

Research Article

Do Fiscal Losses, Firm Scale, and Growth Drive Tax Avoidance?

Nabila Radian¹, Suhirman Madjid^{2*}

^{1,2}Faculty of Economics and Business, YARSI University, Jakarta

Received: 08-09-2025; Accepted: 21-02-2026

Abstract

This study aims to obtain empirical evidence on the influence of Fiscal Loss Carryforward, Company Size, and Sales Growth on tax avoidance. The independent variables used are Fiscal Loss Carryforward, Company Size, and Sales Growth. The dependent variable used is tax avoidance. Tax avoidance is measured by GAAP ETR as the dependent variable. The population in this study are manufacturing companies in the basic and chemical industries listed on the Indonesia Stock Exchange (IDX) in the 2014-2016 period. Samples were collected using a purposive sampling method. The number of companies used as samples in this study is 20 companies. The analytical method used is multiple regression with a significant level of 5%. Based on the results of this study, it shows that Fiscal Loss Carryforward, Company Size, and Sales Growth do not affect tax avoidance. The managerial implication of this study is that companies need to pay attention to other factors beyond fiscal loss carryforward, size, and sales growth in developing tax strategies, while tax authorities can focus supervision on more relevant aspects to suppress tax avoidance practices.

Keywords: Fiscal Loss Compensation, Company Size, Sales Growth, Tax Avoidance

JEL Classification: H26, H32, M41

How to cite: Radian, N., Madjid, S., (2026). Do Fiscal Losses, Firm Scale, and Growth Drive Tax Avoidance? *Tax and Transfer Pricing (TTP)* 1(2), 59-67

Corresponding author: Suhirman Madjid (suhirman.madjid@yarsi.ac.id)



This is an open access article under the [CC-BY-SA](https://creativecommons.org/licenses/by-sa/4.0/) international license.

1. Introduction

Tax revenue is a vital source of state income that plays a central role in financing national development and ensuring sustainable economic growth. However, in many countries, including Indonesia, the realization of tax revenue has often fallen short of the government's target. For instance, Indonesia's tax revenue in 2015 only reached 83.3% of the target, reflecting structural challenges in optimizing tax collection (Direktorat Jenderal Pajak, 2016). One of the main obstacles faced in maximizing tax revenue is the phenomenon of tax avoidance, a practice carried out by corporations to legally minimize their tax liabilities. While legal, tax avoidance reduces government fiscal capacity and has become a recurring global issue (Hanlon & Heitzman, 2010; Lanis & Richardson, 2013).

Tax avoidance practices have attracted significant attention in academic research because they highlight the conflict of interest between governments seeking to maximize tax revenue and corporations aiming to minimize tax expenses. Empirical evidence has shown that multinational companies, such as IKEA and Apple, have been accused of large-scale tax avoidance through mechanisms such as transfer pricing and profit shifting (Cobham & Janský, 2019). In Indonesia, the Directorate General of Taxes reported that around 2,000 multinational companies operating domestically declared losses for several consecutive years and consequently avoided paying corporate income tax, despite continuing business activities (DJP, 2016). This raises concerns about the effectiveness of tax regulations and the capacity of tax authorities to address avoidance practices.

Several factors may influence the likelihood of companies engaging in tax avoidance. Fiscal loss compensation, for example, provides firms with the ability to carry forward tax losses to offset future taxable income, which can reduce the incentive for aggressive tax planning. Prior studies such as Kurniasih and Sari (2013) and Prakosa (2019) suggest that fiscal loss compensation negatively correlates with tax avoidance, as firms with accumulated losses already enjoy lower tax burdens. However, evidence remains mixed, with other studies indicating no significant effect (Kesit, 2014). This inconclusive empirical result establishes a research gap in the role of fiscal loss compensation on tax avoidance.

Another determinant is firm size. Larger companies possess more complex operations and greater resources, enabling them to exploit loopholes in tax regulations to engage in avoidance strategies (Dewi & Jati, 2014; Richardson et al., 2016). According to political power theory, larger firms may leverage their economic importance to influence tax authorities, while political cost theory suggests that such firms may avoid aggressive tax planning due to the risk of regulatory scrutiny (Watts & Zimmerman, 1986). Empirical findings remain inconsistent: some studies report a positive relationship between firm size and tax avoidance (Nugroho, 2020; Lanis & Richardson, 2013), while others indicate no significant relationship (Kristiana, 2013). This inconsistency strengthens the rationale for further investigation.

Sales growth is also considered an important variable influencing corporate tax behavior. Companies with high growth often generate larger profits, leading to higher tax obligations, which may encourage tax avoidance practices (Budiman & Setiyono, 2012). However, evidence from Swingly and Sukartha (2015) and Calvin (2015) demonstrates that sales growth does not always significantly affect tax avoidance. Given these contradictory findings, further analysis is required to clarify the relationship between sales growth and tax avoidance, particularly in emerging markets such as Indonesia where tax compliance and enforcement differ from developed economies.

Based on the above considerations, this research aims to analyze the effect of fiscal loss compensation, company size, and sales growth on tax avoidance among manufacturing companies listed on the Indonesia Stock Exchange (IDX). The study contributes by providing updated empirical evidence in the Indonesian context, where studies integrating these three variables remain limited. The novelty lies in combining fiscal loss compensation, firm characteristics, and growth indicators simultaneously in examining tax avoidance behavior, which has not been extensively explored in prior research. Furthermore, this research adds value by addressing the mixed empirical results found in earlier studies and contextualizing them within Indonesia's unique tax environment.

2. Literature Review and Hypothesis

Literature Review

Fiscal Loss Carryforward

Fiscal loss carryforward is a mechanism for transferring losses to the next period, which serves to reduce the tax burden. Companies that experience losses in one period can use them to reduce taxes in future periods, thereby reducing the tendency to engage in tax avoidance. Kurniasih and Sari (2013) found that fiscal loss carryforward negatively impacts tax avoidance.

Company Size

Company size is often used as a proxy for a company's ability to utilize tax strategies. Larger companies have more complex transactions and greater resources for tax planning, making them more likely to engage in tax avoidance (Rego, 2003). Research by Richardson and Lanis (2007) shows that the larger the company, the lower the effective tax rate paid.

Sales Growth

Sales growth reflects improvements in operational performance, which impacts profits and tax burdens. Logically, the higher the sales level, the greater the likelihood of a company engaging in tax avoidance to reduce its tax burden. Budiman and Setiyono (2012) and Irawan and Farahmita (2012) found that sales growth had a positive effect on tax avoidance practices.

Hypothesis**Fiscal Loss Carryforward and Tax Avoidance**

Fiscal loss carryforward is the right of taxpayers to transfer fiscal losses from one period to the next, thereby reducing their tax burden in the following year. According to Kurniasih and Sari (2013), fiscal loss carryforward tends to reduce tax avoidance practices because companies receive tax relief through loss carryforward. Waluyo and Basri (2015) also showed that fiscal loss carryforward had no significant effect on tax avoidance, while Prakosa's (2014) research yielded similar results. However, Nugroho (2011) argued that the effect of fiscal loss carryforward can vary from company to company, depending on its financial condition and management strategy. Therefore, companies with fiscal loss carryforward have a relatively smaller incentive to engage in tax avoidance because their tax burden has been reduced.

H1: Fiscal loss carryforward has a significant effect on tax avoidance.

Company Size and Tax Avoidance

Company size is considered an important factor in determining the level of tax avoidance. Large companies have greater resources and more complex activities, enabling them to exploit regulatory loopholes to reduce their tax burden (Rego, 2003). Richardson and Lanis (2007) found that large companies tend to have lower effective tax rates, which translates to higher levels of tax avoidance. However, research findings are inconsistent. Dewi (2013) and Aditama (2016) reported that company size had no significant effect on tax avoidance, sparking academic debate. Therefore, company size remains relevant for further testing in the context of tax avoidance.

H2: Company size has a significant effect on tax avoidance.

Sales Growth and Tax Avoidance

Sales growth reflects a company's ability to expand its business activities and generate higher profits. Logically, increased profits due to sales growth will increase the tax burden, thus encouraging companies to engage in tax avoidance. Budiman and Setiyono (2012) and Irawan and Farahmita (2012) support this argument by finding that sales growth has a positive effect on tax avoidance. However, research by Swingly and Sukartha (2015) and Calvin (2015) yielded conflicting results, stating that sales growth had no significant effect on tax avoidance. Therefore, this variable needs to be retested to provide more consistent empirical evidence.

H3: Sales growth has a significant effect on tax avoidance.

Conceptual Framework

A conceptual framework is a synthesis of a series of theories outlined in the literature review. It is essentially a systematic description of the theory's performance in providing solutions or alternative solutions to a set of defined problems. The conceptual framework can be presented in diagram form, qualitatively, or a combination of the two.

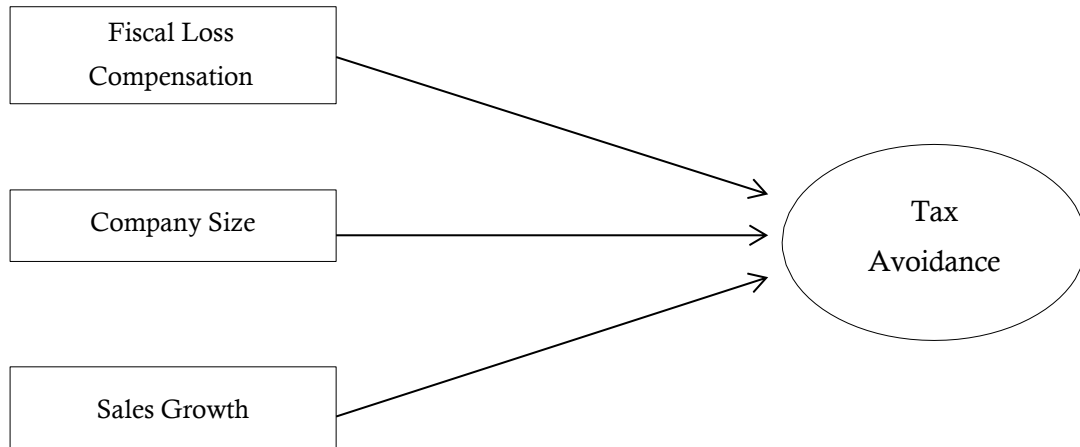


Figure 1. Conceptual Framework

3. Data and Method

Research Type

The method used in this study is quantitative, a research method based on the philosophy of positivism. Sampling is generally random, and data collection uses research instruments. Quantitative research is research that obtains data in the form of numbers or qualitative data (Sugiyono, 2003). Data analysis is quantitative with the aim of testing a predetermined hypothesis (Sugiyono, 2012). This research is descriptive. Descriptive research is research conducted to determine the value of an independent variable, either one or more (independent) variables, without making comparisons or linking them to other variables.

Data Collection

Data Types and Data Sources

This research is quantitative. The type of data used in the study is secondary data. Secondary data is a source of research data obtained indirectly by researchers through intermediaries, recorded by other parties. Secondary data generally consists of evidence, notes, or historical reports compiled in published documents (Indriantoro and Supomo, 2002). The data used consisted of annual reports and financial reports of manufacturing companies in the basic and chemical industries listed on the Indonesia Stock Exchange (IDX), accessible from www.idx.co.id, for the 2014-2016 period.

Data Collection Techniques

The data collection methods used in this study included observation and documentation, namely by copying or downloading records from the IDX. The data collected were secondary data obtained from the Indonesia Stock Exchange (IDX).

Population and Sample

According to Kriyantono (2006:153), in social research, a researcher does not have to research all the objects being observed. This is due to limitations in terms of cost, time, and effort. The entire object being researched is called the population, while a portion of the entire object being observed is called the sample. The population refers to the entire group of people, events, or things of interest that the researcher wishes to investigate, while the sample is a subset of the population being studied (Sekaran, 2006). The population studied in this study was manufacturing companies in the basic and chemical industries listed on the Indonesia Stock Exchange for the 2014-2016 period. The sample is a subset of the population's size and characteristics (Sugiyono, 2008). The sampling method used in this study was purposive sampling.

4. Results

Normality Test

The normality test aims to determine whether the confounding variables or residuals in a regression model have a normal distribution. There are two ways to detect whether residuals are normally distributed: graphical analysis and statistical testing (Gujarati, 2012). A good regression model has normal data or detects normality.

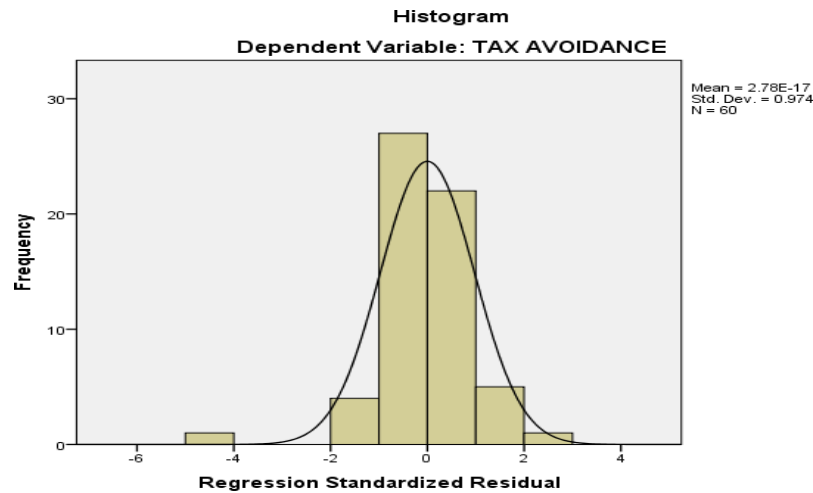


Figure 2. Normality Test

By observing Figure 2, it can be concluded that the residual and observation values are normally distributed because the graph tends to follow a normal curve pattern.

Multicollinearity Test

According to Ghazali (2016), this test aims to determine whether a correlation exists between independent variables in the regression model. A good regression model should have no correlation between independent variables. If independent variables are correlated, they are not orthogonal. The multicollinearity test is performed by examining the Tolerance Value and Variance Inflation Factor (VIF). The Tolerance Value limit is 0.10, and the VIF limit is 10. If the Tolerance Value is below 0.10 or the VIF value is above 10, multicollinearity is present. The results of the multicollinearity test can be seen in Table 1 below:

Table 1. Multicollinearity Test Results

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
(Constant)	.339	.097		3.477	.001		
1 RFIS	.046	.066	.102	.699	.487	.809	1.237
SIZE	-.004	.004	-.130	-.966	.338	.952	1.050
SGWTH	.085	.139	.088	.607	.546	.826	1.210

Source: Processed data (2017)

The analysis results show that the VIF values for all independent variables are below 10 and the tolerance value is above 0.10, indicating no multicollinearity, making the model reliable as a basis for analysis.

Heteroscedasticity Test

Heteroscedastic symptoms were tested using a scatterplot. The scatterplot shows that the points are randomly distributed, both above and below zero on the Y-axis. This concludes that heteroscedasticity does not occur in the regression model, making it suitable for use in determining the effect of Fiscal Loss Carryforward, Company Size, and Sales Growth on Tax Avoidance. The

results are shown in Figure 3 below:

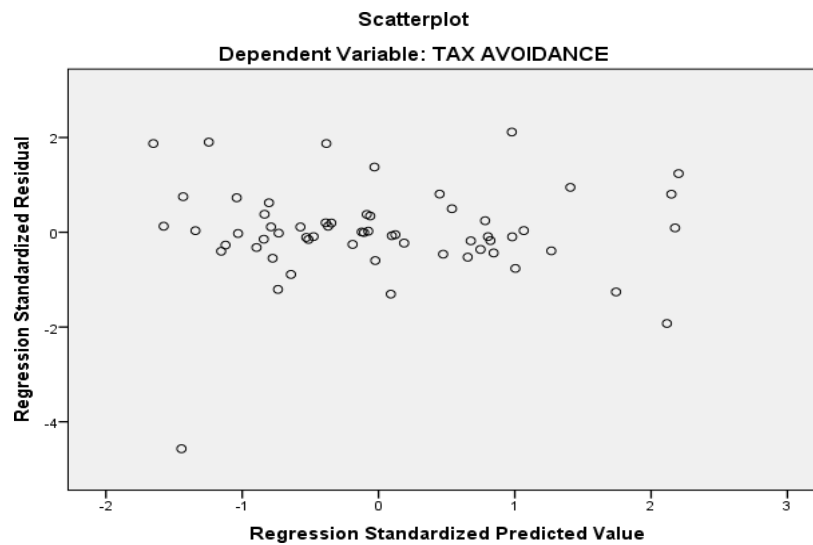


Figure 3. Heteroscedasticity Test Results - Scatterplot Graph

The scatterplot test above shows that the sample data is random and does not form a specific pattern. It is spread both above and below the number 0 on the Y-axis. Therefore, it can be concluded that there is no heteroscedasticity problem in the regression model.

Autocorrelation Test

The correlation test aims to determine whether there is a correlation between the confounding error in period t and the confounding error in period $t-1$ (the previous one). If a correlation occurs, it is said to have an autocorrelation problem (Ghozali, 2016). In this study, the autocorrelation test was tested using the Durbin-Watson (D-W) test. This test aims to determine whether there is a correlation between the confounding error in a particular period and the previous period in the regression model. A good regression model is one that is free from autocorrelation problems. More details about the results of the autocorrelation test can be seen in Table 2 below:

Table 2. Autocorrelation Test Results

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.183 ^a	.034	-.018	.14777	2.293

Source: Processed data (2017)

Table 2 above shows a D-W value of 2.293. This value will then be compared with the table value with a 5% significance level, a sample size of ($n=60$), and 3 variables ($k=3$). Therefore, the Durbin Watson table yields a lower limit (dL) of 1.4797 and an upper limit (dU) of 1.6889. Therefore, the 4-dL value can be calculated as 2.5203 and the 4-dU value as 2.3111. Since the Durbin Watson value (2.293) falls between dU and 4-dU (1.6889-2.3111), there is no positive or negative autocorrelation ($dU < dW < 4-dU$).

Coefficient of Determination Test (R²)

According to Nachrowi (2008). The coefficient of determination (goodness of fit), denoted by R², is an important measure in regression because it can indicate the goodness of fit of the estimated regression model. In other words, this number measures how close the estimated regression line is to the actual data. In this case, R² is used to determine the extent of influence of the independent variable on the dependent variable. The results of the coefficient of determination (R²) test can be seen in Table 3 below:

Table 3. Coefficient of Determination (R2) Test

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.183 ^a	.034	-.018	.14777

Source: Processed data (2017)

The R2 value based on the analysis using SPSS was 0.034. Therefore, the influence of the variables Fiscal Loss Compensation, Company Size, and Sales Growth on Tax Avoidance is 3.4%, while the remaining 96.6% is influenced by other factors not examined in this study.

Partial Significance Test (t-Test)

To determine the effect of each independent variable on the dependent variable in this study, a t-test was used to test the regression coefficients. Based on the SPSS version 20 calculations, as shown in Table 4, the probability values for each independent variable on the dependent variable are determined. If the probability value is >0.05 , H_0 is rejected; if the probability value is <0.05 , H_a is accepted. Table 4 below shows that:

Table 4. Partial Test Results (t-Statistic Test)

Model	Unstandardized Coefficients		Standardize d Coefficients	T	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
(Constant)	.339	.097		3.477	.001		
1 RFIS	.046	.066	.102	.699	.487	.809	1.237
SIZE	-.004	.004	-.130	-.966	.338	.952	1.050
SGWTH	.085	.139	.088	.607	.546	.826	1.210

Source: Processed data (2017)

5. Discussion

The Effect of Fiscal Loss Carryforward on Tax Avoidance

The results of this study indicate that fiscal loss carryforward has no effect on tax avoidance. This indicates that the loss carryforward facility provided by companies is not yet a primary factor in determining tax avoidance strategies. Companies tend to utilize loss carryforward to directly reduce their tax burden in subsequent periods in accordance with regulations, rather than engaging in additional tax avoidance practices. This finding aligns with research by Prakoso (2014) and Waluyo, Basri, and Rusli (2015), which found that fiscal loss carryforward had no effect on tax avoidance. However, this finding differs from that of Kurniasih and Sari (2013), who found a significant effect. Therefore, this study confirms that fiscal loss carryforward policy functions more as a tax compliance instrument than an opportunity for tax avoidance.

The Effect of Company Size on Tax Avoidance

Company size was also shown to have no effect on tax avoidance practices. This indicates that both large and small companies have similar tendencies in managing their tax burdens. Even large companies are more cautious about tax avoidance due to the risk of attracting greater attention from tax authorities, according to political cost theory (Watts & Zimmerman, 1986). This study's findings align with those of Dewi (2013), Asfiyati (2012), and Aditama (2016), who stated that company size has no significant effect on tax avoidance. These findings demonstrate that although larger companies have more resources and complex transactions, these factors do not automatically make them more aggressive in tax avoidance.

The Effect of Sales Growth on Tax Avoidance

Sales growth was also not proven to affect tax avoidance. This finding suggests that increased sales volume is not always directly proportional to tax avoidance strategies, as increased sales are generally accompanied by increased operating costs, resulting in a significant change in taxable profit. These results align with research by Swingly and Sukartha (2015) and Calvin (2015), which also found that sales growth has no effect on tax avoidance. However, the results of this study differ

from those of Budiman and Setiyono (2012) and Irawan and Farahmita (2012), who stated that sales growth encourages companies to engage in tax avoidance to reduce their tax burden. Therefore, this study shows that tax avoidance strategies are not solely determined by sales growth but are more influenced by managerial factors and the company's financial structure.

6. Conclusion

Based on the analysis and discussion, this study concludes that fiscal loss carryforwards, company size, and sales growth have no effect on tax avoidance in manufacturing companies in the basic and chemical industries listed on the Indonesia Stock Exchange (IDX) during the 2014–2016 period. These results indicate that neither the availability of fiscal loss carryforwards, company size, nor sales growth are determining factors in tax avoidance practices, suggesting that companies' propensity to engage in tax avoidance is more influenced by factors other than the variables tested.

The managerial implications of this study are that company management cannot rely solely on fiscal loss carryforwards, size, or sales growth when designing tax avoidance strategies. Instead, companies need to place greater emphasis on good governance, compliance with tax regulations, and optimal utilization of legitimate tax policies. For regulators, these results suggest that tax oversight should focus on other factors, such as capital structure, transfer pricing practices, or managerial characteristics, that may have a greater influence on tax avoidance.

Recommendation

The Directorate General of Taxes needs to strengthen oversight and improve the effectiveness of anti-tax avoidance policies by narrowing regulatory loopholes that companies can exploit. For companies, implementing transparent and compliance-based tax management is crucial to avoid legal and reputational risks. Future researchers are advised to add variables such as leverage, profitability, or corporate governance to obtain a more comprehensive picture of the factors influencing tax avoidance practices.

Limitations and avenue for future research

This study has several limitations, including its focus on a specific sector (basic and chemical manufacturing) and a relatively short observation period (2014–2016), which may limit the generalizability of the findings. The data used are secondary and limited to financial statements, so they may not fully capture all determinants of tax avoidance. The use of multiple regression also defines the analysis to linear relationships. Future research could expand the sample across sectors and time, employ more robust analytical methods, and integrate additional variables such as leverage, profitability, or corporate governance for deeper insights.

References

- Aditama, A. (2016). Analisis Pengaruh Corporate Governance terhadap Tax Avoidance. *Jurnal Ilmiah Akuntansi*, 5(1), 77–92.
- Asfiyati. (2012). Pengaruh Ukuran Perusahaan terhadap Tax Avoidance. *Jurnal Akuntansi Multiparadigma*, 3(2), 234–245.
- Budiman, J., & Setiyono, A. (2012). Pengaruh karakteristik eksekutif dan corporate governance terhadap penghindaran pajak. *Jurnal Akuntansi dan Auditing*, 9(2), 95–108.
- Calvin, S., & Sukartha, I. M. (2015). Pengaruh karakteristik eksekutif, komite audit, ukuran perusahaan, leverage, dan sales growth pada tax avoidance. *E-Jurnal Akuntansi Universitas Udayana*, 10(1), 47–62.
- Cobham, A., & Janský, P. (2019). Global distribution of revenue loss from corporate tax avoidance: Re-estimation and country results. *Journal of International Development*, 31(2), 188–206. <https://doi.org/10.1002/jid.3348>
- Dewi, A. (2013). Pengaruh Corporate Governance terhadap Tax Avoidance pada Perusahaan Manufaktur. *Jurnal Akuntansi*, 17(1), 43–55.
- Dewi, L., & Jati, I. (2014). Pengaruh karakter eksekutif, ukuran perusahaan, koneksi politik, dan capital intensity terhadap tax avoidance. *E-Jurnal Akuntansi Universitas Udayana*, 9(1), 143–162.

- Dewi, N. N. K. (2013). Pengaruh karakter eksekutif, karakteristik perusahaan, dan corporate governance terhadap tax avoidance. *Skripsi, Universitas Udayana*.
- Hanlon, M., & Heitzman, S. (2010). A review of tax research. *Journal of Accounting and Economics*, 50(2–3), 127–178. <https://doi.org/10.1016/j.jacceco.2010.09.002>
- Irawan, H. P., & Farahmita, A. (2012). Pengaruh kompensasi manajemen dan corporate governance terhadap manajemen pajak perusahaan. *Simposium Nasional Akuntansi XV, Banjarmasin*.
- Kurniasih, T., & Sari, M. (2013). Pengaruh return on assets, leverage, corporate governance, ukuran perusahaan, dan kompensasi rugi fiskal pada tax avoidance. *Buletin Studi Ekonomi*, 18(1), 58–66.
- Kurniasih, T., & Sari, M. M. (2013). Pengaruh Return on Assets, Leverage, Corporate Governance, Ukuran Perusahaan dan Kompensasi Rugi Fiskal pada Tax Avoidance. *Buletin Studi Ekonomi*, 18(1), 58–66.
- Lanis, R., & Richardson, G. (2013). Corporate social responsibility and tax aggressiveness: A test of legitimacy theory. *Accounting, Auditing & Accountability Journal*, 26(1), 75–100. <https://doi.org/10.1108/09513571311285621>
- Nugroho, A. (2011). Analisis faktor-faktor yang memengaruhi penghindaran pajak pada perusahaan publik di Indonesia [Skripsi, Universitas Diponegoro].
- Nugroho, S. (2020). Firm size and corporate tax avoidance: Evidence from Indonesian manufacturing companies. *Jurnal Akuntansi Multiparadigma*, 11(2), 210–222
- Prakosa, K. (2019). The effect of tax loss is carryforward and corporate governance on tax avoidance. *International Journal of Business and Society*, 20(1), 189–204
- Prakosa, K. B. (2014). Pengaruh profitabilitas, kepemilikan keluarga, dan corporate governance terhadap penghindaran pajak di Indonesia. *Simposium Nasional Akuntansi XVII, Mataram*.
- Prakoso, D. (2014). Pengaruh Profitabilitas, Kepemilikan Keluarga, dan Corporate Governance terhadap Penghindaran Pajak di Indonesia. *Jurnal Akuntansi dan Keuangan*, 16(2), 131–142.
- Rego, S. O. (2003). Tax-avoidance activities of U.S. multinational corporations. *Contemporary Accounting Research*, 20(4), 805–833. <https://doi.org/10.1506/VANN-B7UB-GMFA-9E6W>
- Richardson, G., & Lanis, R. (2007). Determinants of the variability in corporate effective tax rates and tax reform: Evidence from Australia. *Journal of Accounting and Public Policy*, 26(6), 689–704. <https://doi.org/10.1016/j.jaccpubpol.2007.10.003>
- Richardson, G., Taylor, G., & Lanis, R. (2016). Women on the board of directors and corporate tax aggressiveness in Australia: An empirical analysis. *Accounting Research Journal*, 29(3), 313–331. <https://doi.org/10.1108/ARJ-09-2014-0079>
- Swingly, C., & Sukartha, I. M. (2015). Pengaruh karakteristik eksekutif, komite audit, ukuran perusahaan, leverage, dan sales growth pada tax avoidance. *E-Jurnal Akuntansi Universitas Udayana*, 10(1), 47–62.
- Waluyo, T. M., & Basri, Y. M. (2015). Pengaruh ROA, leverage, ukuran perusahaan, kompensasi rugi fiskal, dan kepemilikan institusi terhadap tax avoidance. *Jurnal Akuntansi Multiparadigma*, 6(2), 220–236. <https://doi.org/10.30741/wiga.v6i2.121>
- Watts, R. L., & Zimmerman, J. L. (1986). *Positive Accounting Theory*. Englewood Cliffs, NJ: Prentice-Hall.