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Transekonomika: Akuntansi, Bisnis dan Keuangan
https://transpublika.co.id/ojs/index.php/Transekonomika
Online ISSN 2809-6851 | Print ISSN 2809-7866

https://doi.org/10.55047/transekonomika.v5i1.867

Original Article

Effect of Leverage on Profit Growth in Manufacturing Companies in the Consumer Goods Sector Listed on the Indonesia Stock Exchange (IDX) in 2015 - 2019

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Received : 27 December - 2024
Accepted : 28 January - 2025
Published online : 30 January - 2025

Abstract

The main goal of this study is to examine how leveraging affects the increase in profits in the Consumer Goods Industry Sector of manufacturing firms that are publicly traded on the Indonesia Stock Exchange (IDX) between 2015 and 2019. The study is driven by the inconsistency in company performance, with fluctuations in profit growth and leverage. Data collection for this study is conducted through documentation. The sample selection method employed is purposive sampling, with a total of 23 manufacturing companies from the consumer goods industry sector on the Indonesia Stock Exchange (IDX) during 2015-2019. The technique used for analysing the data involves conducting a panel data regression analysis with a significance level of 5%, using Program Eviews 12. According to the results, it appears that the level of debt does not have a direct effect on the increase in profits for manufacturing companies in the consumer goods industry sector listed on the Indonesia Stock Exchange (IDX) from 2015 to 2019. However, it was observed that both leverage and Company Size collectively influence profit growth in such companies during the same period.

Keywords: Consumer Goods Sector, Leverage, Profit Growth.

1. Introduction

Publicly traded consumer goods manufacturers on the Indonesian Stock Exchange are generally big companies that are in a good position to capitalise on their profit-making prospects. Definition of profit according to Subramanyam (2014) is the difference in revenue and Profit after deducting expenses and losses. To measure the profit earned in a certain period, profit growth is needed. Profit growth according to Harahap (2011) is a the ratio is utilised in order to assess the rise or fall in net earnings from one year to the next. To measure profit growth, one must compare the earnings of the current year with that of the previous year. This calculation involves deducting last year's net earnings from this year's and then dividing by the earnings of the previous year. Positive profit growth entails an increase in earnings from one year to the next and signifies strong financial performance by the company. It is vital to pay attention to the difficulties encountered by consumer goods companies in the manufacturing industry that are publicly traded on the Indonesia Stock Exchange. The profit growth variable experiences unstable conditions, sometimes experiencing increases and

decreases from 2015-2019. The following is a table of profit growth variables that experience unstable conditions.

Table 1. Profit growth in manufacturing companies in the Goods and consumption sector listed on the IDX

No	Company Code	2015	2016	2017	2018	2019
1	CEKA	1,59	1,34	-0,56	-0,13	1,32
2	ICBP	0,14	0,24	-0,02	0,31	0,15
3	DLTA	-0,33	0,33	0,10	0,21	-0,06
4	INDF	-0,28	0,42	-0,02	-0,04	0,19
5	MLBI	-0,37	0,98	0,35	-0,07	-0,02
6	SKBM	-0,55	-0,44	0,15	-0,38	-0,94
7	SKLT	0,19	0,03	0,11	0,39	0,41
8	MYOR	2,05	0,11	0,17	0,08	0,16
9	ROTI	0,43	0,03	-0,52	-0,06	0,86
10	ULTJ	0,85	0,36	0,003	-0,01	0,48
11	STTP	0,50	-0,06	0,24	0,18	0,89
12	KAEF	-0,02	0,07	0,22	0,61	-0,97
13	MERK	-0,06	0,08	-0,06	7,04	-0,93
14	SIDO	0,05	0,10	0,11	0,24	0,22
15	KLBF	-0,03	0,14	0,04	0,02	0,02
16	DVLA	0,32	0,41	0,07	0,24	0,11
17	TSPC	-0,10	0,03	0,02	-0,03	0,10
18	GGRM	0,19	0,03	0,16	0,005	0,40
19	WIIM	0,16	-0,19	-0,62	0,26	-0,47
20	ADES	0,06	0,7	-0,32	0,38	0,58
21	KINO	1,53	-0,31	-0,39	0,37	2,43
22	TCID	2,10	-0,70	0,11	-0,03	-0,16
23	UNVR	-0,01	0,09	0,10	0,30	-0,19

Source: www.idnfinancial.com (Data re-processed)

The information presented in the table indicates that there were variations in the profit growth of manufacturing companies within Indonesia's consumer goods industry that are listed on the Stock Exchange during the period of 2015 to 2019. The ups and downs of profit growth due to the ups and downs of net income or this may occur due to various factors including the level of Leverage, sales levels, and profit growth in the past (Hanafi & Halim, 2009).

The table shows the different levels of profit growth in consumer goods manufacturing companies listed on the Indonesia Stock Exchange from 2015 to 2019. The fluctuations in profit growth can be linked to variations in net profit and various other factors like company size, leverage, sales success, and past profit trends (Hanafi & Halim, 2009). Leverage is a metric that shows how much of a company's funds are borrowed. The research looked into the Leverage ratio by evaluating the ratio of debt to assets according to Kasmir (2014) the ratio of debt to assets is a useful measure for comparing overall debt against assets.

In view of the problems seen in manufacturing companies in the consumer goods sector on the Indonesia Stock Exchange, the leverage factors have experienced variable conditions between 2015 and 2019, with some instances of both rise and fall. Here is a breakdown of the average leverage ratios for six textile and garment companies which have shown an increase.

Table 2. Leverage on manufacturing companies in the Goods and consumption sector listed on the IDX in 2015-2019

No	Company Code	2015	2016	2017	2018	2019
1	CEKA	0,56	0,38	0,35	0,16	0,18
2	ICBP	0,38	0,35	0,35	0,33	0,31
3	DLTA	0,18	0,15	0,14	0,15	0,14
4	INDF	0,53	0,46	0,46	0,48	0,43
5	MLBI	0,63	0,63	0,57	0,59	0,60
6	SKBM	0,54	0,63	0,36	0,41	0,43
7	SKLT	0,59	0,47	0,51	0,54	0,51
8	MYOR	0,54	0,51	0,50	0,51	0,47
9	ROTI	0,56	0,50	0,38	0,33	0,33
10	ULTJ	0,20	0,17	0,18	0,14	0,14
11	STTP	0,47	0,49	0,40	0,37	0,25
12	KAEF	0,42	0,50	0,57	0,64	0,59
13	MERK	0,26	0,21	0,27	0,58	0,43
14	SIDO	0,07	0,07	0,08	0,13	0,13
15	KLBF	0,20	0,18	0,16	0,15	0,17
16	DVLA	0,29	0,29	0,31	0,28	0,28
17	TSPC	0,30	0,29	0,31	0,30	0,30
18	GGRM	0,40	0,37	0,36	0,34	0,35
19	WIIM	0,29	0,26	0,20	0,19	0,20
20	ADES	0,49	0,49	0,49	0,45	0,30
21	KINO	0,44	0,40	0,36	0,39	0,42
22	TCID	0,17	0,18	0,21	0,19	0,20
23	UNVR	0,69	0,71	0,72	0,61	0,74

Source: www.idnfinancial.com (Data re-processed)

As per the information presented in the table, manufacturing companies in the consumer goods sector listed on the Indonesia Stock Exchange have experienced varied situations in terms of the leverage ratio, showing intermittent rises and falls from 2015 to 2019. According to Brigham and Houston (2019), leveraging can potentially enhance anticipated profits. Utilizing debt to fund the company's assets is expected to boost revenue as the assets generate income. According to Simamora (2018)'s research, the noteworthy and advantageous correlation between the Debt to Asset Ratio and the rise in partial profits should be highlighted.

Figure 1. Research Model

2. Methods

The study utilised quantitative research methodology. According to Nugroho (2018) the concept of quantitative research entails a thorough examination of a phenomenon through the gathering of measurable data utilising statistical, mathematical, or computational tools. This approach is labelled as quantitative due to its dependence on numerical data that is analysed using statistical methods. The main aim of this research is to investigate how the leverage ratio affects the growth of profits.

According to Sunyoto (2016), the research data is typically classified into two categories: 1) Primary Data; Primary data is the information collected by the researcher themselves to tackle a particular research issue, or data obtained directly from the source. This data is

typically not easily accessible, requiring the researcher to gather it according to their specific needs. 2) Secondary Data; Secondary data pertains to data collected from existing company records and external sources, such as consulting relevant literature or utilising online platforms like BPS, IDX, and other resources. This research makes use of secondary data taken from the yearly financial reports of manufacturing firms in the goods and consumption industry that are listed on the Indonesia Stock Exchange between 2015 and 2019, retrieved from the idnfinancial website. This was done after collecting pertinent theories and data sources accessed through the website www.idnfinancial.co.id in order to view the yearly financial statements.

The population according to Sugiyono (2015), is an idealisation zone comprises items/subjects with specific attributes established by the researcher for examination and drawing conclusions, whereas the population refers to all individuals selected as research subjects. This study focuses on analysing the financial statements of manufacturing companies in the consumer goods sector that are listed on the Indonesia Stock Exchange from 2015 to 2019, with a total of 46 companies included in the analysis. According to Sugiyono (2015), the selected sample represents the characteristics and size of the entire population. The research sample consists of 23 companies currently listed on the Indonesia Stock Exchange.

This study makes use of purposive sampling, which entails choosing samples based on specific criteria instead of random selection. The criteria for sample selection in this study will be detailed in the following paragraphs.

1. Businesses that produce goods for consumers are included on the Indonesia Stock Exchange.
2. Companies in the consumer goods industry that have financial statements missing between 2015 and 2019.
3. Businesses in the consumer goods sector that possess full financial records from 2015 to 2019.
4. Companies Manufacture consumer goods sector suffered losses.

In this study, information is gathered through the documentation method, involving the analysis of annual financial statements from consumer goods manufacturing companies listed on the Indonesian stock exchange.

3. Results and Discussion

3.1. Research Results

A. Data Analysis

1) Estimation of Panel Data Regression Model

Table 3. Common Effect

Variable	Coefficient	Std. Error	t- Statistic	Prob
C	0.634500	0.385903	1.644197	0.1029
Leverage (X)	0.179633	0.127509	1.408791	0.1617
R-Squared	0.034629	Mean dependent var		0.461383
Adjusted R-Square	0.017390	S.D. dependent var		0.841518
S.E. of regression	0.797156			
F-Statistic	0.380750	Durbin – Watson stat		1.914482
Prob (F-Statistic)	0.686960	Sum squared resid 71.17135		

After examining the usual influence, a regression analysis is carried out on panel data incorporating fixed effects. Here are the results of the fixed effect regression analysis on panel data. The following are the discoveries from the fixed effect regression on panel data.

Table 4. Fixed Effect

Variable	Coefficient	Std. Error	t- Statistic	Prob
C	-20.48119	4.286734	-4.777807	0.0000
Leverage (X)	0.358742	0.21887	1.638997	0.1047
Effect Specification				
Cross-section fixed (dummy variables)				
R-Squared	0.452767	Mean dependent var		0.365236
Adjusted R-Square	0.306839	S.D. dependent var		0.852106
S.E. of regression	0.702044			
Sum squared resid	44.35787			
F-Statistic	3.102662	Durbin – Watson stat		2.409923
Prob (F-Statistic)	0.0000			

After analysing the typical consequences, a Random effect method was applied in the panel data regression. The results of the panel data regression with Random effect showed the following. The subsequent results of the panel data regression using Random effect are presented here.

Table 5. Fixed Effect

Variable	Coefficient	Std. Error	t- Statistic	Prob
C	0.206902	1.421230	0.145579	0.8845
Leverage (X)	0.558227	0.446301	1.250786	0.2136
Effect Specification				
S.D Rho				
Cross-section random			0.000000	0.0000
Idiosyncratic random			0.788893	1.0000
Weighted Specification				
R-Squared	0.012169	Mean dependent var		0.226957
Adjusted R-Square	-0.005471	S.D. dependent var		0.838857
S.E. of regression	0.841148	Sum squared resid		79.24343
F-Statistic	0.689868	Durbin – Watson stat		2.359309
Prob (F-Statistic)	0.503761			
Unweighted Statistics				
R-Squared	0.012169	Mean dependent var	0.226957	
Sum squared resid	79.24343	Durbin- watson wat	2.359309	

2) Selection of Regression Models

a) Chow Test

The Chow test determines which model, common effect or fixed effect, is superior. The hypothesis of the Chow Test is outlined as follows.

Ho: Common Effect Ha: Fixed Effect Criteria:
If the sig value > 0.005 then Ho is accepted
If the sig value < 0.005 then ha is accepted

Tabel 6. Chow Test Results

Effect Test	Statistic	d.f	Prob
Cross - Section f	1.804243	(22,90)	0.0278
Cross – Section Chi square	42.016767	22	0.0062

The information provided in the chart indicates that the importance values for the Cross – section f and Chi Square are 0.0278 and 0.0062, which are both less than 5%. Thus, we can conclude that Ha is valid while Ho is invalid, suggesting that a Fixed Effect Model is the best option for estimating the regression panel data. After performing the Chow test, the Langrange Multiplier test is also carried out.

b) Langrange Multiplier Test

The Langrange Multiplier test is used to evaluate the superiority between the Common effect model and the Random effect model. The test is based on the following hypotheses:

Ho: Common Effect Model Ha: Random Effect Model Criteria:
If the value of Breusch-pagan cross section > 0.005 then Ho is accepted
If the value of Breusch-pagan cross section < 0.005 then ha is accepted

Table 7. Test Results Langrange Multiplier

	Test Hypothesis		
	Cross-Section	Time	Both
Breusch – Pagan	0.416943	0.076050	0.492993
	(0.5185)	(0.7827)	(0.4826)

Based on the Langrange Multiplier Test findings presented in the table, the Probability value for Breusch-Pagan exceeds 5%, thereby favouring the validation of statistic Ho and dismissal of Ha. As a result, the suitable model for estimating panel data regression is the Common Effect Model.

c) Hausman Test

The Hausman test is used to determine which model, Fixed effect or Random effect, is more effective. This test relies on a hypothesis that suggests:

Ho: Fixed Effect Model Ha: Random Effect Model Criteria:
If the cross section probability value < 0.005 then Ho is accepted
If the cross section probability value > 0.005 then Ha is accepted

Table 8. Hausman Test Results

Test Summary	Chi-Sq.Statistic	Chi-Sq.d.f.	Prob
Cross-section random	18.488564	2	0.0001

Based on the findings from the Hausman Test provided in the table above, the results suggest that the likelihood value of the cross section is 0.001 (lower than 5%). This leads to the statistical rejection of Ha and the acceptance of Ho, ultimately determining that the Fixed Effect model is the most suitable estimation model for panel data regression. Therefore, the Fixed Effect Model is the model employed in this study, as validated by the results of both the Chow Test and Hausman Test, which both indicate the Fixed Effect model as the recommended option.

3) Classical Assumption Test Results

The CEM model was chosen, therefore it is important to carry out traditional assumption testing. For the CEM model, traditional assumption testing includes the evaluation of normality. The normality test is used to establish whether the standardised residual values in the regression model adhere to a normal distribution. It is crucial for the data in the regression model to exhibit a normal distribution as a requirement (Junaidi, 2010). The hypothesis in this test is as follows:

Ho: normally distributed residual Data

Ha: residual Data is not normally distributed

Criteria:

If the probability value of jarque-bera > 0.005 then Ho is accepted.

If the probability value of jarque-bera < 0.005 then Ha is accepted (Junaidi,2010,11)

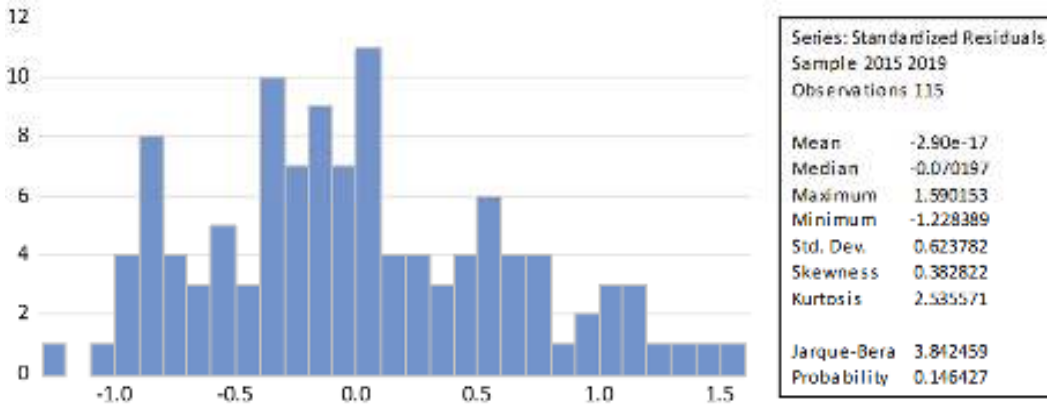

Figure 2. Results of the Normality Test

The decision was made to use the CEM model, so it is essential to conduct traditional assumption testing. In the case of the CEM model, traditional assumption testing involves examining normality. Check for normality to determine if the standardized residual values in the regression model follow a normal distribution. It is imperative for the data in the regression model to display a normal distribution as a prerequisite.

4) Regression Analysis

Table 9. Results Of Linear Regression

Variable	Coefficient
C	-20.48119
Leverage	0.358742

According to the findings from the fixed Effect Model regression displayed in the above table, the equation for the regression model connecting profit growth and Leverage is as follows:

$$Yit = -20.48119 + 0.358742Xit$$

Description:
Y= Profit Growth
X = Leverage
i = number of companies as many as 23 companies
t = time period of the study is from 2015-2019

Based on the regression equation above, it can be explained that:

According to the equation provided, the constant has a value of -20.48119, indicating that if the leverage is zero, the profit growth will also be -20.48119. The coefficient for Leverage is 0.358742xit with a positive symbol, implying that for each 1% increase in leverage, there will be a corresponding 0.358742 change in profit growth.

5) Hypothesis Testing

a) Coefficient of determination (R-Square)

The coefficient of determination serves to establish the extent to which the independent variable impacts the dependent variable. Based on the information provided, the R-Square value stands at 0.2478, suggesting that 24.78% of the profit growth can be attributed to leverage, while the rest of 75.22% is influenced by other factors.

b) T test results

The T-test offers a glimpse into how individual variables contribute to explaining the changes in the dependent variable. Presented here is a table showcasing the outcomes from the panel data regression analysis carried out using a fixed effect model.

Table 10. T Test Results

Variable	t- Statistic	Prob
C	-4.777807	0.0000
Leverage	1.638997	0.1047

T test results can be interpreted as follows:

The results of the t-test in the fixed effect model revealed a t-statistic of 1.638997 for the leverage variable, which fell below the critical value of 1.98081, suggesting an insignificant correlation. Moreover, the probability value of 0.1047 exceeded the threshold of 0.05. As a result, the hypothesis pertaining to the impact of leverage on profit expansion remains uncertain.

In this case:

Ho: The impact of leverage on profit growth in manufacturing companies within the consumer goods sector listed on the Indonesia Stock Exchange between 2015 and 2019 was found to be insignificant.

Ha: The influence of leverage on the increase in profits of manufacturing firms in the consumer goods industry listed on the Indonesia Stock Exchange between 2015 and 2019 is examined.

After analysing the results mentioned above where Ho is deemed valid and Ha is dismissed, it can be inferred that the leverage variable does not have a considerable impact on the growth of profits in manufacturing firms within the consumer goods sector on the Indonesia Stock Exchange from 2015 to 2019.

3.2. Discussion

Based on the test findings, it was revealed that the constant coefficient for Leverage is 0.358742. The t-value for the leverage factor is 1.68997, lower than the critical value of 1.98081. Since the probability value is 0.1047, higher than 0.05, we can deduce that the leverage variable does not have a significant effect on profit growth in manufacturing companies within the consumer goods industry sector on the Indonesia Stock Exchange between 2015 and 2019. The reason for this lack of influence of leverage on profit growth is attributed to the fact that company assets are mainly funded through share capital rather than company liabilities. Therefore, increasing the level of liabilities to finance assets is unlikely to have a substantial effect on profit levels, as the majority of the company's assets are financed through share capital. If a company issues equity instead of debt to finance its new project, investors will interpret the signal negatively (Afza & Hussain, 2011). The results of this study are in line with studies conducted by Awan (2014); Agestin and Hartono (2017); and Adyatmika and Wiksuana (2018) which argue that having too much debt can lower a company's profits because of higher interest payments and the risk of default. This can lead to lower profitability as the company has to pay more in fixed costs for the debt than it earns in profits.

The findings of this research do not align with previous studies by Abor (2005) which reveals the collected data was gathered from businesses that are registered in Ghana, revealing a correlation between profitability and leverage that was shown to be positive. Nguyen and Ramachandran (2006) who conducted research on small and medium-sized businesses in Vietnam to gather information, and discovered a positive correlation between leverage and company expansion. In addition, this study contradicts the research of Sari and Dwirandra (2019) and Nugraha et al. (2021) which discovered that using debt to fund a company can have a beneficial impact by lowering interest expenses for taxable income calculation, thereby decreasing the company's tax liability. In essence, leverage can boost a company's profitability by allowing for greater earnings while also decreasing tax burden. Biger et al. (2007) found financial leverage in Vietnamese companies fluctuates based on their profitability and non-debt tax protections. It is also influenced by industry-specific factors. Additionally, research has shown that the amount of fixed assets in a company can affect its corporate leverage, as well as the presence of growth opportunities. Furthermore, the impact of corporate income tax on financial leverage is generally negative, albeit minimal.

4. Conclusion

Financial leverage in Vietnamese companies fluctuates in line with their profitability and the level of non-debt tax protection they have. Additionally, financial leverage is influenced by industry-specific traits. Moreover, studies have shown that i) corporate leverage tends to rise with fixed assets but decrease with growth prospects, and ii) the corporate income tax negatively impacts corporate financial leverage, albeit to a small extent.

5. References

Abor, J. (2005). The effect of capital structure on profitability: an empirical analysis of listed firms in Ghana. *The Journal of Risk Finance*, *6*(5), 438–445.

Adyatmika, I. G. P., & Wiksuana, I. G. B. (2018). Pengaruh inflasi dan leverage terhadap profitabilitas dan return saham pada perusahaan manufaktur di bursa efek Indonesia. *E-Jurnal Ekonomi Dan Bisnis Universitas Udayana*, *3*(7), 615–648.

Afza, T., & Hussain, A. (2011). *Determinants of capital structure across selected manufacturing sectors of Pakistan*.

Agestin, N., & Hartono, U. (2017). Pengaruh debt to equity ratio, ukuran perusahaan, likuiditas dan inflasi terhadap profitabilitas pada perusahaan sektor pertambangan yang terdaftar di bursa efek Indonesia periode 2011-2015. *Jurnal Ilmu Manajemen*, *5*(3), 1–10.

Awan, M. R. (2014). Impact of liquidity, leverage, inflation on firm profitability an empirical analysis of food sector of Pakistan. *IOSR Journal of Business and Management*, *16*(1), 104–112.

Biger, N., Nguyen, N. V, & Hoang, Q. X. (2007). The determinants of capital structure: Evidence from Vietnam. In *Asia-Pacific financial markets: Integration, innovation and challenges* (Vol. 8, pp. 307–326). Emerald Group Publishing Limited.

Brigham, E. F., & Houston, J. F. (2019). *Fundamentals of Financial Management 15th*. Cengage.

Hanafi, M. M., & Halim, A. (2009). Analysis of financial statements. *UPP. STIM YKPN, Yogyakarta*.

Harahap, S. S. (2011). *Analisis kritis atas laporan keuangan*. Rajawali Pers.

Junaidi, J. (2010). Statistik uji kruskal-wallis. *Jurnal Fakultas Ekonomi Universitas Jambi*, 1–5.

Kasmir. (2014). *Analisis Laporan Keuangan, Edisi Pertama, Cetakan Ketujuh*. PT. Rajagrafindo Persada.

Nguyen, T. D. K., & Ramachandran, N. (2006). Capital structure in small and medium-sized enterprises: the case of Vietnam. *ASEAN Economic Bulletin*, 192–211.

Nugraha, N. M., Ramadhanti, A. A., & Amaliawiati, L. (2021). Inflation, leverage, and company size and their effect on profitability. *Journal of Applied Accounting and Taxation*, *6*(1), 63–70.

Nugroho, U. (2018). *Metodologi penelitian kuantitatif pendidikan jasmani*. CV. Sarnu Untung.

Sari, P. R. P., & Dwirandra, A. (2019). Pengaruh Current Ratio Dan Debt To Equity Ratio Terhadap Profitabilitas Dengan Intellectual Capital Sebagai Pemoderasi. *E-Jurnal Akuntansi*, *26*(2), 851–880.

Simamora, M. (2018). *Analisis Pengaruh Rasio Keuangan terhadap Pertumbuhan Laba dengan Ukuran Perusahaan sebagai Variabel Moderating pada Perusahaan Consumer Goods yang Terdaftar di Bursa Efek Indonesia*. Universitas Sumatera Utara.

Subramanyam, K. R. (2014). *Financial statement analysis*. Không nhà xuất bản.

Sugiyono. (2015). *Metode Penelitian Kuantitatif Kualitatifdan R&D*. Alfabeta.

Sunyoto, D. (2016). *Metodologi penelitian akuntansi*. PT Refika Aditama.