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THE EFFECT OF SALES GROWTH, FIRM SIZE, PROFITABILITY, BUSINESS RISK ON CAPITAL STRUCTURE

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ABSTRACT

The purpose of this research is to determine the effect of sales growth, firm size, profitability, and business risk on capital structure of consumer non cyclicals sub-sector companies listed on the Indonesia Stock Exchange (IDX) in 2020-2022. There are 196 data used as samples which were taken from 71 consumer non-cyclical companies listed on Indonesia Stock Exchange (IDX) for three years in a row. Data used for this reseach is secondary data which is the annual reports from 2020-2022. This research uses multiple regression analysis and helped by Microsoft Excel and SPSS program version 25. Refering to signaling theory, assumption in this research that are used as hypotheses in this study are Sales growth has a significant negative effect on capital structure, Firm size has a significant positive effect on capital structure, profitability has a significant negative effect on capital structure, and business risk has a significant negative effect on capital structure. The results of this study find that sales growth influences capital structure positively, firm size influences capital structure positively. However, profitability influences capital structure negatively. Meanwhile business risk no influences on capital structure.

Keywords: *Capital structure, sales growth, firm size, profitability, business risk.*

1. INTRODUCTION

In this era of globalization, the business world continues to grow and develop very quickly. This causes competition between companies. Companies are required to be able to keep up with developments and be able to compete well. Along with conditions and competition that are increasingly difficult to predict, companies are required to be able to survive and have advantages that are not owned by other companies. This demand requires companies to carry out planned and systematic financial management to be able to maintain the company's survival.

Efforts to maintain company continuity amidst increasingly tight competition create challenges for companies related to financial needs. Of course, running a business requires a very large amount of money to carry out its operations. A company cannot operate to achieve its goals without available financial support. Of course, the funds needed cannot be met only with one's capital. Companies can obtain funding sources that come from internal funds or external funds of a company. The company's internal funds are funds that come from within the company, such as profits from the business the company has carried out. Meanwhile, external funds are funds sourced from outside the company, such as funds obtained from creditors and investors.

In 2019, a virus emerged from the city of Wuhan called Coronavirus Disease (COVID-19). This virus began to spread and attack Indonesia in 2020. Apart from the health equipment and medicines industry, industries in Indonesia experienced a reduction in production capacity, reaching 50% according to the Minister of Industry via Kompas.com. Several industries experienced a decline in income as a result of this pandemic, one of which is the food and beverage industry.

Even though they experienced pressure due to the Covid-19 pandemic, over time manufacturing companies were able to recover in the second quarter of 2021 (KEMENPERIN, 2021). Seeing this, there must be a challenge for the company to be able to maintain the continuity of the company.

Capital structure is an important funding strategy for a company. It is not uncommon for financial managers to be faced with problems in deciding on funding sources for company operational activities. It is hoped that the financial manager can determine the exact source and amount of funds that the company will use to carry out its business activities, so that these funds do not have an impact or greater burden on the company. It is important for a company to design a good capital structure, because the capital structure is the basis of a company's activities. To build an optimal capital structure, a company must be able to balance the use of external capital and the company's internal capital.

There are several differences with previous research. First, based on research by Paramitha & Wijana Asmara Putra (2020, p. 2762) sales growth has a positive and significant effect on capital structure. However, Saragih & Hariani (2023, p. 36), Brito et al. (2020, p. 108), and Yuniningsih et al. (2018, p. 174) that sales growth has a significant negative effect on capital structure, the research results of Jayanti & Damayanti (2023, p. 58) sales growth has a positive and not significant effect, and based on research from Afinindy et al. (2021, p. 18) and Viandy & Dermawan (2020) states that sales growth has no effect capital structure.

Then, based on research by Suharsono & Setiadi (2020, p. 71), and Nasution et al. (2018, p. 212) firm size has a positive and significant effect on capital structure. Research by Stoiljković et al. (2023, p. 14) that company size has a negative and significant effect on capital structure. Research by Rahman et al. (2023) that company size has a positive and no significant effect on capital structure. However, research by Dzikriyah & Sulistyawati (2020, p. 111) states that company size has no effect on capital structure.

The research results of Brito et al. (2020, p. 111) stated that profitability has a positive and significant effect on capital structure. In contrast to Triyono et al. (2019, p. 109), Suharsono & Setiadi (2020, p. 71) and Stoiljković et al. (2023, p. 14) which states that profitability has a negative and significant effect on capital structure. However, research from Hendri & Agusrianti (2019, p. 197) states that profitability has no effect on capital structure.

The research results of Triyono et al. (2019, p. 109) stated that business risk has a positive and significant effect on capital structure. Research from Meilyani et al. (2019, p. 21) which states that business risk has a positive but not significant effect. The difference in results obtained from Khaki & Akin (2020, p. 21) and Stoiljković et al. (2023, p. 14) which states that business risk has a negative and significant effect on capital structure. However, research from Paramitha & Wijana Asmara Putra (2020, p. 2762) and Nasution et al. (2018, p. 212) states that business risk has no effect on capital structure. Inconsistencies in the results of the variables that have been studied, then re-testing is carried out, namely to find out the truth of the factors that can influence the capital structure.

The aim of this research is to test and determine the influence of each independent variable on the dependent variable. Apart from that, it is hoped this research will provide benefits to the companies studied as input for company management in determining capital structure policies.

Then, it is hoped that it can provide benefits for further research by providing an understanding of capital structure. For investors and creditors, it is hoped that it can be used as knowledge as well as a source of information for consideration in decision making.

The novelty in this research from previous studies in Indonesia related to the determinants of the capital structure of the consumer non-cyclicals sector companies, namely adding the sales growth and business risk variabels in the research, and the signalling theory which previous studies not much to explain related to the relationship of variabels in determining capital structure. The proxy for calculating profitability uses return on equity (ROE) not return on assets (ROA). This study attempted to address this gap by focusing on understanding the determinants of the capital structure of consumer non-cyclical sector companies listed on the Indonesia Stock Exchange (IDX) in 2020-2022 period.

The rest of the paper is organized as follows. Section 2 introduces the preliminaries used in this paper, covering the basic theories and hypothesis used in this study. Section 3 presents the research model, the population, sample count, sample criteria, and proxies are described. Section 4 shows the results of the study. Section 5 concludes of the study. Finally, Section 6 presents limitations and direction for future research.

2. RESEARCH METHOD

Michael Spence's on 1973 be the first that explained about signaling theory in his research entitled Job Market Signaling. Signaling theory provides an explanation of the theory involving two parties. These two parties are company management as parties within the company and investors as parties outside the company. Parties within the company act as signal givers, while parties outside the company act as signal recipients. Signaling theory was also introduced by Ross in 1977, who revealed that signal theory is the giving of signals from the sender who tries to share relevant information for use by the recipient.

Signals are things that companies do to provide clues to investors about how management views the company's prospects Suharsono & Setiadi (2020, p. 64). Signaling theory is a theory that explains and emerged due to the encouragement for companies to share financial information with external parties. These information signals are needed as consideration for making decisions. There is a connection between signal theory and information asymmetry. Information asymmetry occurs where company management has more information than the principal.

Capital structure is the ratio of total debt to own capital. The company's capital structure can reflect the company's performance. Determining the wrong company capital structure will have a negative impact, especially if large debt is used. This will be a consideration for creditors and investors. According to Riyanto (2001) in Triyono et al. (2019, p. 102) factors that can influence capital structure include company size, company growth, profitability, taxes, management, leverage, liquidity, business risk, and so on. In this research, the variables sales growth, firm size, profitability and business risk are used.

Sales growth is sales growth carried out by the company in a period. According to Chakrabarti & Chakrabarti (2019) Companies that have high growth opportunities tend to use less debt because having high growth opportunities feels that it would be a burden on the company if they relied on debt as a source of funding. Companies with stable sales growth will have an influence on the profits obtained by the company, this is a good signal for companies to finance operational activities without requiring additional funds from external parties.

The next factor is firm size. Firm size can reflect the size of the company through the assets owned by the company (Suharsono & Setiadi, 2020, p. 64). The size of a company can be grouped into several group large companies, medium companies and small companies. The size of a company can influenced capital structure. Large companies need funds originating from external companies to develop. The better the company is in providing quality information about the company, it will provide a positive signal to external parties in responding to this signal. Large companies have the flexibility to obtain funds from external sources through the stock market.

The next factor is profitability. Profitability shows the company's ability to earn profits through the capital used. According to Triyono et al. (2019, p. 104) profitability describes profitability as the ability of a company to gain profits originating from sales, total assets and own capital. Companies that have high profitability provide a good signal for the company which means the company does not need funds that come from external sources. Because the company is indicated to be able to finance its operational activities from the company's internal funds.

The final factor that influences capital structure is business risk. Business risk is uncertainty regarding something that a company will face in carrying out its operational activities. Paramitha & Wijana Asmara Putra (2020, p. 2756) explain that business risk is the risk of the company being unable to cover funding for business activities which is influenced by the stability of income and costs. There is a corellation between business risk and debt, Companies that continue to use debt as a source of company funding, but do not predict their ability to repay, can make external parties doubt with the company. Companies that have a high level of business risk should minimize the use of debt to prevent bankruptcy.

Based on all of this framework, the following hypothesis is formulated:
H1: Sales growth has a significant negative effect on capital structure.
H2: Firm size has a significant positive effect on capital structure.
H3: Profitability has a significant negative effect on capital structure.
H4: Business risk has a significant negative effect on capital structure.

Based on the explanation above, the research framework can be described as follows:

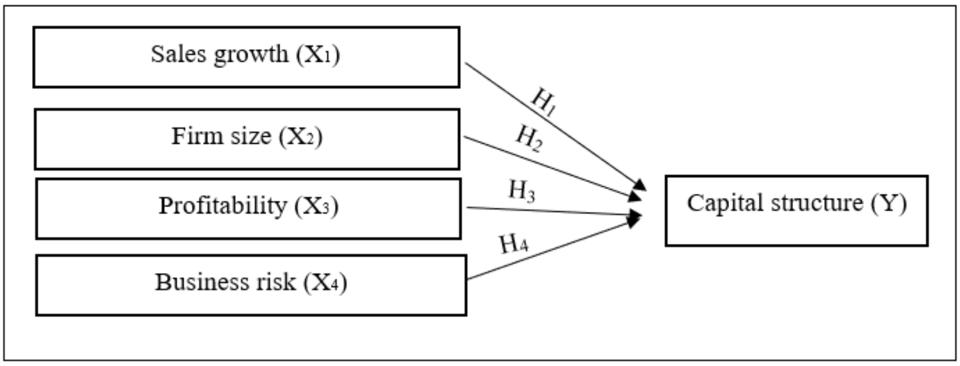

Figure 1. The Research Model

In the research conducted, the data used was secondary data. Data was obtained from annual financial reports obtained via the Indonesia Stock Exchange (BEI) website at www.idx.co.id/.

The population used as the subject of this research is consumer non cyclicals sub-sector companies listed on the Indonesia Stock Exchange (BEI) in 2020-2022. The sampling technique in this research is a purposive sampling method by considering certain criteria. The sample criteria used in this research are as follows: (1) consumer non cyclicals sub-sector listed on the Indonesian Stock Exchange during 2020-2022, (2) consumer non cyclicals sub-sector companies that use the Rupiah currency in their 2020-2022 financial reports, (3) consumer non cyclicals sub-sector companies that publish financial reports ending December 31 for the year 2020-2022. There are 82 consumer non-cyclicals sub-sector companies sector that meet the criteria. The amount of research data for 3 years produced 246 data, then outliers were carried out for 50 data so that it ended with a total of 196 data used for 71 companies. The software used for data processing are Microsoft Excel and SPSS version 25. The dependent variabel is capital structure. This research measures of capital structure with Debt to Equity Ratio (DER), is a financial ratio that compares the propotion of equity and debt financing.

The main independent variables considered in this study are sales growth, firm size, profitability, and business risk.

Tabel 1. Operational Variables

No.	Variables	Measurement	Scale	Ref
1.	Capital Structure	Debt to Equity Ratio = $\frac{\text{Total Debt}}{\text{Total Equity}}$	Ratio	(Nurul Aini et al., 2022; Suharsono & Setiadi, 2020)
2.	Sales Growth	Sales growth = $\frac{Sales_t - Sales_{t-1}}{Sales_{t-1}}$	Ratio	(Saragih & Hariani, 2023; Paramitha & Wijana Asmara Putra, 2020)
3.	Firm Size	Firm size = Ln (total asset)	Ratio	(Suharsono & Setiadi, 2020; Khaki & Akin, 2020; Nurul Aini et al., 2022)
4.	ROE	Return On Equity = $\frac{\text{Net Income}}{\text{Total Equity}}$	Ratio	(Darmawan et al., 2021; Brito et al., 2020)
5.	DOL	$DOL = \frac{\%pertumbuhan\ earning\ before\ interest\ and\ taxes}{\%pertumbuhan\ sales}$	Ratio	(Paramitha & Wijana Asmara Putra, 2020; Nasution et al., 2018)

3. RESULTS AND DISCUSSIONS

This research uses 196 data obtained from primary consumer goods sector companies listed on the Indonesia Stock Exchange (BEI) from 2020 to 2022. This research consists of 4 independent variables including sales growth, firm size, profitability and business risk. Consists of 1 dependent variable, namely capital structure.

Tabel 2. Descriptive statistical test results
Source: Processed by researchers using SPSS version 25, 2023

	Minimum	Maximum	Mean	Observations
Capital Structure	,00	24,56	1,0117	196
Sales growth	-1,00	3,19	,1611	196
Firm size	25,25	32,83	28,6713	196
Profitability	-8,07	,52	,0208	196
Business Risk	-183,45	154,30	2,6660	196

Based on the results of the descriptive statistical tests above, it can be seen that capital structure has a minimum and maximum value of 0.00 and 24.56, while the average capital structure value is 1.0117. Furthermore, sales growth has a minimum and maximum value of -1.00 and 3.19 while the average value is 0.1611. Furthermore, firm size has a minimum and maximum value of 25.25 and 32.83, while the average value of firm size is 28.6713. Furthermore, profitability has a minimum and maximum value of -8.07 and 0.52, while the average value of profitability is 0.208. And finally, business risk has a minimum and maximum value of -183.45 and 154.30, while the average business risk value is 2.667.

After carrying out descriptive statistical testing, classical assumptions were then tested.

Tabel 3. Classic assumption test results

Uji Asumsi Klasik	Metode	Syarat	Result	Conclusion
Normality Residual	One-Sampel Kolmogorov-Smirnov Test	Asymp. Sig. (2-tailed) > 0.05	0.200	Accepted
Multicollinearity	VIF and tolerance	Centered VIF < 10; Tolerance > 0.01	Sales Growth: VIF = 1.008 Tolerance = 0,992 Firm Size: VIF = 1.030 Tolerance = 0,971 Profitability: VIF = 1.035 Tolerance = 0,966 Business Risk: VIF = 1.004 Tolerance = 0,996	Accepted
Heteroscedasticity	Glesjer	Sig. > 0.05	Sales Growth: 0.215 Firm Size: 0.101 Profitability: 0.305 Business Risk: 0.355	Accepted
Autocorrelation	Durbin watson	dU ≤ d ≤ 4 - dU	2.136	Accepted

Based on testing using the One-Sample Kolmogorov-Smirnov Test, it is known that Asymp. Sig. (2-tailed) is 0.200 where this value is greater than 0.05. Judging from these results, it can be concluded that the data used is normally distributed. Next, a multicollinearity test was carried out which resulted in a tolerance value of 0.992 for sales growth, 0.971 for firm size, 0.966 for profitability and 0.996 for business risk. Then this test also produces a VIF value of 1.008 for sales growth, 1.030 for firm size, 1.035 for profitability, and 1.004 for business risk. Where the results of all independent variables show a tolerance figure greater than 0.01 and a VIF angle smaller than 10, which means that there is no multicollinearity in the independent variables. Next, heteroscedasticity testing was carried out using the Glesjer test. In this test, each variable produces a significance value of 0.215 for sales growth, 0.101 for firm size, 0.305 for profitability, and 0.335 for business risk. Where the results of each independent variable have a significance value greater than 0.05. So, it can be concluded that heteroscedasticity does not occur in the research data. Next, autocorrelation testing was carried out using the Durbin-Watson test. The Durbin-Watson test produces a value of 2.136, where this value is located between 1.8079 (dU) and 2.1921 from the 4 – dU calculation. Through these results it can be concluded that there is no autocorrelation in the research variables.

Tabel 4. Results of Multiple Regression Analysis
Source: Processed by researchers using SPSS version 25, 2023

Coefficients

Model		Unstandardized Coefficients B
1	(*Constant*)	-2,280
	SALES GROWTH	,261
	FIRM SIZE	,116
	PROFITABILITY	-2,916
	BUSINESS RISK	-,002

Based on the output of multiple linear regression testing, the equation can be as follows:

$$DER = -2{,}280 + 0{,}261\ GROWTH + 0{,}116\ SIZE - 2{,}916\ ROE - 0{,}002\ DOL + \varepsilon$$

Whereas:

DER	: Debt to Equity Ratio
GROWTH	: Sales Growth
SIZE	: Firm Size
ROE	: Return on Equity
DOL	: Degree of Operating Leverage
ε	: error

Based on the results of Multiple Regression Analysis, sales growth has a coefficient value of 0.261, meaning that there is a positive relationship between sales growth and capital structure. Firm size has a coefficient value of 0.116, meaning that there is a positive relationship between firm size and capital structure. Profitability has a coefficient value of -2.916, meaning there is a negative relationship between profitability and capital structure. Business risk has a coefficient value of -0.002, meaning that there is a negative relationship between business risk and capital structure.

Tabel 5. F test results
Source: Processed by researchers using SPSS version 25, 2023

ANOVA

Model		F	Sig.
1	Regression	533,249	,000[b]
	Residual		
	Total		

Based on the Table 5, the Sig. < 0.05. Through these results, it can be concluded that the variables of sales growth, firm size, profitability, and business risk influence capital structure simultaneously.

Tabel 6. Correlation (R) and Adjusted R Square (R^2) test results
Source: Processed by researchers using SPSS version 25, 2023

Model Summary

Model	R	R *Square*	*Adjusted R Square*	*Std. Error of the Estimate*
1	,958	,918	,916	,52661

Based on the tabel 6 of the correlation (R), it was found to be 0.958, where if the value is close to one, it means there is a strong relationship between the independent variable and the dependent variable. Then the R Square coefficient result is 0.918 or 91.8%. It can be concluded that this value shows that the variation of independent variables used in this research is able to explain 91.8% of the dependent variable, and 8.2% is explained by variables that are not included in this research.

Tabel 7. t test results
Source: Processed by researchers using SPSS version 25, 2023

Coefficients

Model		Unstandardized Coefficients B	Unstandardized Coefficients Std. Error	Standardized Coefficients Beta	t	Sig.
1	(*Constant*)	-2,280	,623		-3,661	,000
	SALES GROWTH	,261	,080	,068	3,267	,001
	FIRM SIZE	,116	,022	,112	5,338	,000
	PROFITABILITY	-2,916	,063	-,973	-46,127	,000
	BUSINESS RISK	-,002	,002	-,032	-1,535	,126

a. Dependent Variable: **CAPITAL STRUCTURE**

Based on table 7. The first variable, sales growth, has a significance of 0.001, this value is lower than 0.05 and the t value is 3.267, which means it has a significant positive influence on capital structure. The second variable, firm size, has a significance of 0.000, this value is lower than 0.05 and the t value is 5.338, which means it has a significant positive influence on capital structure. The third variable, profitability, has a significance of 0.000, this value is lower than 0.05 and the t value is -46.127, which means it has a significant negative influence on capital structure. The fourth variable, business risk, has a significance of 0.126, this value is greater than 0.05 and the t value is -1.535, which means it has a negative but not significant influence on capital structure.

The following is a summary of the results of hypothesis testing that have been carried out as follows:

Tabel 7. The results of Hypothesis Testing

	Hypothesis	t	Significance	Conclusion
H1	Sales growth has a significant negative effect on capital structure	3.267	0.001	H1 Rejected
H2	Firm size has a significant positive effect on capital structure	5.338	0.000	H2 Accepted
H3	Profitability has a significant negative effect on capital structure	-46.127	0.000	H3 Accepted
H4	Business risk has a significant negative effect on capital structure	-1.535	0.126	H4 Rejected

Based on the results obtained, the following is an explanation of the influence of independent variables on capital structure.

First, H1 is rejected which means that there is a significant positive effect of sales growth on capital structure consumer non cyclicals sub-sector companies listed on the Indonesia Stock Exchange (IDX) in 2020-2022. This is because companies entering the growth stage in their operational activities will need additional funds to support the company's development. An increase in sales will make the company increasingly want to develop the company, developing the company can be done using debt. The research results are in line with Brigham and Houston in Afinindy et al. (2021, p. 18) stated companies that have increasing sales growth tend to depend on funding that comes from the company's external capital or debt. In accordance with signaling theory, companies with increasing sales growth will attract the attention of investors because it is indicated that the company has good prospects. This result is in line with Paramitha & Wijana Asmara Putra (2020, p. 2762) that sales growth has a significant positive influence on capital structure.

Second, H2 is accepted, which means that there is a significant positive effect of firm size on capital structure consumer non cyclicals sub-sector companies listed on the Indonesia Stock Exchange (IDX) in 2020-2022. The size of a company can be seen from the high level of sales or the total assets it owns. A large company will need large funds to finance the company's operational activities, these funds do not only from internal companies but external companies also such as debt. In accordance with signaling theory, companies that provide good quality information will provide a positive signal to external parties to invest capital and provide loans to the company. This result is in line with Suharsono & Setiadi (2020, p. 71), and Nasution et al. (2018, p. 212) that firm size has a significant positive influence on capital structure.

Third, H3 is accepted, which means that there is a significant negative effect of profitability on capital structure consumer non cyclicals sub-sector companies listed on the Indonesia Stock Exchange (IDX) in 2020-2022. A company that has high profitability prefers to use funds that come from internal company sources. Companies that have a high level of profitability provide a good signal for the company, indicating that the company has internal funds obtained from company profits. Therefore, funds originating from short-term debt or long-term debt will decrease. This result is in line with Triyono et al. (2019, p. 109), Suharsono & Setiadi (2020, p. 71) and Stoiljković et al. (2023, p. 14) that profitability has a significant negative influence on capital structure.

Fourth, H4 is rejected, which means that there is a non effect of business risk on capital structure consumer non cyclicals sub-sector companies listed on the Indonesia Stock Exchange (IDX) in 2020-2022. The size of the business risk will not affect the capital structure. It depends on the situation of the company when deciding on a decision to fund company activities. If a company has high business risks but has good performance, it can still choose to use funds that come from external sources. Through a company's reputation for good performance, external parties can trust the company to provide loans or capital. There are some investors who are risk takers, who do not really pay attention to the company's business risks. This result is in line with Paramitha & Wijana Asmara Putra (2020, p. 2762) and Nasution et al. (2018, p. 212) that business risk has no influence on capital structure.

4. CONCLUSIONS AND SUGGSESTIONS

Based on the result and discusion that have been carried out in this research regarding the effect sales growth, firm size, profitability and business risk on capital structure. In this research used consumer non-cyclicals companies listed on the Indonesian Stock Exchange (BEI) in 2020-2022. The sampel for this research used 196 data of 71 companies. The results of this study indicate that sales growth and firm size have a significant positive effect on capital structure, profitability has a significant negative effect on capital structure. Then, business risk has a negative and not significant effect on capital structure.

There are limitations in this research that can be taken into consideration for further research. Limitations in this research include: a) this research is only limited to one independent variable and four independent variables, b) this research is only limited to consumer non-cyclical companies listed on the Indonesia Stock Exchange (IDX) in 2020-2022, c) this research was only carried out in three periods, namely from 2020 to 2022.

There are several suggestions for future researchers including: a) adding independent variables that can be used as factors that influence capital structure such as liquidity, asset structure, company growth, b) adding a time span to the research period, so that the overall results can be described as not being limited to three years, c) addition of other sectors besides the consumer non-cyclicals companies.

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