, which have reduced company

sales, including those in the LQ45 index. The heightened risk has no bearing on the company's debt policy, which is determined by the company's assets and capital's capacity to service its loans. Although the proportion is not big, the majority of the firms in the LQ45 index are substantial corporations that have been registered in the stock market for a long time and have adequate assets and own capital to service the company's debt. The results of this study indicate that risk has no significant effect on policy debt that is aligned with supporting research by Surya & Rahayuningsih (2012) and Yeniatie & Destriana (2010). However, the results of this study are not in line with the results of research by Abor et al., (2009); Bokpin et al., (2010); Datta et al., (2005); Desiyanti et al., (2017); Husna & Wahyudi, (2016); Lemma et al., (2020); Murtiningtyas, (2012); Turvey & Kong, (2009).

The second hypothesis test reveals that the return has a considerable impact on the company's debt policy, with the connection going in the other way. The impact of the COVID-19 epidemic, which has lowered the firm's income, has forced the corporation to seek alternative sources of funding to support its operating expenditures, one of which is debt. This option was chosen since the firm still has sufficient assets, wealth, and own capital to cover the overall debt. These results are supported by research by Abor et al., (2009); Basdekis et al., (2020); Chen & Chen, (2011); Handoo & Sharma, (2014); Husna & Wahyudi, (2016); Murtiningtyas, (2012); Rahayu et al., (2020). Return reflects earnings for investment funding based on pecking order theory where the first choice in funding decisions is retained earnings, then using debt and equity (Donaldson, 1961; Myers, 1984; Myers & Majluf, 1984). The higher the return obtained by the company, the smaller the use of debt used in company funding because the company can use internal equity obtained from retained earnings first. If the need for funds has not been fulfilled, the company can use debt (Yeniatie & Destriana, 2010).

The third hypothesis test shows that risk has a significant effect on agency costs with a unidirectional relationship. The decline in company revenues increases the risk of costs incurred by the company so that managers can properly manage the company's assets or assets and manage the company's operational costs efficiently to make the company better financial condition. When the principal/owner/shareholder appoints another person (agent) to manage the company, it is called an agency relationship (Jensen & Meckling, 1976). The results of the study are in line with the research conducted by H. Chen et al., (2020); El Kelish, (2017); Fadah, (2009); Khaw, (2019).

The results of testing the fourth hypothesis show that return has no significant effect on agency costs. The decrease in profits has no impact on the agency costs incurred by the company. Agency costs are costs incurred by the company when in its operational activities using a manager so that these costs are always incurred by the company not related to the ups and downs of company profits. The results of this study are in line with the results of research by Ellili & Nobanee (2017). However, these results do not support the research results of Chong et al., (2017); Jelinek & Stuerke, (2009); Wang, (2010). Firms with high operating cash flows tend to save current income for future use (Chung et al., 2005b, 2005a).

Based on the results of hypothesis testing, it shows that debt policy has a significant effect on firm value with a unidirectional relationship. The outbreak of disease cases caused by the COVID-19 virus has affected most companies either directly or indirectly. The management of the company's financial resources, which are tiered from internal to external

sources of debt, and the issuance of shares will have an impact on investors' perceptions of the company. The company's financial decisions included in the LQ45 index relating to funding sources, especially those from debt as measured by the company's ability to cover its debts from assets or assets and own capital owned by the company are still adequate, only the percentage value is not too large. This was seen by investors as a positive signal because investors obtained recorded information that the company was still able to cover its total debt with assets and own capital so that the company's debt policy significantly affected the value of the company. The increase in the value of corporate debt which is used to improve the company's performance which can be monitored by investors through the book value and market value of the company's financial data provides a good signal for investors so that investors' perceptions of the debt policy implemented by the company also increase. The results of the study support the research results of H. Chen et al., (2020); Cheng & Tzen, (2011); Iona et al., (2020); Qureshi, (2007); Rahayu et al., (2020); Sudiyatno et al., (2012); Wellalage & Locke, (2014); Widari et al., (2018). The phenomenon of higher debt in the capital structure turns out to reduce the amount of taxes to be paid and reduce the amount of debt interest, which positively affects stock prices on the stock market and ultimately increases firm value (Rahayu et al., 2020). The free credit market makes it easy for companies to access external sources of funds (Iona et al., 2020). Maximizing the value of the company is very important for a company because maximizing the value of the company also means maximizing the prosperity of shareholders which is the company's main goal. According to Fama (1978), the value of the company will be reflected in its share price.

The results of testing the sixth hypothesis indicate that agency costs have a significant effect on firm value in the opposite direction. The COVID-19 pandemic has resulted in a decline in sales or revenue for most companies. Companies will try to improve this situation by incurring costs for managers so that they can improve company performance. The costs incurred by the company are calculated based on the manager managing asset turnover and based on the manager managing the company's operating costs to increase sales. The costs incurred by the company are a negative signal for investors about the company's condition. This is because the increase in agency costs issued by the company is not very effective during the covid 19 pandemic due to various restrictions made by the government to reduce the spread of the covid 19 virus so that it will reduce company profits and is considered by investors as a signal that will reduce the value of the company. The results of the study support the research of He et al., (2016); Khan et al., (2020); Osasere & Olowe, (2020). Agency theory explains that the interests of management and shareholders are often conflicting so that conflicts can occur between the two (Jensen & Meckling, 1976). In agency theory, there is an influence of conflict of interest between management (agent) and company owner as a part of information asymmetry related to company performance. The conflict can arise because the two parties have different interests. Each party strives to maintain the level of prosperity it expects.

### 5. CONCLUSION

As a result of the COVID-19 pandemic, companies in the LQ45 index have experienced a fall in their income values, resulting in a decrease in operational profit. As a result, companies' risks, both business and financial risks, have grown. Because the value of firm sales declined,

the return of companies was very little. Even if the company's ability was limited, its debts could still be serviced by its assets and money. Because the firm's operating expenditures were more than the money obtained by the company, the fees paid for management did not considerably improve the company's worth of assets.

During the pandemic, risk has no significant effect on debt policy for public companies listed on the Indonesia Stock Exchange, while the return has a significant effect on debt policy for public companies listed on the Indonesia Stock Exchange. Risk has a significant effect on agency costs for public companies listed on the Indonesia Stock Exchange, while the return has no significant effect on agency costs for public companies listed on the Indonesia Stock Exchange.

The value of public firms listed on the Indonesia Stock Exchange is influenced by debt policy and agency charges. The findings of this study also confirmed the pecking order principle, which states that retained profits should be used first, followed by debt and equity (Donaldson, 1961; Myers, 1984; Myers & Majluf, 1984). Furthermore, the findings support Markowitz's (1952, 1959) portfolio theory, which states that investors would always prefer a high rate of return above a low risk. When the principal/owner/shareholder selects another individual (agent) to operate the firm, the outcomes also reveal an agency connection (Jensen & Meckling, 1976). Maximizing the value of the company is very important for a company because maximizing the value of the company also means maximizing the prosperity of shareholders which is the company's main goal. According to (Fama, 1978) the value of the company will be reflected in its share price.

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