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About APMAA

Founded in 2004, the Asia-Pacific Management Accounting Association has provided a platform for management accounting academics and practitioners in the Asia Pacific Region to improve their contribution to global scholarship and the lives of the region's people. The gender and geographic diversity of our membership and board create a rich environment for collaboration and innovation. We shape management accounting's future through teaching, research, and a robust network, ensuring our association is a thought leader in the field.



Have a question about APMAA? The web pages below will give you answers.

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http://apmaa.org/APMAA/2022_Bangkok_Conference.htm

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The future annual conference venues ([Asia-Pacific Management Accounting Association \(APMAA\) Official Site](#))

APMAA 2022 Conference - Thailand (Asst. Prof. Pattanant Petchchedchoo, Ph.D, Dhurakij Pundit University, Accepted at the 2018 board meeting)

APMAA 2023 Conference - China (Prof Gao, Liang Fian, Xi'an Jiaotong University China), Accepted at the 2018 board meeting.

APMAA 2024 Conference. - Vietnam (Prof Phuy, Nguyen Thi Hong, Vietnam National University- Hanoi), Accepted at the 2019 board meeting.

APMAA 2022 Doctoral Colloquium

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Guidelines for Presenters, Moderators and Discussants

Currently, we are working to develop the session schedule.

Each of the 2022 Academic Paper Session slots will be allocated with two-three papers. Accordingly, each paper is given 20 mins for presentation, 10 mins for discussion, and 10 mins. for Q & A. Each session is facilitated by 2-3 discussants and 1 moderator.

We recommend **presenters prepare 10-20 PPT slides for their 20 min. presentation. When there is any update in their camera-ready paper, presenters are expected to send the updated version directly to both the moderator and discussant in a timely manner.**

Each **discussant will be given a 10 min slot for his/her discussion. We recommend them to prepare between 7-10 PPT slides to convey the discussion points.**

A **moderator coordinates an assigned session and should ask the session presenter and discussants to send their discussion slides and keep them at hand before the Conference Day. If for some reason, the discussant is not available (e.g., no show-up), the moderator assumes the discussant role and discusses the papers, based on the slides at hand.**



Instructions for preparing the APMAA proceedings (camera-ready) paper

(Edited on August 30, 2021, by Ueno and Updated on August 11, 2022, by DPU)

What is your proceedings (camera-ready) paper?

In your acceptance notification, we asked you to submit the **proceedings (camera-ready) paper** by September 15, 2022. Please refer to the reviewer's comments, then revise or rewrite your accepted article when developing the proceedings (camera-ready) paper.

Suppose you register for APMAA 2022 conference and submit the proceedings (camera-ready) paper by September 15, 2022. In that case, your manuscript is included in the **APMAA 2022 Proceedings** and the **Book of Abstracts** (Proceedings contain **camera-ready papers** while the Book of Abstracts has only abstracts). The author can choose the full-length paper or executive summary submission for the conference proceedings.

Executive summaries are more extended than abstracts, running 5-7 pages (around 1500-2000 words). They summarize the research output's purpose, method, results, and conclusions such that someone who reads *only* the summary can obtain a solid understanding of the research as a whole.

Note that we use **both (Microsoft Word and PDF) files** you submitted to the "camera-ready column of the CMT" when editing the Proceedings and the Book of Abstracts without editing. Your proceedings (camera-ready) paper's length and format have to follow the submission guideline (**Guideline for Authors**), as you have initially submitted your paper. Please edit your camera-ready paper by following the requested format described on the **Guideline for Authors** at the Official Guide to [APMAA 2022 \(Annual Conference of the Asia-Pacific Management Accounting Association\) \(sakura.ne.jp\)](http://sakura.ne.jp).

(Excerpts from the Guideline for Authors)

4. Authors' names should be placed with two-line space below the title. Authors' affiliations should be placed below each author's name.
5. **An abstract*** should be around **200-300 words**.
6. Text should be 5,000-10,000 words for a full-length submission, and 5-7 pages (around 1500- 2000 words) for an executive summary submission. The paper must be written in the best possible technical and grammatical English.
8. All manuscripts should be formatted using 12-point font (Times New Roman). The text should be **single spaced**.



*** Why do you need to write an abstract for a research paper?**

- an abstract lets readers get the gist or essence of your paper or article quickly, to decide whether to read the full paper;
- an abstract prepares readers to follow the detailed information, analyses, and arguments in your entire paper; and, -later, an abstract helps readers remember key points from your paper.

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ABSTRACT

The purpose of this study is to analyze and investigate how aspects of financial factors, namely financial derivatives, debt shifting and transfer pricing, affect tax avoidance with firm value as a moderating variable. The object of this research is conventional banks and non-bank institutions listed on the Indonesia Stock Exchange (IDX) with a period between 2015 and 2020. The purposive selection requirements were met by 69 conventional banks and non-bank financial institutions as samples of the study. Purposive sampling criteria in this study are: Conventional banks and non-bank financial institutions that do not experience losses during the research year, because business actors who experience losses are not required to pay taxes. In addition, Islamic banks, regional development banks and Islamic financial institutions are also not included in the object of this research. Using E-views 9 software for data processing, the findings of this study show that debt transfer has a negative impact on tax avoidance, but financial derivatives have no effect on tax avoidance, while transfer pricing has a positive impact on tax avoidance. In addition, firm value does not have an impact on the weakening and strengthening of tax avoidance on the variables of debt shifting, financial derivatives and transfer pricing.

Keywords: Tax Avoidance, Financial Derivatives, Debt Shifting, Transfer Pricing And Firm Value.

1. INTRODUCTION

Tax receipts account for around 80% of state revenue, making taxes one of Indonesia's most consistent sources of income. The realization of Indonesia's tax collections in 2015-2019 is estimated to be around 80% of the target. This demonstrates that Indonesia's tax revenue has not been maximized, even though it has a significant potential source of tax revenue due to its large population and commercial activities. According to the Law of the Republic of Indonesia Number 17 of 2003 on Indonesian State Finances, state revenues are all revenues arising from tax revenues, non-tax state revenues, and grants from inside and outside the country. In the General Provisions and Tax Procedures section of Law Number 16 of 2009, it is stated that "taxes are coercive contributions to the state by individuals or entities, with no compensation in return, directly and employed for the purposes of the state for the greatest prosperity of the people.

According to Yustinus Prastowo, Executive Director of the Center for Indonesia Taxes Analysis (CITA), there are at least five reasons why taxation did not meet the target in 2019.

1) The onset of deterioration Commodity prices are affected by global economic conditions. 2) Due to global economic conditions, import activity declines, resulting in a fall in value-added tax. 3) Increase in non-taxable income and the amount of government tax breaks, such as tax vacations and tax allowances 4) Inadequate use of data and information about possible tax income sources, 5) Due to the political year, the state is forced to halt access data/further information operations and postpone tax collection by numerous departments.

The company's tax burden is determined by the difference between profit and taxable income (book-tax difference). So one method of avoiding taxes is to limit the book-tax difference (Evers et al., 2016). Positive book taxation The differences reflect the taxpayer's efforts to reduce the number of tax payments. This action reduces the amount of tax income collected by the state.

Even though they are lawful and do not violate any legislation, tax avoidance activities influence the government's revenue. As a result, tax avoidance activity might result in losses to the state if it leads to excessive tax avoidance; this can lower revenue for the state. According to (Chen et al., 2010), there are three benefits that corporations can reap from avoiding paying taxes, and they are as follows:

1. The reduction in the amount of taxes that businesses are required to pay to the government;

2. The ability for managers to earn compensation from company owners or shareholders for their actions and to avoid paying taxes is one of the benefits that might accrue to managers either directly or indirectly.

3. The availability of benefits presents managers with options to take action about rent collection. Action Rent extraction is an action that managers take that does not maximize the benefit of the owners or shareholders but rather for personal purposes, such as preparing financial statements that can be aggressive or conducting transactions with a specific party. These are examples of situations in which rent extraction may occur.

Moreover, according to Putri (2017), the following types of financial losses can be incurred by businesses as a direct result of engaging in tax avoidance practices:

2. The prospect of being subjected to fines by the relevant tax authorities in the event that an audit is carried out and fraudulent activity relating to taxes is discovered.

3. The company's reputation takes a hit as a result of audits conducted by the relevant tax authorities.

4. The fact that other shareholders were aware that the activities of tax avoidance carried out by managers were carried out in the context of rent extraction was a contributing factor in the drop in share prices.

Banks and financial institutions are the most vulnerable sectors since they are difficult to detect by law enforcement. Tax avoidance is frequently accomplished by proactive tax planning that outwits existing tax restrictions. According to PWC (2019), UK Finance says that their banking sector contributed approximately RP. 27.7 billion in tax revenue.

In the banking industry and financial institution, several financial transactions and commercial activity occur. This also suggests that there will be a multitude of transaction-based tax income sources. The potential for tax avoidance in the banking sector is likely to occur in the context of: (i) Banks as tax avoidance actors employing diverse schemes; and (ii) Banks as conduits utilized by third parties to engage in tax avoidance.

Typically, the top management of banks and financial institutions engages in tax avoidance by inserting unjustified expenses, so that the company's costs appear high and profits are low, or even incur losses, so that the tax paid is low or nonexistent. As a result, Indonesia loses 10 to 12 trillion rupiah annually due to tax fraud by banks and financial organizations. The case of tax avoidance at the BCA bank in Indonesia, for instance. Bank BCA's efforts to evade taxes consist of taking use of tax loopholes to enhance manager pay and allowances as

well as bribing officials through out-of-the-ordinary spending (Kompas, 2014). This is further supported by study undertaken by Vania et al. (2018) demonstrating that Islamic banks in Indonesia engage in tax avoidance via earnings management. One of the motives for corporations to engage in profits management is taxation.

Transfer pricing is one method for manipulating the actual tax by transferring goods, services, and the selling price of intangible property to subsidiaries, related parties, or parties with unique relationships in multiple states (Hornngren, 2012). In determining transfer prices, transfer pricing refers to transactions that are fair between linked companies. However, corporations purposefully move income to affiliates in nations with low tax rates (Richardson et al., 2013). Transfer pricing can be detrimental to the state, which lends it a negative reputation. Research has been conducted to determine the influence of transfer pricing on aggressive tax avoidance strategies by corporations utilizing transfer pricing.

In addition to transfer pricing, multinational corporations frequently utilize treaty shopping as a tax avoidance method. This is also a potential tax avoidance loophole. Most nations accomplish this by withholding taxes on profits and interest payments made to foreign subsidiaries. In order to prepare for this, the Indonesian government adopted Indonesian Taxation Law no. 36 of 2008, which decreased the dividend rate earned by individual domestic taxpayers from 15% to 10% and made this change permanent. In addition, the government of Indonesia has canceled tax treaties with tax haven nations. With this strategy, the government seeks to lessen the opportunity for businesses to evade paying taxes.

The Organisation for Economic Co-operation and Development (OECD) and the Group of Twenty (G20) have announced a groundbreaking project to address climate change (BEPS). This program is founded on a considerable empirical study identifying the key BEPS channels. The use of debt, which takes advantage of tax-deductible interest payments, is one of these outlets' strategies. In several countries, the banking industry generates nearly one-fourth of corporation tax revenues. Interest payments are tax-deductible, which permits both base erosion and profit shifting. When a bank borrows money from a third party, the interest payments, it receives reduce its taxable income.

In a prior study, Buettner (2014) utilized bilateral internal debt data and found considerable positive benefits of the bilateral tax rate differential, the most accurate measure of debt shifting incentives. Additionally, multinational corporations use debt shifting to transfer their tax burden via parent company loans and overseas debt (Dischinger, 2010). Buttner (2007) has demonstrated that multinational corporations in Germany engage in debt shifting and reduce their debt by transferring profits from high-tax nations to low-tax nations to reduce their tax burden. Moreover, transfer the debt to a nation with low taxes.

According to Barton (2001), Pincus and Rajgopal (2002), Huang et al. (2009), and Oktavia et al. (2010), financial derivatives can be utilized to lower the volatility of firm earnings (2019); this is because financial derivatives have a direct effect on a company's cash flow, which ultimately affects its profit.

In addition to their usage as a method of income management, derivatives are also employed as a method of tax avoidance. Donohoe (2015) states that financial derivatives are complex tax avoidance. Due to the complexity of such derivative arrangements, businesses may exploit tax law inconsistencies. Several prior studies have demonstrated that the cash effective tax rate (Cash ETR) is inversely correlated with the fair value of hedged derivative assets (Devi, 2018). Additionally, there is a positive correlation between Cash ETR and the fair value of non-hedging derivative assets (liabilities). This suggests that the corporation deferred the realization of profits while accelerating the realization of losses from non-hedging derivatives in order to lower the amount of income tax paid.

Transfer pricing is the process of distributing business profits to lower or avoid taxes. Moreover, transfer pricing may also be referred to as intracompany price, intercorporate price,

interdivisional price, or internal price, which is a price set for management control over the transfer of goods and services among members (group companies). In conventional accounting literature, transfer pricing is described as a strategy for transferring expenses and revenues among divisions, subsidiaries, and joint ventures within a group of affiliated firms (Sikka & Willmot, 2010).

Transfer pricing methods are responsive to opportunities for fixing values to increase private profits while avoiding the payment of public taxes. MNEs typically shift revenues from high-tax jurisdictions to low-tax nations (Huizinga & Laeven, 2008; Davies et al., 2018; Trslv et al., 2020)

2. LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

2.1 GRAND THEORY STAKEHOLDER THEORY

According to stakeholder theory, a firm cannot operate solely for its own profit; it must also deliver benefits to all its stakeholders (Freeman & Mc Vea 2001). Shareholders, management, employees, consumers, creditors, investors, regulators, and the government are stakeholders in financial institutions. Who have a relationship with the company and an interest in it. Essentially, stakeholders can exert control or influence over the company's use of economic resources.

To survive and compete, the company's mission is to meet the interests of its stakeholders. This aligns with the use of stakeholder theory. As in the contemporary period, firms need superior technology to compete and maximize profits for the benefit of their stakeholders. Government as one of the interested parties Especially in regard to taxation When a corporation complies with its tax obligations in good faith, the government will reap huge rewards. Consequently assisting the state government as a shareholder in acquiring tax revenues to finance development (Donaldson & Preston, 1995).

2.2 POSITIVE ACCOUNTING THEORY

Watts and Zimmerman (1986) created the positive accounting theory, which identifies specific economic aspects that can be related with the behavior of managers or financial report creators. This theory aids in the explanation and forecasting of accounting processes. Consequently, managers will be more cautious (conservative) while engaging in tax avoidance.

The Positive Accounting Theory investigates the elements that influence the management's attitude toward accounting standards and, consequently, the company's lobby against accounting standards. Positive accounting theory has three hypotheses: the bonus plan hypothesis, the debt covenant hypothesis, and the political cost hypothesis (Watts & Zimmerman, 1986).

TAX AVOIDANCE

According to Desai and Dharmapala (2010), Tax Avoidance is a business planning approach implemented by management to attain firm objectives. Tax Avoidance is defined by Tang and Firth (2011) as the endeavor to exploit tax law uncertainties for the company's benefit. Wang (2019) defines tax avoidance as the legal violation of tax laws to reduce the

corporate tax burden through the use of tax rules. Various indicators have been used in the past to measure Tax Avoidance, according to previous research. Effective Tax Rate is one of these (ETR). ETR is deemed capable of measuring the extent of Tax Avoidance if a company's ETR is lower than the industry average ETR. ETR is the ratio of a company's tax liability to its pretax income, calculated by dividing tax expense by pretax income.

DEBT SHIFTING

Debt shifting is interest income obtained from low-tax countries and withheld in high-tax countries, so that this strategy can save taxes resulting from deductions in high-tax countries exceeding the appropriate tax payments in low-tax countries (De Mooij, 2011). Due to changes in foreign debt, the leverage ratio is typically more sensitive to taxation in multinational corporations. The corporate debt policy of a nation appears to follow local taxation. Generally, multinational corporations avoid paying high taxes by moving their debt to high-tax nations. This reduces business margins and tax burdens. Multinational firms move Intellectual Property to subsidiaries in low-tax jurisdictions in order to shift income and, as a result, pay fewer taxes. (Gravelle, 2013)

FINANCIAL DERIVATIVE

According to Pincus and Rajgopal (2002), using derivative trades is one method for managing earnings. Due to the significant rise in derivative transactions nowadays, corporations employ derivative trades to decrease their tax liability (Wyman, 2013). Therefore, derivative trades can be utilized as a tax avoidance strategy.

Research conducted by Donohoe (2012) states that the ambiguity of tax regulations on derivative transactions makes financial derivatives serve as objects to avoid taxes. The corporation uses this ambiguity as a loophole to avoid paying taxes. Oktavia and Martani (2013) identified a substantial correlation between financial derivative variables and tax avoidance.

TRANSFER PRICING

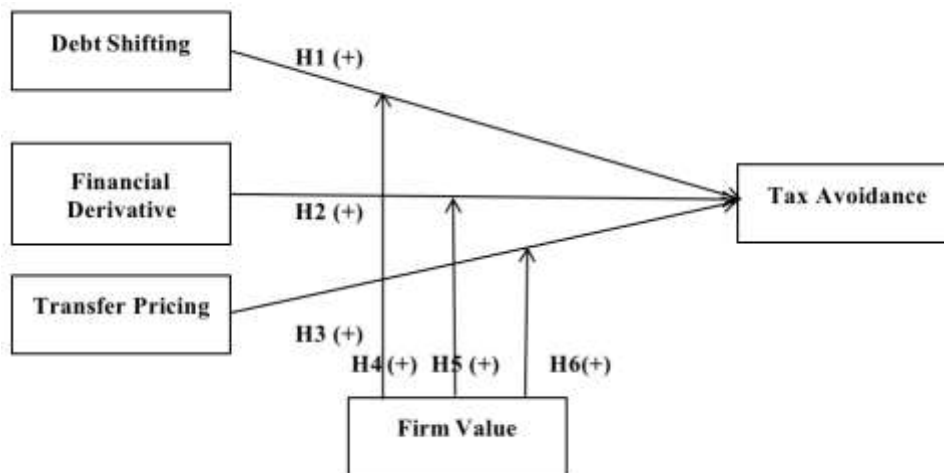
Transfer pricing is essentially indicated as fair transactions applied between affiliated companies in determining transfer prices. In practice, however, corporations purposefully move profits to companies with special links in nations with low tax rates (Richardson et al., 2013). This gives transfer pricing a negative connotation because it can cause harm to the government. There have been studies conducted to determine the influence of transfer pricing on aggressive tax avoidance strategies conducted by corporations adopting transfer pricing. Prior research by Sikka et al. (2010) and Amidu et al. (2012) revealed the transfer prices tactics employed by firms in developing and developed economies to avoid taxes.

FIRM VALUE

The maximization of firm value is one of the objectives of an established business because a higher firm value will increase the wealth of the shareholders (Jensen, M. C, 2010).

Subramanyam (2011) noted that firm value is an indication of the firm's market value, which means firm value is the summation of an investor's judgments of the company's entire performance. The fact that the expanding firm value is dependent on the company's success indicates that firm value is tied to firm performance. Furthermore, in order to optimize firm value, businesses typically minimize expenses, particularly tax expenses, because taxes do not directly affect firm performance (Austin, C. R., & Wilson, R. J, 2017). Therefore, businesses typically engage in tax avoidance to decrease their tax burden.

2.2 FRAMEWORK



3. METHODOLOGY

This research will utilize secondary data sources as its data resource. Secondary data is research data received indirectly from a second party or documented by a third party (Saunders; Lewis; & Thornhill, 2012). This study aims to identify Indonesian banks that have gone public. This analysis employs the 2015-2020 financial statements of conventional banks and non-bank financial institutions. Purposive sampling was the sample technique used. Purposive sampling is a sampling method that takes into account particular criteria.

The sample criteria are as follows:

1. The banking institutions analyzed in this study were listed on the Indonesia Stock Exchange from 2015 to 2020.
2. Excluding Islamic banks, regional banks, and Islamic non-bank financial institutions listed on the Indonesia Stock Exchange in 2015-2020

The Operational Definition of Variables

In this study, there are three independent factors, one dependent variable and one moderating variable. This study will evaluate the impact of debt shifting, financial derivatives, transfer pricing on tax avoidance with firm value as moderating variable. Detailed descriptions of all independent and dependent variables follow.

Table 1 Variable's Measurement

Variables	Measurement
<i>Tax Avoidance</i>	Effective Tax Rate = $\frac{\text{Tax Expense} - \text{deferred tax expense}}{\text{Income Before Tax}}$
Debt shifting	Foreign Ownership = $\frac{\text{Total liability}}{\text{Total equity}}$
Financial derivative	Derivative = $\frac{\text{absolute value of net fair value of derivative}}{\text{Total asset}}$
Transfer Pricing	Transfer Pricing = $\frac{\text{Related Party Receivable}}{\text{Total Receivable}}$
Firm Value	Tobins Q = $\frac{\text{Market value of outstanding share} + \text{Debt}}{\text{Total Asset}}$

4. FINDINGS AND DISCUSSION

After filtration, only 69 financial institutions met all of the criteria for this technique of sampling by purpose. The number of samples collected from the study's population is as follows:

Table 2 Sample Criteria

No.	Criteria	Number
1	Banking companies listed on the Indonesia Stock Exchange 2015 - 2020	105
2	Islamic banks, regional banks, and Islamic non-bank financial institutions listed on the Indonesia Stock Exchange in 2015-2020	(8)
3	IPO above 2015	(15)
4	Companies whose financial statement and annual report data are incomplete	(13)
5	Observation	69
6	Years observation	6
7	Outlier	(26)
8	Sample	388

Source: Processed by the Author, 2022

4.1 Descriptive statistics

Based on table 2 of the data for each variable derived from the processed model. Each variable has a mean value (mean), maximum value (max), and minimum value (min), as well as a standard deviation. The description of the descriptive statistics of each research variable is as follows:

Table 3 Descriptive Statistic

	ETR	DS	DERV	TP	FV
Mean	0.178593	0.035887	0.000908	0.045371	1.785541
Median	0.213500	0.027000	0.000000	0.004000	1.025500
Maximum	0.553000	0.335000	0.023704	1.045000	69.28100
Minimum	-0.180000	-0.082000	0.000000	0.000000	0.000000
Std. Dev.	0.129098	0.041501	0.002914	0.124923	4.835991
Skewness	-0.164595	3.229136	5.054360	5.152896	11.20128
Kurtosis	2.806128	19.18955	32.46532	34.13680	143.2682
Jarque-Bera	2.359556	4911.609	15687.99	17390.64	326195.7
Probability	0.307347	0.000000	0.000000	0.000000	0.000000
Sum	69.29400	13.92400	0.352492	17.60400	692.7900
Sum Sq. Dev.	6.449822	0.666555	0.003287	6.039385	9050.697
Observations	388	388	388	388	388

a. *Debt Shifting (DS)*

The mean value of debt shifting is 0.035887, with a standard deviation of 0.041501. This means that the mean value is greater than the standard deviation, indicating that the data for this variable is evenly distributed.

b. *Financial Derivative (DERV)*

According to data processing using Eviews 9 software, the DERV variable has an average value (mean) of 0.000908 and a standard deviation of 0.002914. This indicates that the values for this variable are evenly distributed, as the average value (mean) is less than the standard deviation.

c. *Transfer Pricing (TP)*

The transfer pricing variable's average value (mean) is 0.045371, with a standard deviation of 0.124923. This indicates that the values for this variable are not uniformly distributed, as the average value (mean) is less than the standard deviation.

d. *Firm Value (FV)*

Firm value variable has a range of values with an average (mean) value of 1.785541 and a standard deviation of 4.835991. This demonstrates that the average value (mean) is less than the standard deviation, indicating that the data for this variable is not evenly distributed.

4.2 Panel Data Regression Analysis

To determine which of the standard effect model, the fixed-effect model, and the random-effect model is the most appropriate for use in the inquiry.

a. *The Chow Test*

The Chow test determines whether the study model uses a common or fixed effect. Due to the probability value, the Chi-Square cross-section probability value is 0.2366. Due to the fact that this value is bigger than the significance level of 0.05, the equation regression results in this study were based on a common-effect model, and the Hausman test was employed.

b. *The Hausman Test*

The Hausman test is used to assess whether a random effect or fixed effect probability value of a random cross-section of 0.0174 will be used in the research model. Because this number is small than the 0.05 level of significance, the regression equation results in this study were based on a fixed effect model.

c. Lagrange Test

The Breusch-Pagan cross-section has a probability of 0.6215, as determined by the Lagrange test on the processed data. This result is more than the significance criterion of 0.05. The results of the proper regression model used in this investigation, the Common Effect Model, can be determined.

Normality Test

The objective of a normality test is to establish whether the distribution of the research sample is normal. The study's data must have a normal distribution and a significant probability of 0.05 or 5% for a suitable regression model. Because having equally distributed data is a prerequisite for completing panel data regression analysis successfully. According to the results of data processing using Eviews 9, all variables have a uniform distribution. This is supported by the Jarque-Bera probability value over 5%, namely 0.553095. On the basis of a total of 388 observations, it can be concluded that the data are normally distributed.

Heteroscedasticity Test

Tabel 4 Heteroscedasticity Test

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.054644	0.003682	14.84233	0.0000
DS	0.046664	0.061958	0.753149	0.4518
DERV	-3.391052	4.454233	-0.761310	0.4469
TP	0.034650	0.027167	1.275473	0.2029
FV	-0.000561	0.000915	-0.613442	0.5400
FV*DS	0.006923	0.017623	0.392821	0.6947
FV*DERV	2.877142	3.865883	0.744239	0.4572
FV*TP	-0.036084	0.022329	-1.616020	0.1069

The Heteroscedasticity test seeks to determine whether the regression model identified a link between the independent variables. The regression model lacks heteroscedasticity if the probability value is bigger than 0.05. According to the data analyzed with Eviews 9 and the Glejser test, as displayed in table 4, there is no probability coefficient with a value less than 0.05. Therefore, it can be stated that the data lack heteroscedasticity.

The Multicollinearity Test

Table 5 Multicollinearity Test

	DS	DERV	TP	FV	FV*DS	FV*DRV	FV*TP
DS	1.000000						
DERV	0.038529	1.000000					
TP	-0.029205	0.028222	1.000000				
FV	-0.005532	-0.040645	-0.041807	1.000000			
FV*DS	0.199192	-0.014622	-0.019488	0.824024	1.000000		
FV*DERV	0.045974	0.957438	0.013059	0.160467	0.209141	1.000000	
FV*TP	0.016500	0.005302	0.651784	0.336220	0.384610	0.082312	1.000000

It is required to consider the correlation coefficient's value in order to test for multicollinearity. The model has a multicollinearity problem if the correlation between independent variables is greater than 0.8 (> 0.8). On the other hand, if the correlation between independent variables is less than 0.8, the model does not have a multicollinearity problem (0.8). However, the correlation coefficient of the moderating variable in the table above is 0.957438, indicating multicollinearity. This often occurs as a result of multiplication or interaction between two or more independent variables (Gujarati, 2017).

The Autocorrelation Test

Table 6 Autocorrelation Test

Durbin Watson stats	1.501657
d-4	2,498343
du	1.8261
dl	1.5340

The autocorrelation test is used to see a link between the error in period t and the confounding error in period $t-1$ in a linear regression model (previous). The Durbin Watson test was employed to detect the presence of autocorrelation in this investigation (DW test). Based on table 4.8, the Durbin Watson statistic value of 1.501657 is between the upper limit value (dU) 1.7813 and the lower limit value (dL) 1.5762, where $(4-d) > du$, and the regression model in this study does not exhibit a negative autocorrelation.

4.3 Panel Data Regression Analysis

There are 388 samples in this study that satisfy the criteria with the equation below since it uses regression analysis panel data from 69 companies with six years of observation.:

$$\text{ETR}_{i,t} = \alpha_0 + \beta_1 \text{DS}_{i,t} + \beta_2 \text{DERV}_{i,t} + \beta_3 \text{TP}_{i,t} + \beta_4 \text{FV}_{i,t} + \beta_5 \text{FV} * \text{DS}_{i,t} + \beta_6 \text{FV} * \text{DERV}_{i,t} + \beta_7 \text{FV} * \text{TP}_{i,t} + e$$

Description:

- ETR : Tax Avoidance
- α_0 : Constant
- B : Regression coefficient
- DS : Debt Shifting
- DERV : Financial Derivative
- TP : Transfer pricing
- FV : Firm Value
- E : Error term

Table 7 Regression Results

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.167841	0.009618	17.45049	0.0000
DS	0.646686	0.161864	3.995234	0.0001
DERV	17.47531	11.63656	1.501759	0.1340
TP	-0.166325	0.070972	-2.343538	0.0196
FV	-0.007589	0.002389	-3.176547	0.0016
FV*DS	0.073941	0.046039	1.606050	0.1091
FV*DERV	-12.32581	10.09951	-1.220436	0.2231
FV*TP	0.019017	0.058334	0.325997	0.7446

Source: processed secondary data, 2022

$$\text{ETR}_{i,t} = 0.167841 + 0.646686 \text{DS}_{i,t} + 17.47531 \text{DERV}_{i,t} - 0.166325 \text{TP}_{i,t} - 0.007589 \text{FV}_{i,t} + 0.073941 \text{FV} * \text{DS}_{i,t} - 12.32581 \text{FV} * \text{DERV}_{i,t} + 0.019017 \text{FV} * \text{TP}_{i,t} + e$$

The regression equation's results in table 7 are interpreted as follows:

1. The resulting Effective Tax Rate (ETR) is zero if the independent variable is constant.
2. Debt shifting (DS) has a regression coefficient of 0.646686. This means that the Effective Tax Rate (ETR) will increase by 0.646686 for every one-unit increase in debt shifting.
3. Financial derivative (DERV) have a regression coefficient of 17.47531. The Effective Tax Rate (ETR) will increase by 17.47531 for every one-unit increase in Financial derivative.
4. Transfer Pricing (TP), the regression coefficient value is -0.166325. The Effective Tax Rate (ETR) will reduce by 0.166325 for every one unit rise in Transfer Pricing.
5. **Firm Value (FV)** have a regression coefficient of -0.007589. The Effective Tax Rate (ETR) will reduce by 0.007589 for every one-unit increase in **Firm Value**
6. The coefficient of regression for the interaction between Firm Value and debt

shifting is 0.189905. This indicates that if the interaction between Firm Value and debt shifting increases by one unit and all other variables remain same, the effective tax rate will increase by 0.198905 percentage points.

7. Firm Value Interaction with Financial derivative have a regression coefficient of -12.32581. This shows that the interaction of Firm Value and Financial derivatives increases by 1 unit, assuming other variables remain constant, the effective tax rate will reduce by 1 2.32581

8. The coefficient of regression for the interaction between Firm Value and transfer pricing is 0.019017. This indicates that the interaction between Firm Value and transfer pricing increases by one unit, and assuming that all other variables remain constant, the effective tax rate will rise by 0.019017 percentage points.

4.4 Hypothesis Test

Partial Test (t-Test)

The test was carried out using the value of $\alpha = 5\%$ to assess whether the influence caused by the dependent variable, independent variable and moderating variable had a significant or negligible effect (0.05). The findings of panel data regression are summarised in Table 8:

Tabel 8 Partial T Hypothesis Testing

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.167841	0.009618	17.45049	0.0000
DS	0.646686	0.161864	3.995234	0.0001
DERV	17.47531	11.63656	1.501759	0.1340
TP	-0.166325	0.070972	-2.343538	0.0196
FV	-0.007589	0.002389	-3.176547	0.0016
FV*DS	0.073941	0.046039	1.606050	0.1091
FV*DERV	-12.32581	10.09951	-1.220436	0.2231
FV*TP	0.019017	0.058334	0.325997	0.7446

Source: processed secondary data, 2022

The following conclusion can be drawn from the partial t hypothesis testing findings in table 8:

1. This study's first hypothesis (H1) is the relationship between debt shifting and tax avoidance. According to the results of the regression equation in table 8, the probability of debt shifting is 0.001 or less than the significance value of 0.05, and the debt shifting variable's regression coefficient is 0.646686. Therefore, if debt shifting increases, ETR increases as well (tax avoidance reduces), signifying that debt shifting has a negative impact on tax avoidance. Consequently, it can be concluded that **H1 is rejected**

2. Hypothesis 2 (H2) in this study examines the impact of financial derivative on tax avoidance. According to the regression equation results in table 8, the probability of financial derivative was 0.134 or greater than the significance value of 0.05, and the regression coefficient of the financial derivatives variable was 17.47531. As a result, financial derivatives have no impact on tax avoidance. **H2 is rejected**

3. Hypothesis 3 (H3) in this study is the influence of transfer pricing on tax avoidance. Probability transfer pricing is 0.0196 or less than the significance value of 0.05, according to the findings of the regression equation in table 8, and the regression coefficient of the transfer pricing variable is -0.166325. So, if transfer pricing increase, then ETR decreases (tax

avoidance occurs), meaning that transfer pricing have a positive effect on tax avoidance. And it can be concluded that **H3 is accepted**

4. Hypothesis 4 (H4) in this study is firm value strengthens the effect of debt shifting on tax avoidance. The probability of debt shifting and ETR being moderated by firm value is 0.1091 or greater than a significance value of 0.05 and the regression coefficient of this variable shows a value of 0.073941. According to the findings of the t-test, the firm value of the company was not shown to be a moderating factor in the relationship between debt shifting and tax avoidance. **H5 is rejected**

5. Hypothesis 5 (H5) in this study is firm value strengthens the effect of financial derivative on tax avoidance. This variable's regression coefficient is -12.32581, and the probability of financial derivatives and ETR moderated by firm value is 0.2231, which is greater than the significance level of 0.05. According to the results of the t-test, firm value did not moderate the relationship between financial derivatives and tax avoidance. **H5 is rejected**

6. Hypothesis6 (H6) in this study is firm value strengthens the effect of transfer pricing on tax avoidance. which is greater than a significance value of 0.05, and the regression coefficient of this variable reveals a value of 0.019017. According to the findings of the t-test, the firm value of the company was not shown to be a moderating factor in the relationship between transfer pricing and tax avoidance. **H6 is rejected**

Coefficient of Determination Test (*Adjusted R²*)

The coefficient of determination (R^2) is used to measure the model's ability to explain the suitability relationship between the variation of the dependent variable and the independent variable in the study. Value at *Adjusted R²* is always between 0 and 1. The following table describes the results of panel data regression:

Table 9 Coefficient of Determination Results

R-squared	0.116449	Mean dependent var	8.286493
Adjusted R-squared	0.121348	SD dependent var	0.000000
SE of regression	0.116449	Sum squared resid	5.595666
F- statistic	8.286493	Durbin-Watson stat	1.188063
Prob(F-statistic)	0.000000		

Source: processed secondary data, 2021

Based on table 9 above, it can be concluded that the *adjusted R²* 0.121348 or 12.121348%. This shows that the ownership structure variables, *debt shifting*(DB), fFinancial Derivative (DERV), *Transfer Pricing*, and Firm Value can influence *Tax Avoidance* by 0.121348 or 12.121348%. At the same time, the remaining 87.878652% is explained by other variables not used in this study.

5. CONCLUSION AND REFERENCES

This study aims to determine the effect of debt shifting, financial derivative, transfer pricing and firm value on tax avoidance in conventional banking firms and non-bank financial

institutions listed on the Indonesia Stock Exchange. The sample in this study was 69 companies. Based on the results of this study, it can be concluded that debt shifting has a negative effect on tax avoidance, financial derivatives have no impact on tax avoidance, transfer pricing have a positive effect on tax avoidance, the firm value of the company was not shown to be a moderating factor in the relationship between debt shifting and tax avoidance, firm value did not moderate the relationship between financial derivatives and tax avoidance, firm value of the company was not shown to be a moderating factor in the relationship between transfer pricing and tax avoidance.

The results show that the company's debt shifting, transfer pricing, and firm value influence tax avoidance. Through the theory of planned behavior, Ajzen (1991) says that individuals will do anything that can benefit themselves and the group. Besides that, it is also in line with positive accounting theory, which states that companies have the freedom to choose one alternative accounting policy to minimize costs and maximize firm value. With this freedom, managers tend to take opportunistic actions that are profitable and maximize company satisfaction (Scott, 2014). Companies use debt shifting and transfer pricing to reduce their tax burden. Tax planning refers to the company's efforts to reduce its tax burden, while tax avoidance refers to tax planning carried out legally and does not violate tax regulations. To reduce the amount of tax payable, the methods and strategies used to take advantage of weaknesses (gray areas) in the tax laws and regulations themselves (Pamungkas, 2018). Tax Planning is a legal action because tax savings are only done by taking advantage of things not regulated by law. The aim is to minimize the amount of tax paid so that the tax paid by individuals and entities does not exceed the amount that should be (Natakharisma & Sumadi, 2014)

Limitations and Suggestions

This study has limitations that can be used as a reference for future researchers to obtain more accurate results.

1. The study only used conventional banking firms and non-bank financial institutions listed on the Indonesia Stock Exchange (IDX) for 2015-2020. The purposive selection method only yielded 69 samples of companies that could be used as research objects. In the future, it is hoped that banking companies (including Islamic banking) as well as non-bank financial institutions can contribute more to become objects in the research conducted.

2. The independent variables used financial factors are debt shifting, financial derivative, transfer pricing and firm as mediating. And considering that the influence of the adjusted R-squared of the four factors is only 12.121348%, this indicates that there are still a great deal of other potential variables that play a part in tax avoidance. There are still a great deal of additional monetary aspects, including as profitability, leverage, bond rating, size, and growth, that have the potential to operate as independent variables in the subsequent investigation.

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