Profitability, Fixed Asset Ratio and Business Risk on Capital Structure (Empirical Study on Consumer Goods Industry in the Indonesian Capital Market)

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Abstract
Determination of funding sources at the company, should consider the capital structure that is owned. Many factors in determining capital structure include profitability, fixed asset ratio and business risk. This study aims to determine the effect of profitability, fixed asset ratio and business risk on capital structure in the Indonesia Capital Market period 2017-2019. The study used panel data analysis, with a number of samples based on purposive sampling of 30 research samples. Data analysis techniques using multiple linear regression models with the classical assumption test first. Research findings prove that profitability has an influence on capital structure, while fixed asset ratios and business risk have no effect on capital structure. From the exposure of the study it can be concluded that to increase the capital structure can be done by increasing profitability and fixed asset ratios, as well as reducing business risks that occur.

Keywords: *Capital Structure, Profitabily, Fixed Asset Ratio, Business Risk*

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1. Introduction

In carrying out its business activities at this time, the company requires no small amount of capital to run its business operations, given the fluctuations in prices, inflation and the rupiah exchange rate against foreign currencies that continues to increase. This causes a discrepancy with the company's budget that has been previously set, so the company requires additional business capital to continue the wheels of business activities. To cover this up, the company can make alternative financing. Alternative sources of financing that companies can choose from can be short-term debt, long-term debt, securities issuers, bonds and retained earnings (Riyanto, 2001).

The ratio of the ratio between debt and equity in a company's financial structure is called the capital structure (Husnan, 2004). The selection of the right funding source will be able to produce an optimal capital structure, which will

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be a strong foundation for the company in carrying out its operational activities, so as to be able to bring huge profits for the company and stakeholders.

The consumer goods industry is an industry whose products are much needed by the public. Rising prices, inflation and foreign exchange rates provide a significant impact on the company's operations, so it requires strong effort to be able to survive in the current situation. The wise selection of funding, will greatly help the creation of efficient and effective operations.

The average capital structure of consumer goods industry companies listed on the Indonesia Stock Exchange during 2017-2019 tends to decrease. In 2017 the average capital structure was 34%, in 2018 it decreased to 32% and in 2019 it was at an average of 33%. This shows a decrease in the company's capital structure and the amount of funding sourced from debt is around 33% of the total assets owned by the company, so the use of funds sourced from debt is relatively low compared to the total assets of the company. However, during the observation period, there were still several companies that had capital structures above 50%. This gives an illustration that the company is still using the source of debt funding in carrying out the company's operational activities, so the company must be more careful in facing the course of the business of the possibility of default so that it will lead to bankruptcy.

In determining the company's capital structure, many factors affect managers' decisions, including: business risk, tax position, flexibility, finance and conservatism or management aggressiveness are the factors that determine capital structure decisions. Specifically on capital structures that are targeted more generally, factors that influence capital structure decisions, sales stability, asset structure, operating leverage, growth rates, tax profitability, controls, management attitudes, lenders' attitudes, market conditions, company internal conditions and financial flexibility (Brigham, 2011)

This research is supported by research (Kesuma, 2009). (Wulandari, 2013) (Murhadi, 2011) (Putri, 2018) (Nurrohim, 2008) which states that profitability affects the capital structure, while (Sawitri, 2015) argues that business risk has an influence on capital structure. As for (Nurrohim, 2008), the fixed asset ratio has no effect on capital structure.

2. Literature Review

Pecking Order Theory

In determining financing decisions, companies must carefully consider the benefits and costs in determining financing decisions to be made. Pecking order theory (Myers: 1984) states that the company in its financing prefers internal financing (funding sourced from the company's operations tangible in retained earnings) and if the company requires funding to be done from outside (external financing), the company will issue a letter securities by considering which is safer first, whether it starts with the issuance of bonds, if the bonds are not sufficiently funded, new shares will be issued (Husnan, 1996). Debt equity ratio is not a priority in this theory, because this theory has two own capital, namely external and internal. Capital from outside the company is not a priority compared to internal capital which is preferred. Companies prefer the use of funding from internal capital sourced from cash flow, retained earnings and depreciation. The sequential use of funding sources according to this theory is internal funds, then debt and then own capital. Companies prefer to use internal funding, because when using external funding the company must open up by issuing bonds and shares. This has an impact on the decline in company performance and in the public spotlight as well as the impact of dividend payments on shares and interest on bonds issued (Husnan, 1996). Moreover, the company is concerned that the issuance of new shares will have an impact on the decline in share prices in the market, and will make asymmetric information between the company and the stakeholders.

Capital Structure

Capital structure (capital structure) is a combination of debt and equity in the company's long-term financial structure (Brigham, 2011). And according to (Husnan S., 1996) capital structure is a comparison between foreign capital and own capital. Capital structure can be sourced from: long-term debt, short-term debt, preffered stock, common stock, and earned surplus.

Fund sources basically consist of issuance of shares (equity financing), bond issuers (debt financing) and retained earnings (retained earnings). Issuance of shares and bonds is often referred to as sources of funds originating from outside the company or external financing while earnings for retained earnings are often referred to as retained earnings or sources of funds as expenditures originating from within the company itself or internal financing. Capital structure is an important issue in making decisions regarding company spending. The capital structure is reflected in long-term debt and elements of own capital, where both groups are permanent or long-term funds.

To measure the capital structure using the ratio of the ratio between debt and total assets owned by the company (Ghosh, 2000), or can be written Capital Structure = Long-term Debt / Total Assets (Kesuma, 2009)

Profitability and Capital Structure

Profitability is a variable that affects the company's capital structure. Profitability is the company's ability to earn profits from its business activities. Profits obtained by the company are increasingly high, indicating better company performance. If the company has a high level of profitability, it will use relatively small amounts of debt. This is due to the high profits generated, enabling companies to be able to use capital by using their retained earnings. In addition, with a high level of return on assets, the company will be more flexible in taking capital in the form of debt because by having a large profit, the company will be able to finance debt and interest expense without disrupting the existing capital structure.

This concept is supported by research (Wulandari, 2013) which states that profitability affects the capital structure. The high profitability of the company is reflected in the adequacy of profits, thus allowing the company to finance its operational activities using internal funds owned, without using external funds. This shows the minimization of the use of debt in the composition of the company's capital structure.

H1: Profitability affects Capital Structure

Fixed Asset Ratio and Capital Structure

The large amount of assets owned by the company shows that the company has high ability. The greater the assets owned by the company, the greater the expected operational results generated. The increase in assets followed by an increase in operating results will further increase the confidence of outsiders towards the company. With the increasing confidence of external parties (creditors) to the company, the proportion of debt is getting bigger than the capital itself. This is based on the creditor's confidence in the funds invested into the company guaranteed by the amount of assets owned by the company. Therefore fixed asset ratio has a positive effect on capital structure (Nurrohim, 2008)

H2: Fixed asset ratio affects the Capital Structure

Business Risk and Capital Structure

One other factor that determines the company's capital structure is business risk. The risk of company assets that arise when companies no longer use their debts is called business risk (Brigham, 2011). The business risk of a company can increase if the use of large debt in meeting the funding needs of the company, this will have an impact on the risk of payment and a large interest expense. The greater the debt burden that arises, the greater the risk of the company.

Companies that are indicated to have high risks should use a low debt ratio in their capital structure (Titman, 1988). The use of high debt will result in companies experiencing bankruptcy, so that they cannot pay their debts. To avoid this business risk, the company avoids taking funding in the form of high debt in its capital structure. This study measures business risk using the EBIT to Sales proxy.

Some studies suggest that business risk has a negative and significant effect on the company's capital structure (Yuke Prabansari, 2005), the business risk of the company is not a significant positive effect on the company's capital structure (Sawitri, 2015) and (Gusni, 2019) (Seftianne, 2011) risk business has no influence on the company's capital structure.

H3: Business risk influences capital structure

3. Methodology

This research is a descriptive study using quantitative data analysis techniques and data processing using SPSS 25.

The study population is the goods and services industry consumption companies listed on the Indonesia Capital Market in the period 20017-2019. Taking research sampling using purposive sampling, where the criteria determined are companies that are actively trading on the IDX during the observation period, the company reports the Annual Financial

Report continuously and companies that are not indicated will go bankrupt. The study uses time series data and cross sections, so that the sample is obtained as many as 30.

Statistical analysis was performed using the classical assumption test, multiple linear regression models, hypothesis testing (t test), Model Feasibility Test (F test) and Determination Coefficient analysis.

The variables used in this research and their measurements can be described in the table below:

Table 1. Research Variables and their Measurements

Variable	Symbol	Measurement
Dependent variable		
Capital Structure	CS	Total Liabilities/ Total Asset
Independent Variable		
Profitability	PROB	Net profit / total assets
Fixed Asset Ratio	FAR	Total Fixed Asset/ Total Asset
Business Risk	RISK	(ΔEBIT/ EBIT)/ (Δ Sales/ Sales)

Source : (Husnan, 2004), (Kesuma, 2009), (Gusni, 2019)

4. Results and Discussion

4.1 Results

The histogram graph shows a normally distributed pattern model, with a curve shaped like a bell. So based on the data normality test, this regression in research is feasible to use. Multicollinearity test results showed there were no multicollinearity problems between independent variables, in other words that all independent variables in this study were interdependent, due to the results of the acquisition of Variance Inflation Factor (VIF) <10. Scatterplot diagram illustrates the points of data spread and does not form a specific pattern, this indicates there is no heteroscedaticity in the heteroscedasticity test.

Table 2. Panel Data Regression Test Results and Multicollinearity

Variabel	Mean	Regression Coefficient	Multicollinearity (VIF)	t	Sig
Capital Structure	29.89			5.239	.000
Profitability	11.17	-1.452	1.082	-3.152	.004
Fixed Asset Ratio	43.08	.073	1.010	.530	.601
Business Risk	470.74	-.001	1.089	-.554	.584
Constant	4335.51				
Adjusted R2	.287				
F-statistic	3.481				
Prob F statistic	.030				

Based on table 2, multiple linear regression equations are obtained in the following studies:

$$\boldsymbol{CS = 4335.51 - 1.452\ Prob + 0.073\ FAR - 0.001\ RISK + \varepsilon}$$

The constant value of 4,335.51 indicates that the probability variable, fixed assets ratio and business risk are 0, then the capital structure variable is 4,335.51.

Statistical test results show that the regression model that is made is fixed, this can be seen from the Prob F-statistic value obtained at 0.03 where <0.05, which means there is a linear relationship between independent variables (profitability, business risk and fixed assets) and the dependent variable (capital structure). The results of the determination coefficient test obtained by 0.287 listed in the adjusted R2 value, indicate that the variable capital structure is influenced by profitability, business risk and fixed assets ratio only 28.7%, the remaining 71.3% is influenced by other variables not examined and explained in this research .

Hypothesis test results (t test) with the acquisition of sig <5%, the profitability variable gives effect to the capital structure, while the variable fixed asset ratio and risk business does not affect the capital structure.

4.2 Discussion

Based on the results of hypothesis testing, profitability has an influence on capital structure. The profitability of the company increases allows the company to increase the source of financing from debt with the assumption that with high profits the company is able to pay debts and interest costs. This is in line with research (Wulandari, 2013), (Kesuma, 2009), (Murhadi, 2011), (Putri, 2018), (Nurrohim, 2008) which states that profitability affects the capital structure. Profitability is the main benchmark seen by investors against the company, so the high profits earned by the company can use external sources of debt to finance the company's operations. But there is also an assumption that with the high profits, companies tend to use external funds retained earnings to finance the company's operations.

The significance value of 0.601, greater than 5%, means that the fixed assets ratio has no effect on capital structure. Comparison of fixed assets with the total assets owned by the company, illustrates that with large assets owned, giving impact to the company will be more confident in taking sources of financing from debt. However, in the research data during the observation period, it is seen that the average fixed asset ratio is not optimal, only reaching 43%, and the capital structure shows a low value, where only a few companies utilize their capital structure from debt, but there are still companies that have a low fixed asset ratio and has a capital structure with high debt financing. Such conditions will be risky for the company when the company is unable to pay its debts. This is in line with research (Nurrohim, 2008) argues that the fixed asset ratio has no effect on capital structure.

Hypothesis testing results of 0.584, greater than 5%, indicate that Business Risk does not affect the capital structure. The company's business risk is the risk faced by the company when unable to cover its operational costs due to instability between revenue and costs (Gitman, 2009). High-risk companies tend to use debt as a source of funding in carrying out their company's operations to avoid bankruptcy. Another case with companies that have low risk will be more flexible in choosing alternative financing sourced from debt. But in the company that the writer is careful, there are companies with high business risk that still have a high capital structure, meaning that there are still companies that take financing from debt. The results of this study are the same as those done by (Gusni, 2019), (Seftianne, 2011) which states that risk does not affect business risk.

5. Conclusion

Based on the results of data analysis and hypothesis testing that has been done, it can be concluded that profitability affects the capital structure, while the fixed asset ratio and business risk do not affect the capital structure. These variables are able to give an effect of 28.7%, while the rest are determined by other factors not covered in this study. This research is limited to an empirical study of profitability, fixed asset ratio and business risk variables in influencing capital structure, there are still other variables that can be further tested. With a variety of reporting factors found in consumer goods industry companies listing on the Indonesian Capital Market, the authors took a panel data sample of 30, in subsequent studies the samples taken could be further developed.

References

Brigham, E. F. (2011). *Dasar dasar Manajemen Keuangan.* Jakarta : Salemba Empat.

Farah Margaretha, A. R. (2010). *Faktor-faktor yang mempengaruhi Struktur Modal pada Industri Manufaktur di Bursa Efek Indonesia*. *JURNAL BISNIS DAN AKUNTANSI, 12*(2), 119-130.

Ghosh. (2000). "The Determinants of Capital Structure",. *American Business Review, 18*(2), 129.

Ghozali. (2011). *Aplikasi Analisis Multivariat dengan Program SPSS* (Edisi Lima ed.). Semarang: Badan Penerbit Universitas Diponegoro.

Gitman, L. (2009). *Principle of Managerial Finance* (11 th edition ed.). Jakarta: Prentice Hall.

Gusni, N. M. (2019). Analisis Faktor Penentu Struktur Modal: Studi Empiris Pada Perusahaan Kecil Menengah di Pasar Modal Indonesia . *Jurnal Manajemen Indonesia* , 1.

Husnan. (2004). *Dasar dasar Teori Portofolio.* Yogyakarta: YKPN.

Husnan, S. (1996). *Pembelanjaan Perusahaan (Dasar-dasar Manajemen Keuangan)* (Vol. III). Yogyakarta: Liberty.

Kesuma, A. (2009, Maret). Analisis Faktor yang Mempengaruhi Struktur Modal Serta Pengaruhnya Terhadap Harga Saham Perusahaan Real Estate yang Go Public di Bursa Efek Indonesia. *Jurnal Manajemen dan Kewirausahaan, 11*(1), 38-45.

Mafrukhah, I. (2013). Kepemilikan Manajerial, Kepemilikan Institusional, dan Kinerja Keuangan sebagai Penentu Struktur Modal Perusahaan. *Jurnal Dinamika Manajemen, 4*(1), 69-81.

Mas'ud, M. (2008, Maret). Analisis Faktor Faktor yang mempengaruhi Struktur Modal dan hubungannya terhadap Nilai Perusahaan. *Manajemen dan Bisnis, 7*(1), 82.

Murhadi, W. R. (2011, September). Determinan Struktur Modal: Studi di Asia Tenggara. *Jurnal Manajemen dan Kewirausahaan, 13*(2), 91-98.

Nurrohim, H. (2008, Januari). Pengaruh Profitabilitas, Fixed Asset Ratio, Kontrol Kepemilikan dan Struktur Aktiva terhadap Struktur Modal. *Sinergi Kajian Bisnis dan Manajemen, 10*(1), 11-18.

Pantow, M. S. (2015). Analisa Pertumbuhan Penjualan, Ukuran Perusahaan, Return on Asset dan Struktur Modal terhadap Nilai Perusahaan yang tercatat pada Indeks LQ 45. *EMBA, 3*(1), 961-971.

Putri, R. P. (2018, Februari). Faktor Faktor yang mempengaruhi Struktur Modal Perusahaan Manufaktur di Bursa Efek Indonesia. *Jurnal Ilmu dan Riset Akuntansi, 7*(2), 1.

Rista Bagus Santika, B. S. (2011, November). Menentukan Struktur Modal Perusahaan Manufaktur di Bursa Efek Indonesia. *Dinamika Keuangan dan Perbankan, 3*(2), 172-182.

Riyanto, B. (2001). *Dasar Dasar Pembelanjaan Perusahaan* (Empat ed.). Yogyakarta: BPFE.

Sawitri, N. P. (2015). Pengaruh Resiko Bisnis, Ukuran Perusahaan, dan Pertumbuhan Penjualan terhadap Struktur Modal. *E Jurnal Universitas Udayana, 4*(5), 1238-1251.

Seftianne, R. H. (2011, April). Faktor Faktor yang mempengaruhi Struktur Modal pada Perusahaan Publik Sektor Manufaktur. *JURNAL BISNIS DAN AKUNTANSI, 13*(1), 39-56.

Titman, S. &. (1988). The Determinants of Capital Structure Choice. *The Journal of Finance* , 43.

Wulandari, D. R. (2013). Pengaruh Profitabilitas, Operating Leverage, Likuiditas terhadap Nilai Perusahaan dengan Struktur Modal sebagai Intervening. *Accounting Analysis Journal*, 455.

Yuke Prabansari, H. K. (2005). Faktor Faktor yang mempengaruhi Struktur Modal Perusahaan Manufaktur Go Public di Bursa Efek Jakarta. *Sinergi Kajian Bisnis dan Manajemen*, 1-15.