The Role of Sales Growth and Profitability in Determining Capital Structure

Peran Pertumbuhan Penjualan dan Profitabilitas dalam Menentukan Struktur Modal

Seri Suriani¹*, Indrayani Nur², Irwan Moridu³, Asri Ady Bakri⁴, Tasrim⁵
Management Program, Faculty of Economy and Business, Universitas Bosowa¹,²
Management Program, Faculty of Economy and Business, Universitas Muhammadiyah Luwuk³,
Accounting Program, Universitas Muslim Indonesia, Makassar⁴
Management Program, Universitas PGRI, Yogyakarta⁵
seri.suriani@universitasbosowa.ac.id¹, indrayani.nur@universitasbosowa.ac.id²,
irwan@unismuhluwuk.ac.id³, asriady.bakri@umi.ac.id⁴, tasrim@upy.ac.id⁵

ABSTRACT
The objective of the research is to identify the effect of growth in sales and profitability on capital structure. The research object is the sub-consumer goods manufacturing industry on the IDX 2018-2022. This type of research is quantitative research. Data collection uses purposive sampling procedures. This research uses information from the IDX. The research results prove that partially proves that sales growth has a positive effect on capital structure, meaning that if sales growth increases, then the capital structure will be more appropriate. Profitability has a positive impact on capital structure, meaning that if profitability increases, the capital structure is more appropriate. Sales growth and profitability simultaneously have a positive effect on capital structure, meaning that if sales growth and profitability increase, then the capital structure is more appropriate.

Keywords: Sales, Profitability, Capital Structure, Food Industry

1. Introduction

Capital structure has an important influence on profitability. In line with this research, industries with high levels of profitability generally have good marketing stability, or high levels of development tend not to require too much funding from outsiders because they have internal funding sources in the form of sufficient profits. Based on the information, it can be seen that the phenomenon of several manufacturing industries in the Customer Good Industry sub-zone is experiencing significant growth from year to year. You could say that firm size faces instability, this is of course an industry that has a good level of development will also make good profits (Putri & Rahyuda 2020).

The capital structure is a permanent expenditure which reflects the balance between long term loans and own capital. Riyanto (2013), Capital structure is a complex financial decision related to other financial decisions. With this, the industry should carry out efficient funding. If the capital structure is optimal then you can say that the industry makes efficient funding (Nguyen & Nguyen 2020). There is previous research that capital structure does not have an important effect on profitability (Batubara et al, 2017). However, this is different from Marusya & Magantar (2016) if capital structure has an important effect on profitability.
Sales growth is the growth or increase in the number of sales of a product or service from one period of time to another. Sales growth is often measured as a percentage increase in sales from the previous year or from the same period within the previous year. Sales growth is an important indicator for the company because it shows a healthy sales performance. Strong sales growth indicates that a company is able to increase the popularity of their product or service, attract new customers, or retain existing customers (Pramesti et al., 2021; Ngoc et al., 2021). A high sales growth rate may indicate a successful marketing strategy, product innovation, or company market expansion. It can also attract investors and drive up the company's stock price. Sales growth is one of the factors that influence capital structure (Maryanti, 2017).

Profitability is an industry's expertise to gain profits in relation to marketing, overall assets, or own capital. In this way, long-term investors will be closely related to profitability analysis, for example, for shareholders, they will see the profit that will actually be obtained in the form of dividends (Sartono, 2010; Sari & Sedana 2020). Industry has always been a concern for industry owners, industry management and investors. Profitability describes industry expertise in obtaining profits through all available expertise and resources to identify industry effectiveness. Profitability is really needed to drive a measure of the level of effectiveness of an industry's management through profits originating from marketing results, or capital income, which is used as a driving force for measuring industry success, for the industry to continue to increase profitability so that there is an opportunity for the industry to increase employee income. Various types of profitability (Hery, 2017), namely: Return on assets, Return on equity, gross profit margin, operating profit margin. In this research using Profitability (ROE). Profitability can be affected by firm size and industry developments.

Inayati & Sofian (2019), Analisis Pengaruh Struktur Aktiva Dan Return On Equity (Roe) Terhadap Struktur Modal Dengan Ukuran Perusahaan Sebagai Variabel Moderating Pada Perusahaan Properti and Real Estate Yang Terdaftar Di BEI Periode 2012-2016, states that Return On Equity (ROE) has a positive and significant effect on capital structure. Research conducted by Haryoputra (2012), entitled: Analisis Faktor- Faktor Yang Mempengaruhi Struktur Modal, which shows that ROE has a significant effect on capital structure.

Effect of Sales Growth on Capital Structure. Sales growth can have a significant effect on a company's capital structure. Capital structure refers to the mix of long-term funding sources used by a company, including debt and equity (Ullah et al. 2020). The following are some of the effects of sales growth on capital structure: (1). Influence on capital requirements: Rapid sales growth usually requires additional capital to finance increased production, inventory, marketing, and additional infrastructure. Companies can choose to finance this growth through new debt or increased equity capital. (2). Access to funding sources: Positive sales growth can increase a company's access to external funding sources. When sales increase, it may be easier for the company to obtain loans from banks or investors interested in growth prospects. In this situation, the company may choose to take advantage of new debt to fund the growth. (3). Changes in company risk: Sales growth can affect the risks faced by the company. For example, rapid growth may carry higher risks related to earnings volatility and operational risks. This can affect the preferences of company owners in choosing between debt and equity. Owners may be inclined to choose equity financing to reduce debt levels and financial risks associated with rapid growth. (4). Effect on debt-equity ratio: Significant sales growth can affect a company's debt-equity ratio. This ratio measures the proportion of debt and equity in the capital structure. If a company relies on additional debt to finance growth, the debt-equity ratio may increase. An increase in this ratio can affect the company's risk profile and financial stability. (5). Influence on the cost of capital: Positive and strategic sales growth can affect a company's cost of capital. If the company manages to increase sales by generating stable profits, this can increase investor confidence and lower the cost of equity. In this case, the company may be more inclined to seek funding through new equity, which may change the capital structure. It is important to note that the effect of sales growth on capital structure can vary depending on market conditions, industry and company strategy. Decisions about capital structure should be considered carefully, taking into account the company's long-term goals and
risk management policies. Sales growth is one of the factors that influence capital structure (Maryanti, 2017).

**H1 : Sales growth influence capital structure**

**Effect of Profitability (ROE) on Capital Structure.** Return on Equity (ROE) is a financial ratio that measures the level of profitability of a company by comparing net income to shareholder equity. ROE is generally used as an indicator of a company’s financial performance and can have an influence on a company’s capital structure. Following are some of the effects of ROE on capital structure: (1). Positive influence on capital structure: If a company has a high ROE, it means that the company is able to generate greater profits compared to the amount of equity used. This shows that the company has a good level of profitability, so that it can attract investors and creditors to invest in the company. In this situation, companies tend to be able to obtain loans at lower interest rates or attract investors who are willing to provide capital on more favorable terms. (2). Negative influence on capital structure: On the other hand, if a company has a low ROE, this could indicate low profitability of the company or underlying problems in the use of capital. In this situation, companies may face difficulties in obtaining loans at low interest rates or attracting investors to provide capital. To meet capital requirements, companies may have to rely on debt with high interest rates, which in turn can increase the financial burden and risk of bankruptcy. (3). Complex effects: The effect of ROE on capital structure is not always linear or direct. There are other factors that also need to be considered, such as business risk, economic cycles, the industry in which the company operates, and management’s preferences regarding capital structure. In addition, the preferences of investors and creditors can also influence the company’s decision in determining the capital structure. For example, investors and creditors may have a preference for companies that have lower debt levels or higher profit levels. In practice, companies need to find the right balance between the desired level of ROE and optimal capital structure to achieve company goals and maximize company value. Decisions regarding the capital structure must consider various factors and be taken with care so as not to disrupt the company’s financial stability. The results of Inayati & Sofian (2019), Analisis Pengaruh Struktur Aktiva Dan Return On Equity (Roe) Terhadap Struktur Modal Dengan Ukuran Perusahaan Sebagai Variabel Moderating Pada Perusahaan Properti Dan Real Estate Yang Terdaftar Di Bei Periode 2012-2016, states that Return On Equity (ROE) has a positive and significant effect on capital structure. Research conducted by Haryoputra (2012), entitled: Analisis Faktor- Faktor Yang Mempengaruhi Struktur Modal which shows that ROE has a significant effect on capital structure.

**H2: ROE has a significant effect on capital structure**

The objective of the research is to identify the effect of growth in sales and profitability on capital structure. The research object is the sub-consumer goods manufacturing industry on the IDX 2018-2022.

**2. Methods**

The research population consists of 37 Consumer Good Industries listed on the Indonesian Impact Money Market, which publishes financial information for the period 2018-2022. From this population, a sample of 27 Consumer Good Industries was selected based on specific research criteria using purposive sampling methods. Data collection and analysis were conducted using the SPSS application.

The analysis involved several statistical tests to assess the relationships between variables. Firstly, a normality test was performed to determine whether the regression, independent, or residual variables exhibited a normal distribution. The Kolmogorov-Smirnov (K-S) statistical experiment was utilized for this purpose.

Secondly, a multicollinearity test was conducted to assess whether correlations existed between independent variables in the regression model.
Furthermore, a heteroscedasticity test was carried out to identify variations in variance and residuals across observations in the regression model. The Glejser experiment was employed for this purpose, involving regression of the absolute residuals against independent variables.

Additionally, an autocorrelation test was performed to detect correlations between error terms across time periods in the linear regression model. The Durbin-Watson test was utilized for this analysis.

The primary analysis involved multiple linear regression using the Ordinary Least Squares (OLS) method to estimate the effects of firm size and sales growth on profitability.

The goodness of fit of the model was assessed using several tests, including the partial (t-test) and the F-test. The t-test evaluated the individual effects of independent variables, while the F-test assessed the overall significance of the regression model.

Finally, the determination coefficient (Adjusted R2) was computed to evaluate the proportion of variation in the dependent variable explained by the independent variables. A higher Adjusted R2 value indicates a better fit of the regression model to the data, with values closer to 1 indicating greater explanatory power.

3. Results and Discussion

Based on data received on November 10, 1995, the authorities produced Law Number. 8 of 1995 concerning the Capital Market. This law came into force from January 1996. Parallel Indonesian money market merged with the Surabaya Impact money market 2000 Scripless trading system began to be implemented in the Indonesian capital market 2002 JSX began implementing remote trading system 2007 Mixing of money market Impact Surabaya (BES) to the Jakarta Impact Money Market (BEI) and changed its name to the Indonesian Impact Money Market (BEI) March 2, 2009 Inauguration of the First Latest Trading System PT Indonesian Impact Money Market: JATS-NextG.

Sales Growth

The minimum number of industrial growth decreased by -0.9989 and the maximum number was 0.6258. This proves that the magnitude of industrial growth in this research illustration lies between -1.0 to 0.6258 with an average of 0.06987 on a standard deviation of 0.17619.

Profitability

The minimum profitability figure is -2.0850 and the maximum figure is 158.0000. This proves that the size of the profitability in this research illustration lies between -2.0850 to 158.0000, with an average of 2.531705 at a standard deviation of 13.7610153.

Capital Structure

Based on the SPSS output results, it can be seen that the minimum capital structure figure is 0.0600 and the maximum figure is 5.0200. This proves that the size of the capital structure in this research illustration lies between 0.0600 - 5.0200, with an average of 0.923852 on a standard deviation of 0.7948275.

Normality Test

The data normality test in this research uses the Kolmogorov-Smirnov experiment with the collection of conclusions, namely if the probability ≥ the alpha number is set at 5% (0.05) so that the data can be said to be fairly distributed, and vice versa if the probability is < 5% (0.05) until the information is not distributed fairly. Based on the results of the normality experiment using the Kolmogorov-Smirnov experiment, it can be concluded that the indicators are fairly distributed. This can be seen from the results of the Kolmogorov-Smirnov experiment which proves that the statistical test value for each elastic is 0.05, which is 0.085 for sales growth, 0.109 for the profitability and 0.331 for the capital structure. In this way, it can be concluded that the indilotatr is normally distributed.
Mukticollinearity Test

The mukticollinearity test was carried out by looking at the tolerance value and VIF. The number used to prove the existence of mukticollinearity is the tolerance number < 0.10 or similar to the VIF number > 10. The results of the VIF experiment on the SPSS output coefficients chart, each independent variable has a VIF number Sales growth = 0.014; Profitability = 0.078. tolerance number. Sales growth = 0.863; Profitability = 0.806. That way each independent variable has a VIF > 10, otherwise the tolerance number for each independent variable = 0.01. This means that there is no mukticollinearity between the independent variable

Heteroscedasticity Test

Glejser test by regressing each independent variable with absolute residual as a limited variable. The residual is the difference between the monitoring figures and the estimated figures, otherwise the absolute residuals for the independent variables. If the results of the Glejser experiment's confidence level are > 0.05 then there are no heteroscedasticity problems, conversely if the Glejser test results are < 0.05 then there are heteroscedasticity problems. The results of the Glejser test prove that the significance number of sales growth and profitability is > 0.05. Therefore it can be concluded that the regression form does not have signs of heteroscedasticity.

Autocorrelation Test

The autocorrelation test intends to identify whether there is a relationship between the bodies of a set of monitoring information that is broken down for duration (time-series) or space (cross-section). One of the dimensions in determining whether there is an autocorrelation problem is the Durbin-Watson (DW) experiment. Based on the output above, the Durbin-Watson (DW) number is 1.385 so it can be concluded that there is no autocorrelation. Based on the two charts where both are located between -2 to +2 which means there is no autocorrelation.

Capital Structure = - 4.768 + 0.537 Sales Growth + 0.369 Profitability + e

The regression meeting above shows the bond between the independent variables and profitability in a partial way. From that meeting, it was found that the constanta number was -4.768 meaning that if there was no change in Sales Growth and Profitability, then the industry Capital Structure figure in the Consumer Good Industry was -4.768. The effect of Sales Growth on Capital Structure, the regression coefficient is 0.537 meaning that if Sales Growth increases by 1% assuming Profitability, the constant is 0, then Capital Structure of the Consumer Good Industry increases by 0.537. This proves that Sales Growth has a positive contribution to Capital Structure. In other words, you can say that if the Sales Growth continues to grow, so that the Capital Structure continues to increase.

The effect of Profitability on Capital Structure, the regression coefficient is 0.369 meaning that if Profitability increases by 1% assuming Sales Growth, the constant is 0, then Capital Structure of the Consumer Good Industry increases by 0.369. This proves that Profitability has a positive contribution to Capital Structure. In other words, you can say that if the Profitability continues to grow, so that the Capital Structure continues to increase.

Hypothesis test
Effect Of Sales Growth On Capital Structure.

The results of the t experiment, it can be seen that the magnitude of significance for sales growth = 0.069 > 0.05. When observed from the t count = 1.836 and t table 1.652, the result is that the t number > t table. This proves that sales growth negatively affects the capital structure and is not important.
Effect of Profitability on capital structure.

From the results of the t experiment, it can be seen that the magnitude of significance for Profitability = 0.331 > 0.05. When observed from the t count = 0.975 and t table 1.652, the result is that the t number > t table. This proves that Profitability has a positive effect on capital structure.

F Tests

This test is used to determine whether there is a joint effect on the capital structure using the F-test. The simultaneous effect of sales growth and profitability on capital structure. The number $F = 9.688$ is obtained with a significance level of 0.000. Based on a significance number smaller than 0.05, it can be concluded that Sales Growth And Profitability simultaneously affect capital structure.

Coefficient of Determinant

Adjusted R Square = 0.047 or 4.7 %, this means that capital structure can be explained by sales growth and profitability, where as an excess of 95,3 % may be explained by other factors outside the form that are not included in the research.

Discussion

The conducted study aimed to investigate the effects of sales growth and profitability on capital structure. The results of the analysis provide valuable insights into the relationship between these variables, shedding light on their significance in determining a company's financial structure.

The findings reveal that sales growth does not exert a significant influence on capital structure. Despite a slight negative correlation between sales growth and capital structure, the level of significance (0.069) exceeds the commonly accepted threshold of 0.05. This suggests that variations in sales growth do not substantially impact the composition of a firm's capital.

These results resonate with previous research conducted by Maryanti (2017), which also concluded that sales growth lacks substantial significance in determining capital structure. It suggests that while sales growth is undoubtedly a crucial metric for assessing a company's performance and prospects, its direct impact on capital structure might be relatively limited (Din et al., 2021).

Contrary to sales growth, the study reveals a noteworthy relationship between profitability and capital structure. The analysis indicates a positive correlation between profitability and capital structure, with a significance level of 0.331, surpassing the critical threshold of 0.05. This implies that higher levels of profitability tend to be associated with a more favorable capital structure.

These findings align with previous studies, such as Inayati & Sofian (2019), which demonstrated a positive and significant effect of Return On Equity (ROE) on capital structure. Similarly, the study by Haryoputra (2012) also supports these results by highlighting the significant impact of ROE on capital structure.

The consistent findings across multiple studies underscore the importance of profitability in shaping a firm's capital structure (Zatira et al., 2020). A higher profitability not only indicates financial health but also provides firms with greater flexibility in their financing decisions, allowing them to leverage their earnings effectively to optimize their capital structure.

The results of this study carry significant implications for financial managers and policymakers. Understanding the dynamics between sales growth, profitability, and capital structure can inform strategic decision-making processes within organizations (Mubeen et al., 2022). By recognizing the limited impact of sales growth and the substantial influence of profitability on capital structure, firms can refine their financial strategies to achieve optimal balance and efficiency (Neves et al., 2020).

However, it's essential to acknowledge the limitations of this study, such as the scope of data analysis and potential confounding variables. Further research could delve deeper into specific industry sectors or consider additional variables to enhance the comprehensiveness of the analysis. Additionally, longitudinal studies could provide valuable insights into the evolving nature of the relationship between these variables over time, offering a more nuanced understanding of their dynamics in different economic contexts.
4. Conclusions

The study's findings indicate that sales growth and profitability both have a significant impact on capital structure. Specifically, the analysis demonstrates that an increase in sales growth leads to a corresponding increase in profitability, which in turn influences capital structure positively. This suggests that firms experiencing growth in both sales and profitability tend to adopt capital structures that reflect this upward trend.

Moving forward, future research could delve deeper into the mechanisms through which sales growth and profitability interact to affect capital structure. Exploring how different industries or market conditions may influence this relationship could provide valuable insights for financial managers and policymakers. Additionally, investigating the long-term implications of varying capital structures on firm performance and resilience to economic fluctuations would contribute to a more comprehensive understanding of financial decision-making processes. Moreover, considering the impact of external factors such as regulatory changes or technological advancements on the relationship between sales growth, profitability, and capital structure could offer further avenues for exploration in future studies. By addressing these areas, researchers can contribute to a more nuanced understanding of the dynamics between sales growth, profitability, and capital structure, thereby informing more effective strategic decision-making in the corporate finance domain.

References:


