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# Impact of profitability, sales growth, and solvency on tax avoidance in non-cyclical consumer manufacturing firms

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## Abstract

**Purpose:** This study aims to examine the impact of profitability, sales growth, and solvency on tax avoidance in consumer non-cyclical manufacturing companies listed on the Indonesia Stock Exchange from 2017 to 2019.

**Methods:** A quantitative research method was employed using secondary data, with a purposive sampling technique to select the sample. Data analysis involved descriptive statistics, classical assumption tests (normality, multicollinearity, autocorrelation, and heteroscedasticity), panel data regression analysis, and hypothesis testing using EViews Version 10.

**Findings:** The results indicate that profitability and sales growth negatively affect tax avoidance, while solvency has a positive effect. These findings suggest that higher profitability and sales growth reduce tax avoidance tendencies, whereas higher solvency increases them.

**Practical Implications:** The findings provide insights for policymakers and corporate managers to enhance tax compliance and optimize financial decision-making in the manufacturing sector. Understanding these factors can help companies formulate better tax strategies while maintaining regulatory compliance.

**Keywords:** Profitability, Sales Growth, Solvency, Tax Avoidance

**Paper type:** Research paper

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**Abstrak**
**Tujuan:** Penelitian ini bertujuan untuk menganalisis pengaruh profitabilitas, pertumbuhan penjualan, dan solvabilitas terhadap penghindaran pajak pada perusahaan manufaktur sektor non-siklikal yang terdaftar di Bursa Efek Indonesia selama periode 2017–2019.

**Metode:** Penelitian ini menggunakan metode kuantitatif dengan data sekunder. Sampel dipilih menggunakan teknik purposive sampling. Teknik analisis data meliputi statistik deskriptif, uji asumsi klasik (uji normalitas, multikolinearitas, autokorelasi, dan heteroskedastisitas), analisis regresi data panel, serta pengujian hipotesis dengan menggunakan perangkat lunak EViews versi 10.

**Temuan:** Hasil penelitian menunjukkan bahwa profitabilitas dan pertumbuhan penjualan berpengaruh negatif terhadap penghindaran pajak, sedangkan solvabilitas berpengaruh positif. Temuan ini mengindikasikan bahwa semakin tinggi profitabilitas dan pertumbuhan penjualan, semakin rendah kecenderungan perusahaan untuk melakukan penghindaran pajak, sementara semakin tinggi solvabilitas justru meningkatkan kecenderungan tersebut.

**Implikasi Praktis:** Hasil penelitian ini memberikan wawasan bagi pembuat kebijakan dan manajer perusahaan untuk meningkatkan kepatuhan pajak serta mengoptimalkan pengambilan keputusan keuangan di sektor manufaktur. Memahami faktor-faktor ini dapat membantu perusahaan dalam merancang strategi pajak yang lebih efektif dan tetap mematuhi regulasi yang berlaku.

**Kata Kunci**: Profitabilitas, Pertumbuhan Penjualan, Solvabilitas, Penghindaran Pajak

## 1. Introduction

Tax is the largest contribution to the state, provided by taxpayers, both individuals and businesses, on a mandatory and coercive basis without direct compensation. According to Darmawan and Sukartha (2014), taxes are used by the government to develop state infrastructure and improve public welfare across various sectors. For taxpayers, taxes represent a financial burden that reduces the profits earned, leading many to seek ways to minimize their tax payments. On the other hand, the government aims to increase tax revenue to support national development. This conflict of interest often drives taxpayers, especially corporations, to engage in tax avoidance to reduce their tax obligations.

Tax avoidance is a tax planning strategy aimed at optimizing tax efficiency. According to Hutagaol (2007), tax avoidance is a legal method used by companies to reduce tax burdens without violating regulations, by exploiting loopholes in tax laws (gray areas). Although it does not constitute an outright violation of the law, this practice can result in reduced government tax revenues and create unfairness in the tax system.

To this day, tax avoidance remains a prevalent phenomenon among companies, both domestic and multinational. In Indonesia, several companies have been involved in tax avoidance cases. One prominent case in 2019 involved Adaro Energy, one of the world's largest coal companies, which was suspected of tax avoidance by transferring a significant portion of its profits to an offshore network in low-tax jurisdictions. Coal mined in Indonesia was sold through subsidiaries based in Singapore, where the company paid an average tax rate of only 10%, significantly lower than Indonesia's average tax rate of 50%. Furthermore, a substantial portion of the profits generated in

Singapore was transferred to Adaro's subsidiary in Mauritius, which was exempt from taxation until at least 2017. Additionally, Adaro expanded its network by acquiring a subsidiary in Labuan, Malaysia, a low-tax jurisdiction, and used this entity to invest in Australian coal mines (Bisnis.com).

Another case in 2019 involved British American Tobacco (BAT) through PT Bentoel Internasional Investama Tbk (RMBA). BAT allegedly shifted part of its revenue outside Indonesia through two mechanisms. First, by issuing inter-company loans from its subsidiary in the Netherlands, Rothmans Far East BV, between 2013 and 2015, to refinance bank loans and finance machinery and equipment purchases. Second, by making payments for royalties, service fees, and other expenses to its parent company in the UK. As a result, Bentoel recorded larger losses than it otherwise would have, which could eventually be offset against taxes on future profits (Bisnis.com).

This tax avoidance phenomenon highlights existing loopholes in tax regulations that corporations exploit to minimize their tax liabilities. Therefore, stricter oversight and more effective policies are necessary to curb such practices and ensure fairness in the tax system.

This study aims to analyze the influence of profitability, sales growth, and solvency on tax avoidance among consumer non-cyclical manufacturing companies listed on the Indonesia Stock Exchange (IDX). Additionally, this research seeks to provide insights for regulators and stakeholders in designing more effective tax policies and assisting companies in managing tax compliance more optimally.

## 2. Theory and Hypothesis

### 2.1. Theoretical Framework

*Profitability*

Profitability refers to a company's ability to generate earnings relative to its revenue, assets, or equity over a specific period. It indicates how efficiently a company utilizes its resources to produce profit (Brigham & Ehrhardt, 2017). Common profitability metrics include Return on Assets (ROA), Return on Equity (ROE), and Net Profit Margin. According to Wahab and Holland (2015), higher profitability can lead to increased tax obligations, which may incentivize companies to engage in tax planning strategies to minimize their tax burden.

*Sales Growth*

Sales growth measures the percentage increase in a company's revenue over a given period. It indicates the company's ability to expand its operations and increase market share (Higgins, 2015). High sales growth often reflects strong demand for products or services and is a key driver of long-term business success. However, firms experiencing rapid growth may require additional financial resources, leading them to adopt tax-saving strategies to retain more capital for expansion (Taylor & Richardson, 2015).

*Solvency*

Solvency is a company's ability to meet its long-term financial obligations. It reflects the financial health and sustainability of a business, often measured using the debt-to-equity ratio (D/E), interest coverage ratio, and solvency ratio (Kovermann & Velte, 2019). Highly leveraged firms (low solvency) may engage in tax avoidance strategies to conserve cash flow and avoid financial distress (Hassan, Elamer, Fletcher, & Sobhan, 2021).

*Tax Avoidance*

Tax avoidance refers to legal strategies used by companies to minimize their tax liabilities by exploiting loopholes and ambiguities in tax regulations (Avi-Yonah, Sartori, & Seto, 2020). While tax avoidance is legal, it often raises ethical concerns and can lead to stricter government regulations. According to Lisowsky, Minnis, and Sutherland (2017), companies engage in tax avoidance to increase profitability and shareholder value, but excessive tax planning may attract regulatory scrutiny and reputational risks.

### 2.2. Hypothesis Development

*Profitability on Tax Avoidance*

According to Fahmi (2015), profitability is a financial ratio that measures the effectiveness of a company's management, as reflected by the level of profit generated from sales or investments made by the company. When profitability is measured using Return on Assets (ROA), a higher profit earned by a company increases its profitability level. Consequently, the company may utilize depreciation and amortization expenses as tax deductions, which may create the impression of engaging in tax avoidance.

Research conducted by Dewinta and Setiawan (2016) that ROA has a positive effect on tax avoidance, as well as Darmawan and Sukartha (2014), support the argument that higher profitability correlates with a higher degree of tax avoidance. This finding implies that companies with substantial profits possess greater flexibility in leveraging tax regulation loopholes, thereby allowing them to manage their tax burdens more strategically.

**H1** = Profitability has a significant effect on Tax Avoidance.

*Sales Growth on Tax Avoidance*

Sales growth is a ratio that describes a company's ability to maintain its economic position amid overall economic growth and within its business sector (Kasmir, 2014). According to Brigham and Houston (2017), companies with relatively stable sales are in a safer position to secure loans and manage high fixed costs compared to companies with unstable sales. Sales performance reflects the outcome of past investment success and serves as a predictor of future growth. Additionally, sales growth is an indicator of market demand and a company's competitiveness.

An increase in sales growth generally leads to higher profitability, which in turn may encourage companies to engage in tax avoidance practices. Research conducted by Dewinta and Setiawan (2016) indicates that sales growth has a positive effect on tax avoidance. However, Calvin and Flipse (2016) presents an opposing view, suggesting that sales growth negatively affects tax avoidance, as higher sales growth reduces the likelihood of companies engaging in tax avoidance activities.

**H2** = Sales Growth has a significant effect on Tax Avoidance.

*Solvency on Tax Avoidance*

According to Kasmir (2016), the solvency ratio is a financial metric used to measure the extent to which a company's assets are financed by debt. Meanwhile, Fahmi (2015) defines the leverage ratio as a measure of how much a company is financed through its debt.

Many large companies tend to rely on their internal resources rather than debt financing, as high levels of debt can attract government scrutiny. This increased attention may lead company management to either comply with tax regulations or adopt a more aggressive tax strategy (Darmawan and Sukartha, 2014).

Research conducted by Kim and Im (2017), indicating that solvency has a positive effect on tax avoidance. Conversely, research by Dewinta and Setiawan (2016) suggests that solvency has a negative effect on tax avoidance.

**H3** = Solvency has a significant effect on Tax Avoidance.

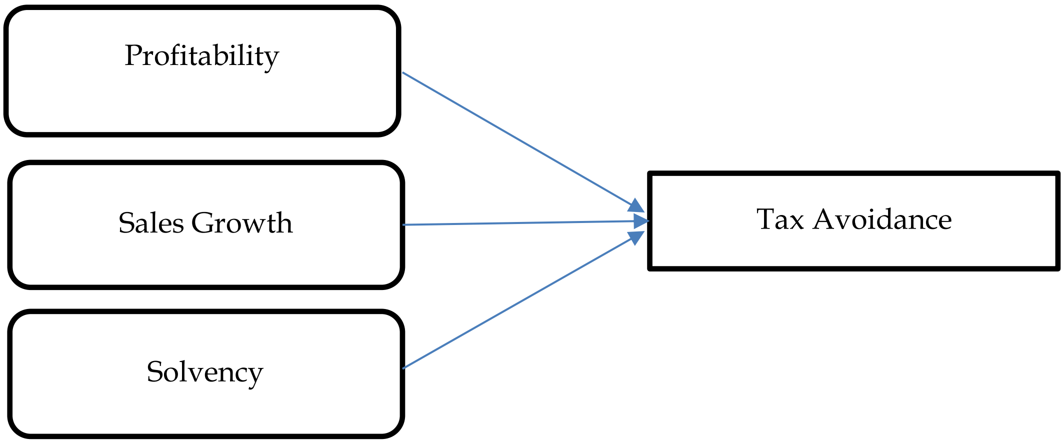


**Figure** 1. Conceptual Framework

## 3. Method

### 3.1. Sample Procedure

This study employs a quantitative approach using the purposive sampling method to determine the sample based on specific criteria. The research population consists of 3 9 consumer non-cyclicals manufacturing companies listed on the Indonesia Stock Exchange (IDX) from 2017 to 2019.

### 3.2. Variable Measurement (Operationalization)

The variables in this study are measured using financial ratios. Profitability (ROA) is calculated by dividing net income by total assets, representing the company's ability to generate profit from its assets. Sales growth is measured by comparing net sales in the current year with the previous year, indicating the company's ability to increase revenue over time. Solvency (DER) is determined by the ratio of total debt to total equity, reflecting the company's financial leverage. Lastly, tax avoidance (CETR) is measured by the ratio of tax paid to pre-tax income, showing the extent to which a company reduces its tax burden through tax planning strategies.

### 3.3. Data Analysis Technique

Data is analyzed using multiple regression analysis with EViews 10 software. Classical assumption tests (normality, multicollinearity, autocorrelation, and heteroscedasticity tests) are conducted. The selection of the panel data regression model is determined using the Chow Test and Hausman Test. A t-test is used to examine the partial effect of independent variables on tax avoidance ($p < 0.05$ indicates significance).

## 4. Results and Discussion

### Descriptive Analysis

The object of this study is consumer non-cyclical companies listed on the Indonesia Stock Exchange (IDX) during the 2017-2019 period. The consumer non-cyclical sector plays a crucial role in driving a country's economic growth and is one of the main contributors to Indonesia's economy. This sector is essential as it provides daily necessities that are consistently required to meet people's basic needs.

Table 1. Descriptive Statistical

| | CETR | ROA | SG | DER |
|---|---|---|---|---|
| Mean | 0.280553 | 0.101131 | 0.131927 | 0.476285 |
| Maximum | 0.696970 | 0.846850 | 0.471180 | 0.933970 |
| Minimum | 0.087870 | 0.011760 | 0.000540 | 0.114170 |
| Std. Dev. | 0.140677 | 0.141991 | 0.110875 | 0.208678 |
| Observations | 39 | 39 | 39 | 39 |

Source: Data Proceed

The Cash Effective Tax Rate (CETR), which serves as the dependent variable in this study, has a maximum value of 0.696970 and a minimum value of 0.087870, recorded by Dharma Satya Nusantara Tbk (DSNG) and Budi Starch & Sweetener Tbk (BUDI), respectively. The average CETR value across the sampled companies is 0.280553, with a standard deviation of 0.140677.

The profitability variable, represented by Return on Assets (ROA), reaches a maximum value of 0.846850 and a minimum value of 0.011760, observed in Siantar Top Tbk (STTP) and Sumber Alfaria Trijaya Tbk (AMRT), respectively. The average ROA value disclosed in the financial statements is 0.101131, with a standard deviation of 0.141991.

Sales Growth (SG) shows a maximum value of 0.471180 and a minimum value of 0.000540, recorded by PP London Sumatra Indonesia Tbk (LSIP) and Siantar Top Tbk (STTP), respectively. The average sales growth reported in the financial statements is 0.131927, with a standard deviation of 0.110875.

The solvency variable, proxied by the Debt to Equity Ratio (DER), has a maximum value of 0.933970 and a minimum value of 0.114170, recorded by Indofood Sukses Makmur Tbk (INDF) and Dharma Satya Nusantara Tbk (DSNG), respectively. The average DER value disclosed in the financial statements is 0.476285, with a standard deviation of 0.208678.

### Hypothesis Test

Based on hypothesis testing conducted using the independent variables Profitability, Sales Growth, and Solvency and the dependent variable Tax Avoidance, with the aid of EViews 10 software, it was determined that the best panel data model is the Fixed Effect Model (FEM).

Table 2. Regression results

| *Variable* | *β* | *SE* | *T-value* | *P-value* |
|---|---|---|---|---|
| ROA | -3,0396 | 0,0656 | -0,6028 | 0,0256 |
| SG | -0,3261 | 0,1086 | -3,0025 | 0,0064 |
| DER | 0,0174 | 0,0367 | 0,4739 | 0,0400 |
| | | | | |
| $R^2$ | 0,5983 | | | |
| Adjusted R-Squared | 0,3364 | | | |
| F-Statistics/p-value | 2,2843 (0,0362) | | | |

Source: Data proceed

Profitability has a significant effect on Tax Avoidance. The p-value for profitability (ROA) is 0.0256, which is less than 0.05, indicating statistical significance. However, the coefficient is negative (-3.0396), meaning that profitability negatively affects tax avoidance. Since the hypothesis does not specify the direction of the effect, but only its significance, H1 is accepted.

Sales Growth has a significant effect on Tax Avoidance. The p-value for sales growth (SG) is 0.0064, which is also less than 0.05, indicating statistical significance. The coefficient is negative (-0.3261), meaning that higher sales growth leads to lower tax avoidance. Since the hypothesis only tests for significance and not direction, H2 is accepted.

Solvency has a significant effect on Tax Avoidance. The p-value for solvency (DER) is 0.0400, which is less than 0.05, indicating a significant effect. The coefficient is positive (0.0174), meaning that higher solvency (debt levels) leads to increased tax avoidance. As the hypothesis only tests significance, H3 is accepted.

The model's explanatory power is reflected in the $R^2$ value of 0.5983, indicating that 59.83% of the variation in tax avoidance can be explained by the independent variables (ROA, SG, and DER). However, the Adjusted $R^2$ value of 0.3364 suggests that after adjusting for the number of predictors, only 33.64% of the variation in tax avoidance is accounted for, implying that other factors outside the model also influence tax avoidance decisions.

The overall significance of the regression model is confirmed by the F-statistic value of 2.2843 with a p-value of 0.0362 ($< 0.05$), indicating that the independent variables collectively have a significant impact on tax avoidance. While profitability and sales growth reduce tax avoidance, higher debt levels contribute to increased tax avoidance. These findings highlight the complex relationship between financial performance, capital structure, and corporate tax strategies.

## Discussion

Profitability has a negative effect on tax avoidance. This suggests that tax avoidance is not influenced by a company's profitability, leading to the rejection of the hypothesis that profitability affects tax avoidance. These findings contradict previous studies conducted by Darmawan (2014), Dewinta & Setiawan (2016), and Susanti & Ichsani (2019), which suggested that profitability (ROA) has a positive effect on tax avoidance—indicating that the higher the ROA, the greater the tax avoidance efforts undertaken by a company. One possible explanation for these results is that highly profitable companies may have stronger corporate governance practices and be subject to greater regulatory scrutiny, discouraging aggressive tax avoidance strategies. Additionally, companies with high profitability may prioritize maintaining a positive public image and investor confidence, thereby limiting their engagement in tax avoidance practices.

These findings are consistent with the study by Setiawan et al. (2021), which demonstrated that Return on Assets (ROA) negatively affects tax avoidance. Their research found that companies with higher profitability tend to have lower levels of tax avoidance, which can be attributed to their efforts to comply with tax regulations and maintain a good reputation among stakeholders.

Sales growth also has a negative effect on tax avoidance. This indicates that tax avoidance is not influenced by a company's sales growth, leading to the rejection of the hypothesis that sales growth affects tax avoidance. These findings contradict research conducted by Nadya & Purnamasari (2020), which suggested that sales growth influences tax avoidance. A possible explanation for this outcome is that companies experiencing high sales growth may prioritize reinvesting profits into business expansion rather than engaging in tax avoidance strategies. Furthermore, firms with strong revenue growth often attract more regulatory attention, making them more cautious in their tax planning approaches. Additionally, companies with high sales growth may already benefit from tax incentives or deductions related to their expansion activities, reducing the need for further tax avoidance measures.

Solvency has a positive and significant effect on tax avoidance. This suggests that tax avoidance is influenced by a company's solvency, supporting the hypothesis that solvency affects tax avoidance. These findings align with previous research by Oktaviani (2017) which suggested that solvency influences tax avoidance. However, this study contradicts the findings of Dewinta & Setiawan (2016) and Irianto et al. (2017), who argued that solvency has no effect on tax avoidance. When a company's solvency level is high, it implies a higher level of debt, leading to increased interest expenses. High interest expenses, in turn, can reduce the company's tax burden by lowering taxable income through interest deductions. Companies with high debt levels may have a greater incentive to engage in tax avoidance to improve cash flow and meet financial obligations. Additionally, firms with higher solvency risks might seek tax minimization strategies as part of their financial management to maintain financial stability and investor confidence.

## 5. Conclusion

The findings of this study indicate that profitability and sales growth have a negative impact on tax avoidance, whereas solvency has a positive influence. This suggests that companies with higher profitability and sales growth tend to engage in lower levels of tax avoidance, while firms with higher debt levels are more likely to undertake tax avoidance strategies.

This study suggests that the Directorate General of Taxes (DGT) enhance supervision of large and multinational companies, particularly in the consumer non-cyclicals sector, to reduce tax avoidance and ensure proper tax contributions. Additionally, companies should carefully assess policies to minimize harmful tax avoidance practices.

However, this study has limitations, including a focus solely on consumer non-cyclicals manufacturing companies listed on the IDX and the use of only three variables—profitability, sales growth, and solvency. Future research should broaden the sample and consider additional factors influencing tax avoidance.

## Referensi

Avi-Yonah, R. S., Sartori, N., & Seto, T. P. (2020). *Global Perspectives on Income Taxation Law*. Oxford University Press.
Brigham, E. F., & Ehrhardt, M. C. (2017). *Financial Management: Theory & Practice*. Cengage Learning.
Calvin, S., & Flipse, S. M. (2016). Analysis of the effect of leverage, profitability, company size, sales growth, and institutional ownership on tax avoidance. *Journal of Social Science Studies*, 2(1), 1–15.
Darmawan, I. G. H., & Sukartha, I. M. (2014). Pengaruh penerapan corporate governance, leverage, return on assets, dan ukuran perusahaan pada penghindaran pajak. *E-Jurnal Akuntansi Universitas Udayana,* 9(1), 143–161.
Dewinta, R., & Setiawan, E. (2016). Pengaruh ukuran perusahaan, profitabilitas, leverage, dan pertumbuhan penjualan terhadap tax avoidance. *E-Jurnal Akuntansi Universitas Udayana,* 14(3), 1584–1613.
Fahmi, (2015) *Pengantar Manajemen Keuangan Teori dan Soal Jawab* Bandung: Alfabeta.
Hassan, M. K., Elamer, A. A., Fletcher, M., & Sobhan, N. (2021). Voluntary governance disclosures and tax avoidance: Evidence from UK firms. *International Journal of Accounting & Information Management,* 29(3), 419-440.
Higgins, R. C. (2015). *Analysis for Financial Management*. McGraw-Hill.
Hutagaol, J. (2007). *Perpajakan: Isu-isu kontemporer*. Jakarta: Graha Ilmu.
Irianto, D. B. S., & S.Ak, A. W. (2017). The Influence of Profitability, Leverage, Firm Size and Capital Intensity Towards Tax Avoidance. *International Journal of Accounting and Taxation*, 5(2), 33–41. https://doi.org/10.15640/ijat.v5n2a3
Kasmir, (2016). Pengantar Manajemen Keuangan. Edisi Kedua Jakarta: Prenada Media.
Kim, J. H., & Im, C. C. (2017). The study on the effect and determinants of small-and medium- sized entities conducting tax avoidance. *Journal of Applied Business Research*, 33(2), 375– 390. https://doi.org/10.19030/jabr.v33i2.9911
Kovermann, A., & Velte, P. (2019). The impact of corporate governance on corporate tax avoidance: A literature review. *Journal of International Accounting, Auditing and Taxation,* 36, 100270.
Lisowsky, P., Minnis, M., & Sutherland, A. (2017). Economic growth and financial statement transparency. *Journal of Accounting Research*, 55(3), 661-697.
Nadya, B., & Purnamasari, D. (2020). The Effect of Sales Growth and Leverage on Tax Avoidance Empirical Study of Coal Sub-Sector Mining Companies Listed on the Indonesia Stock Exchange in 2014-2018. *Jurnal AKSI (Akuntansi Dan Sistem Informasi),* 5(2), 89–95. https://doi.org/10.32486/aksi.v5i2.538
Oktaviyani, R., & Munandar, A. (2017). Effect of Solvency, Sales Growth, and Institutional Ownership on Tax Avoidance with Profitability as Moderating Variables in Indonesian Property and Real Estate Companies. *Binus Business Review,* 8(3), 183. https://doi.org/10.21512/bbr.v8i3.3622
Setiawan, D. A., Wasif, S. K., Husen, I. A., Yuliansyah, R., & Pebriani, W. (2021). Pengaruh Kepemilikan Institusional, Kepemilikan Manajerial, Leverage, Return On Assets terhadap Tax Avoidance (Studi Empiris Perusahaan Sektor Perdagangan Retail yang Terdaftar di BEI 2015-2019). *Jurnal Inovasi Penelitian*, 2(1), 305–318.

https://doi.org/10.47492/jip.v2i1.694

Taylor, G., & Richardson, G. (2015). The determinants of thinly capitalized tax avoidance structures: Evidence from Australian firms. *Journal of International Accounting, Auditing and Taxation,* 24(1), 12-25.

Wahab, N. A., & Holland, K. (2015). The persistence of book-tax differences and the risk of tax avoidance. *Journal of Contemporary Accounting & Economics*, 11(2), 97-115.

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