

Impact of Business Risk and Capital Structure on the Growth of the Sea Transportation Companies

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ABSTRACT

The research aim is to analyze the impact of business risk and capital structure on the growth of the sea transportation companies in Indonesia Stock Exchange list from 2016 to 2020. Some of the problems found in this study were both high business risk and high capital structure could reduce the company's growth, and also high debt to shipping companies could lead to difficulties in determining the composition of the capital structure. Path analysis was used to test the hypothesis proposed in this study using the Partial Least Square (PLS) application. 45 total samples consisted of nine companies with a five-year observation period taken using purposive sampling technique. The results show that business risk and capital structure do not have direct impact on the company's growth, business risk has a positive and significant direct impact on the capital structure, and business risk does not impact directly on the company's growth through capital structure mediation. The study concludes that business risk positively impacts the capital structure, therefore the declining capital structure could decrease business risk.

Keywords: business risk, capital structure, company growth, transportation business, business expansion

A. Introduction

Transportation plays an essential role in a calculatory's economy and strongly impacts its development and economic growth (Tukan et al., 2021). Transportation will help the movement of both goods and people from one place to another so that this movement provides benefits economically, politically, and socially (Putri et al., 2016; Setiani, 2015). The company was founded to provide prosperity for its owners and employees. The company must maintain operational continuity to achieve this goal, and the company will continue to grow. Company growth can be seen from the growth of assets, income, and

company profits (Ramdhonah et al., 2019) and is impactd by capital structure (Bhawa & Dewi S., 2015). Data regarding the growth of sea transportation company assets listed on the IDX for 2016-2020 (Table 1).

Table 1 Sea Transportation Company Asset Growth Listed on the IDX in 2016 – 2020

Year	Asset Growth (%)
2016	-78,35
2017	169,62
2018	128,96
2019	-55
2020	23,6

Source: IDX, data processed, 2021

Table 1 shows the large yearly fluctuations in the asset growth of marine transportation companies. Business risk and each company's capital structure may be the root of the asset's erratic growth. The discrepancy between actual and anticipated company results is known as business risk, which cannot be eliminated but can be reduced (Suharti et al., 2022). Business risk is the uncertainty of return on investment or assets in the future and is faced by every company, both financial and non-financial risks (Sunaryo, 2019). Business risk in sea transportation companies is high because sea transportation is a capital-intensive business. The capital structure is impacted by business risk which also enhances firm value (Suharti et al., 2022; Sunaryo, 2019). Capital structure is a combination or balance between debt and own capital that companies use to plan to obtain capital, which is formulated as the ratio of total debt to total equity (Susanti et al., 2021). The company will seek internal and external funding sources to strengthen its capital structure (Sunaryo, 2019). The shipping industry, or sea transportation, is characterized by high debt levels and tangible assets. Shipping companies require significant investments and continue to invest in facilities, ships, etc. (Yeo, 2018). The high debt to shipping companies can cause difficulties in determining the composition of the capital structure. Considering the context, prior writings, and the just-mentioned description, the novelty of this research is to look at the financial factors that impact the growth of transportation companies, especially sea transportation.

The object of research is a sea transportation company listed on the IDX. The reason is that companies that are listed on the stock exchange need fresh funds for operations, development, or paying debts, as well as data that is open and available on the IDX facilitates the analysis of cash holdings of public companies (Susanti et al., 2021; Zulyani & Hardiyanto, 2019). Hung et al. (2018) researched the impact of business risk on company growth. The study applied multi-

regime panel smooth transition regression (MR-PSTR) estimation in the food industry, using a panel of 30 Taiwanese food companies from 2007 to 2017. The results reveal that business risk harms company growth. Study of Puig et al. (2018) shown the relationship between growth risks in the internationalization of the manufacturing industry. Between 2002 and 2012, a sample of 3181 new manufacturing companies were founded. The 124 late internationalizations were shown to have the lowest risk via analysis techniques utilizing Cox regression. In contrast, the earlier 229 internationalizations were unable to offset the risks in the post-internationalization period with significantly greater growth rates.

According to Sihombing, (2018) the sound capitalization impacted on the growth of Property and Real Estate companies listed on the Indonesia Stock Exchange. The study's time frame is from 2010 to 2014. 57 companies made up the study's entire population. 27 companies were chosen for the sample using the purposive sampling technique. The test results demonstrate that, between 2010 and 2014, the growth of Property & Real Estate companies listed on the Indonesia Stock Exchange was negatively and significantly impacted by capital structure. Molinari et al., (2016) found the relationship between company capital structure and growth for a sample of large companies in Italy in 1998-2003. The method of analysis uses panel regression analysis. The results show that capital structure harms company growth.

Bandanuji & Khoiruddin, (2020) look at how company risk impacts debt policy in their study. Property and real estate firms listed on the Indonesia Stock Exchange (IDX) between 2014 and 2018 made up the study's sample. A purposive sampling technique was used to determine the sample. Path analysis and multiple linear regression analysis techniques for data analysis. Results indicate that company risk is detrimental to debt policy. Based on the test done by Irawati & Komariyah (2019) the impact of business risk policies on capital structure. The sample

includes 41 businesses that match the sample requirements from manufacturing companies listed on the Indonesia Stock Exchange (IDX) from 2012 to 2018. The findings demonstrate that company risk impacts capital structure in a favorable way.

According to Tahir et al., (2020) there is capital structure and company risk in seasonal and non-seasonal business situations. To investigate this link, we need two independent variables credit risk and systematic risk and one dependent variable. While the textile industry is regarded as a non-seasonal industry, the sugar industry is a seasonal one. From the yearly report, panel data from twenty-five businesses in each industry were extracted for the years 2012 to 2019. The findings show that credit risk has a detrimental impact on capital structure in both types of organizations. Additionally, this study demonstrates how systematic risk has a favorable impact on capital structure in non-seasonal enterprises while having.

The research aims to know and analyze the direct impact of business risk and capital structure on the growth of sea transportation companies listed on the Indonesia Stock Exchange in 2016-2020.

Based on the relevant theory and research, a Conceptual Framework can be built in the form of a conceptual model (Figure 1).

Hypotheses

- H₁. Business risk has a direct impact on company's growth.
- H₂. Capital structure has a direct impact on company's growth.

- H₃. Business risk has a direct positif impact on capital structure.
- H₄. Business risk has indirectly positif impact on company's growth mediated by capital structure.

B. Methods

This research was done at the Indonesia Stock Exchange (IDX) with a research period from September to November 2021. The population in this study are 20 sea transportation companies listed on the IDX in 2016-2020. Research with a large population makes it impossible to examine the entire population so that only the sample is used as the basis for the research. Therefore, it is necessary to make calculations only in part of the population unit or sample. The research process began with collecting data on the company's financial statements as samples, processing data, analyzing data. Non-probability sampling, also known as purposive sampling, was the sampling technique used in this study to pick the research sample. These criteria are 1) Sea transportation companies listed on the IDX, 2) The company publishes financial reports consecutively for 5 periods in 2016-2020, and 3) The company presents complete data regarding the variables used in this study over the period 2016 – 2020. Business Risk as an exogenous variable is studied with the variable dimension, namely changes in income. Capital Structure as an intervening variable is studied with its variable dimensions, namely Debt to Assets Ratio (DAR). Meanwhile, Company Growth as an endogenous variable is studied with its variable dimensions, namely growth

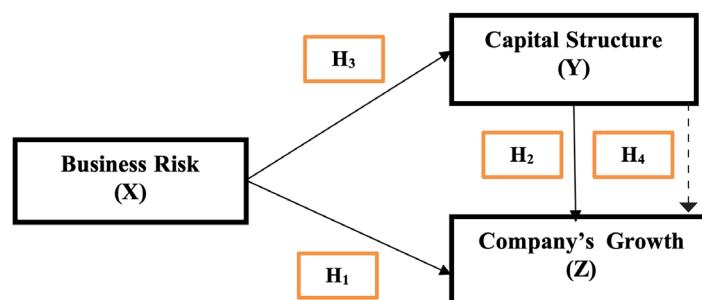


Figure 1 Conceptual Framework

in total assets. Total sample or observation unit of 45 financial reports from nine companies for five years. Path analysis is used to test the hypothesis proposed in this study by using the Partial Least Square (PLS) application.

C. Results and Discussion

The results of statistical calculations with path analysis to test the research hypothesis whose processing was carried out with the SmartPLS 3 program are presented as follows:

1. Direct Impact of Business Risk on Company Growth

The results of calculating the path coefficient and t_{test} to test the hypothesis of the direct impact of business risk on company growth (Table 2).

The results of this study provide empirical evidence that business risk does not directly impact a company's capacity for growth, with a path coefficient value of 0.144 and $t_{\text{statistics}} = 0.533 < t_{\text{table}}$ at $\alpha = 0.05$ (1.68). Business risk is a variation from the anticipated income stream that could happen as a result of the uncertainty the company faces when conducting its business operations. The level of business risk in the company does not impact the company's growth. Fluctuations in income that exist in the company cannot reduce the company's growth. The business risk with income fluctuations may cause the company to carry out cost efficiency so that a decrease in income can be anticipated.

With cost efficiency, the company does not need to sell or reduce company assets to cover the lack of income. With this condition, the business risk caused by fluctuations in the company's income does not reduce the company's growth. Additionally, the findings of this study disagree with those of Hung et al., (2018), who draw the conclusion that business risk inhibits company growth. With research settings on marine transportation businesses listed on the IDX, the conclusions of this study are therefore inappropriate and confirm the findings of earlier research that

business risk directly impacts company growth. Practical policy implications, both government and private sea transportation companies in Indonesia can increase company growth through business risks. So, companies must ensure that company revenues do not fluctuate too much so that companies can generate profits that can be used to increase company assets so that company growth can be achieved.

2. Direct Impact of Capital Structure on Company Growth

The results of calculating the path coefficient and t test to test the hypothesis of the direct impact of capital structure on company growth (Table 3).

With an indicator of the path coefficient value of 0.018 and the value of $t_{\text{statistics}} = 0.194 < t_{\text{table}} \alpha = 0.05$ (1.68) the study's findings empirically demonstrate that the capital structure has no significant impact on the company's ability to grow. The capital structure is the mix of debt and equity a company uses to finance its assets. A high capital structure means that debt is used to finance the assets of large companies.

The capital structure of sea transportation companies is generally high. This high capital is due to financing the procurement of ships and other equipment. The capital structure of sea transportation companies is also not too volatile. These circumstances can be the reason why the capital structure has no impact on the company's expansion. Research results do not support by Sihombing, (2018) that the debt-to-equity ratio as one of the capital structure ratios harms profit growth. The research setting of sea transportation businesses listed on the IDX means that the conclusions of this study are inappropriate and do not confirm the findings of prior studies that capital structure directly impacts company growth.

Practical policy implications, both government and private sea transportation companies in Indonesia can increase company growth through modal structure. So, efforts need to be made to reduce the company's

Table 2 Path Coefficient and $t_{\text{statistics}}$ the Direct Impact of Business Risk on Company Growth

<i>Sample Size (n)</i>	<i>Path Coefisient</i>	$t_{\text{statistics}}$	t_{table}	
			$\alpha = 0,05$	$\alpha = 0,01$
45	0,144	0,533 ^{ns}	1,68	2,41

Table 3 Path Coefficient and $t_{\text{statistics}}$ Direct Impact of Capital Structure on Company Growth

<i>Sample Size (n)</i>	<i>Path Coefficient</i>	$t_{\text{statistics}}$	t_{table}	
			$\alpha = 0,05$	$\alpha = 0,01$
45	0,018	0,194 ^{ns}	1,68	2,41

debt to finance its assets. With a low capital structure, profits can increase, thereby affecting company growth.

3. Direct Impact of Business Risk on Capital Structure

The results of calculating the path coefficient and t_{test} to test the hypothesis of the direct impact of business risk on capital structure (Table 4).

With an indication of the path coefficient value, of 0.215 and the value of $t_{\text{statistics}} = 1.703 > t_{\text{table}} \alpha = 0.05$ (1.68) this study also demonstrates that business risk has a positive and large direct impact on capital structure. Business risk is a variation from the anticipated income stream that could happen as a result of the uncertainty the company faces when conducting its business operations. The high business risk in sea transportation companies is indicated by changes in the company's fluctuating income. Due to the significant business risk, the

company will incur debt in order to stabilize its income. In addition, marine transportation companies also need funds to procure assets such as ships that require high capital. This study's results align with research of Irawati & Komariyah, (2019), concluding that business risk positively impacts capital structure. With the research setting being sea transportation businesses listed on the IDX, the findings of this study do not support the results of other studies that suggested business risk has a direct impact on capital structure. Practical policy implications, both government and private sea transportation companies in Indonesia can reduce capital structure through business risk. So, companies should make efforts to keep income positive and always increasing so that the company's business risk is low.

4. Indirect Impact of Business Risk on Company's Growth mediated by Capital Structure

Table 4 Path Coefficient and $t_{\text{statistics}}$ of the Direct Impact of Business Risk on Capital Structure

<i>Sample Size (n)</i>	<i>Path Coefficient</i>	$t_{\text{statistics}}$	t_{table}	
			$\alpha = 0,05$	$\alpha = 0,01$
45	0,215	1,703*	1,68	2,41

The results of calculating the path coefficient and t_{test} to test the hypothesis of the indirect impact of business risk on company growth mediated by capital structure (Table 5).

This study shows that business risk mediates the capital structure, which in turn impacts firm growth, with an indication of the path coefficient value of 0.004 and $t_{\text{statistics}} = 0.140 < t_{\text{table}} \alpha = 0.05$ (1.68). This result is in line with tests of previous hypotheses that business risk has a direct beneficial impact on capital structure, the capital structure does not directly impact firm growth, and neither does the capital structure. This conclusion supports the notion that, while business risk has a direct impact on capital structure, company development is not directly impacted by the capital structure. This circumstance essentially eliminates the possibility of business risk indirectly influencing firm growth through the use of capital structure.

The capital structure of the corporation has little impact on business risk. Research by Hung et al., (2018); Irawati & Komariyah, (2019); Sihombing, (2018) showed different results compared with that finding. According

to Hung et al., (2018), business risk harms company growth. Sihombing, (2018) shows that the debt-to-equity ratio as a capital structure ratio harms profit growth. While Irawati & Komariyah, (2019) derived the conclusion that business risk positively impacts capital structure. As a result, the study's new findings, based on research on sea transportation companies listed on the IDX, show that business risk and capital structure have little bearing on company growth.

The overall results of the path coefficient and $t_{\text{statistics}}$ the impact of business risk and capital structure on company growth are summarized as follows (Table 6).

The results showed that business risk did not have a direct impact on company growth, capital structure did not have a direct impact on company growth, business risk had a positive and significant direct impact on capital structure, and business risk did not have an indirect impact on company growth by mediating capital structure.

The path coefficient and $t_{\text{statistics}}$ can be seen in the following figure 2.

The path coefficient of business risk

Table 5 Path Coefficient and tcount Indirect Impact of Business Risk on Company's Growth mediated by Capital Structure

<i>Sample Size (n)</i>	<i>Path Coefficient</i>	$t_{\text{statistics}}$	t_{table}	
			$\alpha = 0,05$	$\alpha = 0,01$
45	0,004	0,140 ^{ns}	1,68	2,41

Table 6 Summary of Path Coefficients and t_{test}

<i>Sample Size (n)</i>	<i>Path Coefficient</i>	$t_{\text{statistics}}$	t_{table}	
			$\alpha = 0,05$	$\alpha = 0,01$
X – Y ₂	0,144	0,533 ^{ns}	1,68	2,41
Y ₁ – Y ₂	0,018	0,194 ^{ns}	1,68	2,41
X – Y ₁	0,215	1,703*	1,68	2,41
X – Y ₁ – Y ₂	0,004	0,140 ^{ns}	1,68	2,41

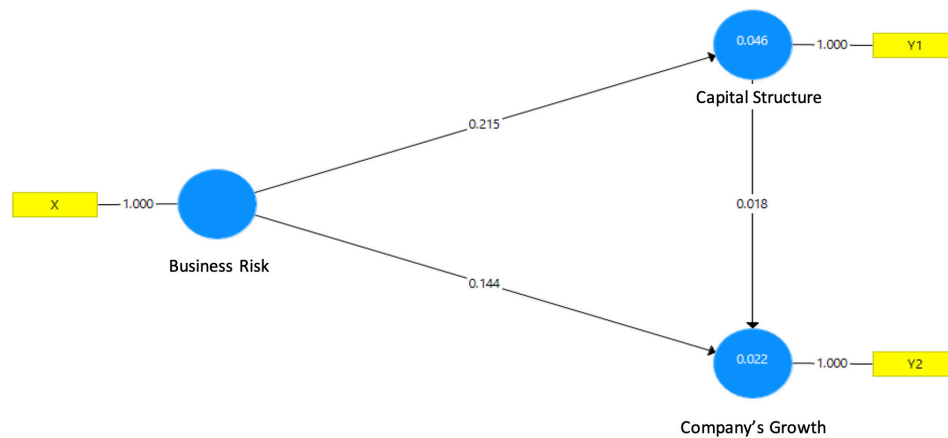


Figure 2 Path Coefficient of Impact of Business Risk and Capital Structure on Company Growth

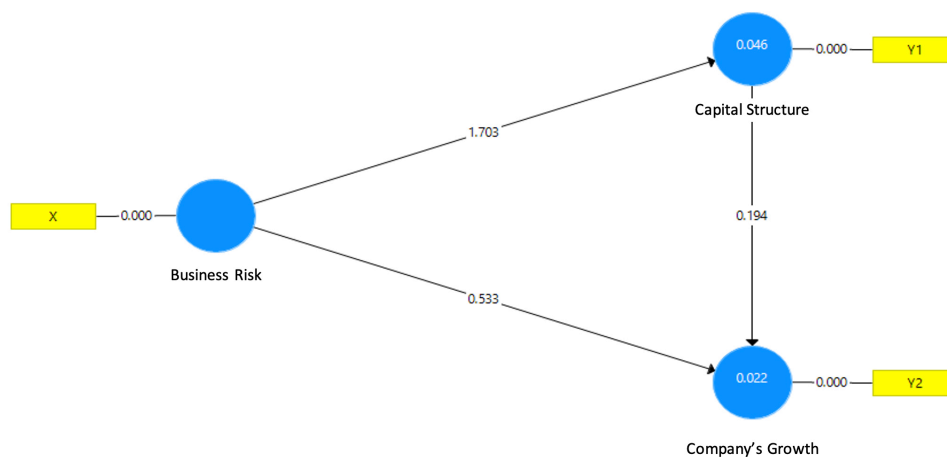


Figure 3 T-statistics of the impact of business risk and capital structure on company growth

(X) on company growth (Y2) is 0.144, meaning that business risk has a positive impact on company growth. The coefficient of the capital structure path (Y1) on company growth (Y2) is 0.018, meaning that capital structure has a positive impact on company growth. The coefficient of business risk path (X) on capital structure (Y1) is 0.215, meaning that business risk has a positive impact on capital structure.

T-statistics business risk (X) on company growth (Y2) of 0.533, meaning that business risk indirectly impact company growth. t-statistics capital structure (Y1) on company growth (Y2) of 0.194, meaning that capital structure does not have a direct impact on company growth. t-statistics business risk (X) on capital

structure (Y1) of 1.703, meaning that business risk has a direct impact on capital structure.

D. Conclusion

Based on the findings of the previously discussed analysis and debate, it can be concluded that business risk does not directly impact company growth. High business risk does not directly increase company growth. The capital structure does not directly impact the company's growth; a high capital structure does not directly increase the company's growth. It is clear that high business risk can boost capital structure because it has a positive and strong direct impact on capital

structure. It can be demonstrated that high business risk does not necessarily raise capital structure, which in turn has implications for boosting company growth. Business risk does not directly impact company growth through capital structure.

Sea transportation companies in Indonesia want to increase the company's growth through business risk, so the company must maintain the company's income so that it does not fluctuate too much so that the company can generate profits that can be used to increase company assets so that company growth can be achieved. Sea transportation companies in Indonesia want to increase the company's growth through capital structure, so what needs to be done is to reduce the company's debt in financing its assets. With a low capital structure, profits can increase so that it impacts the company's growth. Sea transportation companies in Indonesia want to reduce their capital structure through business risk, then the company should make efforts to maintain positive income and always increase so that the company's business risk is low.

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