TAX PLANNING AND FIRM VALUE: THE CASE OF COMPANIES WITH DIFFERENT STATE OWNERSHIP IN VIETNAM

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ABSTRACT
The research objective of our article is to evaluate the impact of tax planning on firm value from the case of non-financial companies listed in Vietnam with different state ownership. We used the purposive sampling method and selected 504 companies for the period 2015-2020. We used secondary data from audited financial statements and stock trading statistics of these companies. The data were analyzed using the generalized least squares (GLS) method. According to the GLS regression results, we assert that the effective tax rates to represent tax planning negatively affect firm value, and this relationship has a significant difference between companies with shares owned by the State and companies without shares owned by the State. In addition, the increased moderation of state ownership on the negative impact of tax planning on firm value differs significantly between state-owned-controlled and non-state-controlled companies. We expect these findings to provide useful information on the relationship between tax planning and firm value, especially for groups of companies with different levels of state ownership. Company managers and the Government can be consulted when making relevant financial decisions or policies.

Keywords: firm value, non-financial companies, state ownership, tax planning

DOI: http://dx.doi.org/10.15549/jeecar.9i2.700

INTRODUCTION
Van Horne & Wachowicz (2008) suggested that efficient financial management is under continuous review. Shareholders who are dissatisfied with financial performance may sell their shares and invest in another company. This action will put downward pressure on the market price per share and the firm's market value. Accordingly, these relationships require management to judge alternative investment, financing, and asset management decisions regarding their effect on firm value.

Khan & Jain (2011), Van Horne & Wachowicz (2008), Nguyen (2007) recommend that firms' financial managers need to consider the tax environment to gain a basic understanding of
how tax implications may impact various financial decisions. Khan & Jain (2011) also showed that tax planning could be integral to working capital planning. Firms expect the broad scope to reduce tax liability through proper tax planning; they seek to take advantage of the various tax concessions and incentives through tax avoidance instead of tax evasion.

Compared to research on developed markets, past works related to state ownership's impact on the association between tax planning and firm value of non-financial listed firms in Vietnam are relatively limited and have mixed findings. Nguyen & Phan (2017) concluded that high state ownership reduces the tax avoidance incentives of 460 firms listed on the Vietnam Stock Exchange market from 2009 to 2015. However, the authors imply that tax avoidance inversely affects firm value. From the agency theory perspective, Nguyen et al. (2020) expected to find the positive nexus between tax avoidance and firm performance. Still, their results are mixed because of the use of different indicators to measure the independent and dependent variables. We realize that tax avoidance consists of current tax or permanent differences; simultaneously, firm performance measured by Tobin's Q is more robust and consistent to mean investor behavior on firm performance. Importantly, Nguyen et al. (2020) had not taken state ownership into account, a prominent characteristic of Vietnamese enterprises in general and listed firms in particular, to clarify if state-controlled firms prefer tax planning to non-state-controlled firms. In the same view of managers-principals problems, Nguyen et al. (2021) had the same findings as Nguyen & Phan (2017).

Altogether, our paper contends that the incentives of state-owned shareholders influence the value of tax planning. In other words, the conflicts of interests in state-controlled shareholders themselves, or between them and other shareholders, affect tax decision-making, then cause firm value. The direction of the effect depends on the state of the Vietnamese tax system and state ownership of firms after economic reform.

Vietnam has reformed its tax system five times since the early 1990s. Its tax system is now still state tax, with nine different taxes: corporate income tax, personal income tax, value-added tax, excise tax, environment protection tax, agriculture land use tax, non-agriculture land use tax, import-export tax, and natural resource tax. All taxes contribute only 80% to governmental revenue, mainly from value-added tax, corporate income tax, and import-export tax (Bhattarai et al., 2019). According to Clause 1, Article 35 of Vietnam Budget Law 2015, 100% of tax revenue is mainly from trade-related revenue, petroleum-related revenue, and corporate income taxes from large state-owned enterprises belonging to the central government. However, 100% of the local budget is from the natural resource tax, agriculture land use tax, and non-agriculture land use tax. Remarkably, the governmental budget can allocate shared tax revenue with the same rate for each tax but different shares for each province. Thus, state-owned enterprises in another area and governed by government or local authorities particularly have tax decision-making. Consequently, the home country's system characteristics influence tax planning and avoidance. Atwood et al. (2012) also indicated that a firm avoids taxes due to managers' incentives for compensative ownership.

Though Vietnam is transitioning from central planning to a market economy, the government still plays an essential role in listed firms. The question, though, is whether state ownership is a mechanic that can help firms have more effective tax planning or is a good funding tool for the state budget. This study investigates the impact of state ownership on tax planning's value enhancement in Vietnamese listed firms from the perspective of financial management.

In addition to the Introduction above, our study is structured in five parts: (i) Section 2 presents literature reviews and hypotheses development; (ii) Section 3 presents the research model, (iii) Section 4 presents the data and methodology, (iv) Section 5 presents the research results and discussions, and (v) Section 6 presents the conclusions and recommendations.

**LITERATURE REVIEWS AND HYPOTHESES DEPENDMENT**

Agency and traditional theory are two perspectives to explain the relationship between tax planning and firm value. Agency theory argues that tax planning harms firm value because managers can reduce earning accounting or tax obligations (Desai & Dharmapala, 2009; Wahab & Holland, 2012).
Chen et al. (2014) suggest that corporate tax avoidance behavior increases agency costs. The traditional theory suggests that tax avoidance increases after-tax income, which benefits shareholders (Ilaboya et al., 2016). On the other hand, tax planning improves shareholder value (Graham et al., 2014; McGuire et al., 2012). Owners are expected to consider the benefits of tax avoidance toward the cost of the possible loss (Hanlon & Heitzman, 2010), so an owner’s assessment of the benefit-cost trade-off of tax avoidance will explain corporate tax avoidance behavior.

Desai & Dharmapala (2009) investigated the link between tax avoidance and firm value by examining 862 companies in the United States. Their research found no relationship between tax avoidance and firm value. Chen et al. (2014) examined the link between corporate tax avoidance and firm value in Chinese by data from 456 listed companies for 2001-2009. The study showed that corporate tax avoidance behavior reduced firm value. Ftouhi et al. (2015) examined the effect of tax savings and effective tax rates on firm value in Europe. Using a sample of 73 companies listed over the period 2008-2012, they found that tax planning negatively impacted firm value. Lestari & Wardhani (2015) examined the impact of corporate tax planning behavior on firm value. Using data from 442 non-financial firms listed on the Indonesia Stock Exchange for 2010-2011, they found a positive relationship between tax planning and firm value. In addition, board diversity increased the positive effect of tax planning on firm value. Nwaobia et al. (2016) analyzed the impact of tax planning on firm value in the Nigerian Stock Exchange context, using data from 50 companies listed over the period 2010-2014. The research showed that effective tax rates positively and significantly affected firm value. Razali et al. (2018) investigated the effect of tax planning on firm value by using a sample of 387 firms listed in Bursa Malaysia from 2014 to 2016, and confirmed that the effective tax rate positively linked to firm value.

On the other hand, book-tax differences harm firm value (Razali et al., 2018). Similarly, Christina (2019) indicated a negative relationship between corporate tax planning and firm value. Bhagiawan & Mukhlasin (2020) explored the impact of tax planning on firm value by using a sample of 266 firms listed on the Indonesia Stock Exchange over the period 2016-2018. They found a positive relationship between corporate tax planning behavior and firm value. From the above previous research, we suggest the first hypothesis as follows:

**Hypothesis H1:** The effective tax rates to represent for tax planning have negative effects on the firm value of Vietnamese listed companies.

Based on the viewpoint of political power theory on tax planning, firms with higher state ownership are associated with a lower effective tax rate due to the tax incentives offered by rules (Vu & Le, 2021). On the other hand, agency theory suggests that increases in institutional ownership are related to increases in tax avoidance (Khan et al., 2017). Dyreng et al. (2010) showed that managers have an individual impact on tax avoidance because they are expected to ponder the personal benefits against the personal costs in the case of conscription action by tax authorities. Bradshaw et al. (2019) confirmed the relationship between tax planning and agency conflicts; their conflicts were between minority and controlling shareholders (Bradshaw et al., 2019).

Zeng (2010) explored the impact of state ownership on effective tax rates, using a sample of 758 listed firms in China over 1998-2008. He found a positive relationship between state ownership and the effective tax rate. Similarly, Bradshaw et al. (2019) also found that state-owned firms have higher effective and cash tax rates than others. Bird & Karolyi (2017) investigated the impact of institutional ownership on tax avoidance. Using a sample of 6,603 firms over 1996-2006, they found that ownership structure hurts corporate tax planning. Tijjani & Peter (2020) examined the impact of ownership structure on tax planning of non-financial firms in Nigeria. Using a sample of 106 firms over the period 2008-2017, they found that institutional ownership has no significant positive impact on corporate tax planning. Hilling et al. (2021) investigated the effect of state ownership on corporate tax avoidance in Sweden. Using data from 2,300 firm-year observations over the period 2000-2019, they indicated that the degree of tax avoidance is a lessening function of state ownership.

In Vietnam, Nguyen & Phan (2017) examined the link between corporate tax avoidance behavior and state-owned firms by using data
from 460 listed firms over the period 2009-2015. They found that state ownership had a negative association with corporate tax avoidance. Vu & Le (2021) investigated the impact of tax planning on firm value; using a sample of 513 enterprises listed from 2015 to 2019, they confirmed a negative relationship between tax planning and firm value. On the other hand, firms with a higher level of state ownership have more negative impacts on firms’ value than others (Vu & Le, 2021). In addition, Do & Pham (2016), Vu & Le (2021) confirmed that state ownership positively impacted firm value. Following these prior studies, we suppose state ownership is associated with tax planning and firm value, so we propose the hypotheses related to state ownership in the research model of the impact of tax planning on firm value as follows:

**Hypothesis H2a:** The negative relationship between tax planning and firm value has a significant difference among companies with shares owned by the State and companies without shares owned by the State.

**Hypothesis H2b:** The moderation of state ownership increases the negative impact of tax planning on the firm value of Vietnamese listed companies.

**Hypothesis H2c:** The increased moderation of state ownership on the negative impact of tax planning on firm value differs significantly between state-owned-controlled and non-state-controlled companies.

### RESEARCH MODEL

To test hypotheses H1 and H2a, the research model includes the firm value (FV) as the dependent variable and tax planning (TP) as the independent variable. In addition, the model has control variables, including tangible fixed assets (TANG), financial leverage (FLEV), and firm size (FSIZE). Thus, the first regression model is formulated as the following:

\[
FV_{i,t} = \beta_0 + \beta_1 TP_{i,t} + \beta_2 TANG_{i,t} + \beta_3 FLEV_{i,t} + \beta_4 FSIZE_{i,t} + \epsilon_{i,t} \quad (Model \ 1)
\]

| Variables | Measurement of variables | Empirical studies |
|-----------|--------------------------|-------------------|
| FV        | Market value of equity + Book value of debt Book value of total assets | Bhagiavan & Mukhlasin (2020), Razali et al. (2018), Ftouhi et al. (2015), Vu & Le (2021) |
| TP        | Total income tax costs (current and deferred tax) Total accounting profit before tax | Christina & Alexander (2018), Bhagiavan & Mukhlasin (2020), Lestari & Wardhani (2015), Razali et al. (2018), Ftouhi et al. (2015), Nwaobia et al. (2016), Vu & Le (2021) |
| SO        | Market value of state equity Market value of all equity | Nguyen & Phan (2017), Vu & Le (2021) |
| TANG      | Tangible fixed assets Total assets | Lestari & Wardhani (2015), Razali et al. (2018), Ftouhi et al. (2015), Nwaobia et al. (2016); Vu & Le (2021) |
| FLEV      | Total debts Total assets | Razali et al. (2018), Ftouhi et al. (2015), Nwaobia et al. (2016); Vu & Le (2021) |
| FSIZE     | Logarithm base 10 of total assets | Christina & Alexander (2018), Bhagiavan & Mukhlasin (2020), Razali et al. (2018), Vu & Le (2021) |

Source: Compiled by the authors

According to the hypotheses H2b, H2c and H2d, we add the state ownership (SO) variable to the first model to form the second model. The variable SO is both an independent variable and
a moderator for the impact of tax planning on firm value. The second regression model is formulated as the following:

\[ FV_{i,t} = \beta_0 + \beta_1 TP_{i,t} + \beta_2 TANG_{i,t} + \beta_3 FLEV_{i,t} + \beta_4 FSIZE_{i,t} + \beta_5 SO_{i,t} + \beta_6 (TP \cdot SO)_{i,t} + \epsilon_{i,t} \quad \text{(Model 2)} \]

In the above two models, i is used to index companies and t to index year; \( \epsilon \) is the error term, \( \beta_0 \) is the constant (intercept), and \( \beta_1, \beta_2, \beta_3, \beta_4, \beta_5, \beta_6 \) are the coefficients. Table 1 below shows the measurement of variables in our models.

**DATA AND METHODOLOGY**

We used the purposive sampling method to identify a sample of 504 listed non-financial companies in Vietnam for the period 2015-2020. Firms in the financial sector are excluded because of their accounting and tax specificities. To ensure the consistency of the item structure in the financial reporting system, we selected the research scope from 2015 to the most recent year. All financial statements in this period are prepared according to the accounting regime based on the guidance of Circular 200/2014/TT-BTC applying the fiscal year starting from 1\textsuperscript{st} January 2015. The research data was collected from the FiinPro System of FiinGroup Joint Stock Company (Vietnam), including audited financial statements and stock trading statistics.

Our research data was structured as panel data with 3024 observations. Accordingly, we used the basic estimation methods for this data type, including the fixed effect model (FEM) and the random effect model (REM). The outcomes of these estimations then were evaluated by Hausman test to find the most relevant result. We continued to test for autocorrelation and heteroskedasticity according to this selection result. If they were confirmed to exist in the model, we fixed them using the generalized least squares (GLS) method.

For the first research model, we estimated for the entire sample of 504 companies with 3024 observations to test hypothesis H1. In addition, we also split this research sample into two groups, group 1 and group 2. Group 1 included companies having shares owned by the State, while group 2 contained companies that did not have shares owned by the State. The number of observations in each group is 1811 and 1213, respectively. Accordingly, we compared the estimation results to conclude the difference in the impact of tax planning on the firm value of these two groups of companies, thereby testing hypothesis H2a.

For the second research model, we estimated group 1 above to test hypothesis H2b. We then further subdivided group 1 into group 1a and group 1b. Group 1a consisted of state-owned-controlled companies (identified by the State's share ownership rate above 50%), including 889 observations. Group 1b were non-state-owned-controlled companies (identified by the State's share ownership rate less than 50%), including 922 observations. Accordingly, we compared the estimated results to conclude the difference in the moderating role of state ownership on the impact of the tax planning on the firm value of these two groups of companies, thereby testing hypothesis H2c.

**RESEARCH RESULTS AND DISCUSSIONS**

## Descriptive Statistics

### Table 2. Descriptive statistics

| Variables | Mean  | Maximum | Minimum | Std. Dev | Observations |
|-----------|-------|---------|---------|----------|--------------|
| FV        | 1.0936| 86.8339 | 0.0813  | 1.6751   | 3024         |
| TP        | 0.1883| 0.9683  | 0.0000  | 0.1210   | 3024         |
| TANG      | 0.2142| 0.9400  | 0.0000  | 0.2044   | 3024         |
| FLEV      | 0.4771| 0.9932  | 0.0041  | 0.2253   | 3024         |
| FSIZE     | 5.8294| 8.0669  | 4.1830  | 0.6751   | 3024         |
| SO        | 0.2584| 0.9672  | 0.0000  | 0.2628   | 3024         |

Source: Calculated by the authors

The variable FV ranges from a minimum of 0.0813 to a maximum of 86.8339 and has a standard deviation of 1.6751. The variable TP is represented by the effective tax rate with an
average value of 18.83% and a standard deviation of 12.10%. Compared with the common tax rate in 2015 (22%) and the period 2016–2020 (20%) as prescribed by the State, the average effective tax rate of companies is lower, showing that the tax burden can be reduced through firms' tax planning or preferential policies of the Government; this has a positive impact on firm value.

Regarding the State's share ownership rate in companies, according to Table 2, the average value is 25.84% and the highest is 96.72%; besides, there are many companies without shares owned by the State. Table 2 also shows the level of investment in tangible fixed assets with an average proportion of 21.42% of total assets, the level of financial leverage that is represented by a debt ratio with an average value of 47.71% and size of companies with an average logarithm of total assets of 5.8294.

**Correlation Coefficients Matrix**

Based on Table 3 below, we find a negative relationship between TP represented by the effective tax rate and FV, but it does not guarantee statistical significance. In addition, the correlations between FV and FSIZE, between FV and SO are also not statistically significant. Meanwhile, FV is positively correlated with TANG at the 10% level of significance and FV is negatively correlated with FLEV at the statistical significance level of 1%.

|       | FV   | TP    | TANG     | FLEV    | FSIZE | SO       |
|-------|------|-------|----------|---------|-------|----------|
| FV    | 1.0000 |      |          |         |       |          |
| TP    | -0.0175** | 1.0000 |          |         |       |          |
| TANG  | 0.0327 | -0.1091*** | 1.0000 |         |       |          |
| FLEV  | -0.0768*** | 0.1302*** | -0.0497*** | 1.0000 |       |          |
| FSIZE | -0.0014** | 0.0458* | 0.1081*** | 0.3311*** | 1.0000 |          |
| SO    | 0.0274** | 0.0835*** | 0.1601*** | 0.0658*** | -0.0081** | 1.0000 |

Notes: ***, ** and * indicate significance at 1%, 5% and 10%, respectively
“” indicate no statistical significance
Source: Calculated by the authors

Table 3 also provides correlation coefficients in the group of explanatory variables. For each pair of variables, the positive correlation coefficient ranges from 0.0458 to 0.3311, and the negative correlation coefficient ranges from -0.0081 to -0.1091. According to Hair et al. (2006) and Gujarati (2008), these results indicate that multicollinearity is not a serious problem in the research models.

**Regression Analysis**

Table 4 summarizes the estimated results for Model 1 according to FEM and REM. The P values from Hausman test of 3 cases is less than 5%, these results indicate that FEM is more suitable than REM. Susmel (2015) and Hair et al (2006) confirmed that FEM is only interested in individual differences contributing to the model, so there is no autocorrelation. In addition, based on the FEM estimation results, we used the Wald test and it showed that the P values were less than 5%. Therefore, we confirmed that there is the heteroskedasticity problem, and this problem is fixed by the GLS in Table 5.

According to Table 5, at the 1% level of significance, TP negatively affects the FV of firms when considering the entire sample of 504 companies and group 1.
### Table 4. Estimation results according to FEM and REM – Model 1

| Variables / Tests | All sample | Group 1 | Group 2 |
|-------------------|------------|---------|---------|
|                   | FEM        | REM     | FEM     | REM     | FEM     | REM     |
| TP                | -0.0551\(^{*}\) | -0.0572\(^{*}\) | 0.0441\(^{**}\) | -0.0564\(^{**}\) | -0.0849 | -0.0185\(^{**}\) |
|                   | [-1.7070] | [-1.7845] | [-1.0381] | [-1.3412] | [-1.6487] | [-0.1970] |
| TANG              | 0.0723\(^{**}\) | 0.1444\(^{**}\) | -0.0315\(^{**}\) | 0.0527\(^{**}\) | 0.2369 | 0.3585 |
|                   | [1.2310] | [2.9172] | [-0.4153] | [0.8867] | [2.3736] | [4.9899] |
| FLEV              | 0.3334\(^{**}\) | 0.2435\(^{**}\) | 0.1858 | -0.0200\(^{**}\) | 0.5556 | 0.5737 |
|                   | [6.7625] | [5.6499] | [2.5887] | [-0.3652] | [6.8265] | [9.2195] |
| FSIZE             | -0.0188\(^{**}\) | 0.0216\(^{**}\) | -0.0264\(^{**}\) | 0.0713\(^{**}\) | 0.0144\(^{**}\) | 0.0331\(^{**}\) |
|                   | [-0.6644] | [1.0724] | [-0.4873] | [2.5802] | [0.3774] | [1.6211] |
| C                 | -0.0932\(^{**}\) | -0.3014\(^{**}\) | 0.1032\(^{**}\) | -0.3866\(^{**}\) | 0.0144\(^{**}\) | 0.0331\(^{**}\) |
|                   | [-0.5800] | [-2.6256] | [0.3486] | [-2.5258] | [0.3774] | [1.6211] |
| Prob (F-statistic)| 0.0000 | 0.0000 | 0.0000 | 0.0415 | 0.0000 | 0.0000 |
| Wald Test         | 206.7783 (0.0000) | 59.8169 (0.0000) | 705.5750 (0.0000) |

Notes: \(^{*}\), \(^{**}\) and \(^{***}\) indicate significance at 1%, 5% and 10%, respectively. 
\(^{\text{ns}}\) indicate no statistical significance; (…) indicate P-value; [….] indicate t-Statistic

Source: Calculated by the authors

Meanwhile, the relationship between TP and FV is not statistically significant in the case of group 2. In addition, the estimation results according to GLS also show that TANG, FLEV and FSIZE are statistically significant at the 1% level to explain FV in the case of non-financial companies listed in Vietnam.

### Table 5. Estimation results according to GLS – Model 1

| Variables | All sample | Group 1 | Group 2 |
|-----------|------------|---------|---------|
| TP        | -0.0563\(^{***}\) | -0.1294\(^{***}\) | 0.0287\(^{**}\) |
|           | [-4.5150] | [-7.1190] | [0.9666] |
| TANG      | 0.2154\(^{**}\) | 0.0843\(^{**}\) | 0.3509\(^{**}\) |
|           | [21.4004] | [8.5644] | [16.1922] |
| FLEV      | 0.0271\(^{**}\) | -0.3812 | 0.5723 |
|           | [2.9829] | [-37.8466] | [37.2596] |
| FSIZE     | 0.0665\(^{**}\) | 0.1115\(^{**}\) | 0.0395\(^{**}\) |
|           | [20.4466] | [34.3532] | [8.0701] |
| C         | -0.4910\(^{**}\) | -0.4271\(^{**}\) | -0.7049\(^{**}\) |
|           | [-28.3475] | [-25.1127] | [-25.8803] |
| Prob (F-statistic) | 0.0000 | 0.0000 | 0.0000 |

Notes: \(^{**}\) indicate significance at 1%; \(^{***}\) indicate no statistical significance
[…] indicate t-Statistic

Source: Calculated by the authors

Similarly, we continue to use FEM and REM to estimate the relationships of Model 2. The Hausman test results show that FEM is more suitable than REM. Accordingly, the second model has no autocorrelation problem, but this model has heteroskedasticity problem based on the results of the Wald test (identified by P values less than 5%). Therefore, we overcome this problem by using GLS, and the estimation results are summarized in Table 7.
Table 6. Estimation results according to FEM and REM – Model 2

| Variables / Tests | Group 1 | Group 1a | Group 1b |
|------------------|---------|----------|----------|
|                  | FEM     | REM      | FEM      | REM      | FEM      | REM      |
| TP               | -0.1166*** [-1.3253] | -0.1261*** [-1.4575] | -0.1507*** [-0.5819] | -0.2041*** [-0.7927] | -0.1268*** [-0.9882] | -0.1299*** [-1.0466] |
| TANG             | -0.0267*** [-0.3544] | 0.0623*** [1.0497] | 0.0513*** [0.7009] | 0.0889*** [1.4027] | -0.2861 | 0.0492*** [0.5239] |
| FLEV             | 0.2128 [2.9738] | -0.0180*** [-0.3293] | 0.4437 [5.1871] | 0.1854 [2.8068] | 0.1216*** [1.0556] | -0.1924 [-2.4044] |
| FSIZE            | -0.0561*** [-1.0351] | 0.0738*** [2.6731] | -0.2060*** [-2.9125] | 0.0173*** [0.4442] | -0.0161*** [-0.1937] | 0.1043*** [2.8673] |
| SO               | -0.3609*** [-6.4645] | -0.2169 [3.2560] | 0.1200*** [0.6331] | 0.1495*** [0.8786] | -1.0545*** [-5.9218] | -0.3102 [-2.2135] |
| TPSO             | 0.1857*** [1.0220] | 0.1737*** [0.9693] | 0.1744*** [0.4173] | 0.2394*** [0.5757] | 0.2844* [0.6482] | 0.2466*** [0.5816] |
| C                | 0.4144*** [1.3758] | -0.3148*** [-2.0612] | 0.9079*** [2.2355] | -0.2924*** [-1.2943] | 0.4514*** [0.9981] | -0.3756*** [-1.8738] |
| Prob (F-statistic) | 0.0000 | 0.0020 | 0.0000 | 0.0081 | 0.0000 | 0.0072 |
| Hausman Test     | 39.5278 (0.0000) | 28.6338 (0.0001) | 130.7255 (0.0000) | 57.5145 (0.0000) |
| Wald Test        | 83.3654 (0.0000) | 35.5831 (0.0000) | 130.7255 (0.0000) | 57.5145 (0.0000) |

Notes: *** and * indicate significance at 1%, 5% and 10%, respectively

ns indicate no statistical significance; (...) indicate P-value; [...] indicate t-Statistic

Source: Calculated by the authors

According to the GLS regression in Table 7, the relationship between TP and FV is *statistically significant in the case of group 1 and group 1a*, but not for group 1b. The interaction between TP and SO is *statistically significant in the case of group 1a*, but not for group 1 and group 1b.

Table 7. Estimation results according to GLS – Model 2

| Variables | Group 1 | Group 1a | Group 1b |
|-----------|---------|----------|----------|
|           | FEM     | REM      | FEM      | REM      | FEM      | REM      |
| TP        | -0.1240*** [-7.4958] | -0.9156*** [-5.5622] | -0.0032*** [-0.0636] |
| TANG      | 0.0920 [9.4316] | 0.0420 [3.0568] | 0.2114 [11.2901] |
| FLEV      | -0.3758*** [-30.4341] | -0.2245*** [-16.4962] | -0.5347*** [-33.1553] |
| FSIZE     | 0.1146 [34.1749] | 0.1263 [31.8720] | 0.1437 [22.3404] |
| SO        | -0.0942 [-6.0616] | -0.4524 [-6.7745] | 0.3315 [7.6145] |
| TPSO      | -0.0244*** [-0.4501] | 1.2215*** [4.6129] | -0.1393*** [-0.8456] |
| C         | -0.4102 [-23.1787] | -0.3530 [-7.8119] | -0.6256 [-16.7948] |
| Prob (F-statistic) | 0.0000 | 0.0000 | 0.0000 |

Notes: *** and * indicate significance at 1%, 5% and 10%, respectively

ns indicate no statistical significance; [...] indicate t-Statistic

Source: Calculated by the authors
Thus, TP contributes to reducing effective tax rates and increasing FV in case of state-owned-controlled companies. If the State's share ownership rate is higher than 50%, it will more strongly moderate the negative effect of TP on FV. In addition, Table 7 also shows that TANG, FLEV, FSIZE and SO are statistically significant at the 1% level to explain FV in the case of state-owned companies.

**DISCUSSIONS**

Table 8 summarizes our findings according to each hypothesis. The hypothesis H1 is accepted, meaning that tax planning positively affects firm value. The more firms save tax expenses, the higher the firm value is. This result lines with the traditional theory that reducing tax costs benefits shareholders (Ilaboya et al., 2016). From another perspective, reducing agency costs from good tax governance also enhances firm value-adding (Desai & Dharmapala, 2009). Moreover, the research results support the hypotheses H2a, H2c but do not support H2b, indicating that the association between tax planning and firm value depends on state ownership in firms.

**Table 8. Summary of our findings**

| Hypotheses | Description | Our findings |  |
|------------|-------------|--------------|---|
| H1         | The effective tax rates to represent tax planning negatively affect the firm value | Accepted |  |
| H2a        | The negative relationship between tax planning and firm value has a significant difference between companies with shares owned by the State and companies without shares owned by the State | Accepted | Group 1 (Firms with shares owned by the State): Negative Group 2 (Firms without shares owned by the State): Insignificant |
| H2b        | The moderation of state ownership increases the negative impact of tax planning on the firm value | Rejected |  |
| H2c        | The increased moderation of state ownership on the negative impact of tax planning on firm value differs significantly between state-owned-controlled and non-state-controlled companies | Accepted | Group 1a (State-owned-controlled firms): Incremental moderation. Group 1b (Non-state-owned-controlled firms): Insignificant. |

Source: Compiled by the authors

There is a significant difference between the relationship of tax planning on firm value in groups of companies with and without state ownership. The results show that this association is negatively significant in firms with state shares while insignificant in the latter. In other words, only state-owned firms have tax benefits; thus, this is not consistent with Nguyen et al. (2021) and Nguyen & Phan (2017). Though the moderation of state ownership insignificantly increases the negative impact of tax planning on the firm value in having state equity and non-state-controlled firms, it incrementally does in state-controlled firms. Thus, this finding clarifies to Vu and Le (2021).

As mentioned above, large state-owned enterprises’ income tax belongs to the central government. Besides, large state-owned enterprises are often in crucial industries. From the perspective of political power theory, large size and profitable firms can reduce the effective tax rate, thus enhancing firm value. Consequently, these firms prefer tax benefits to tax obligations. In this case, the Vietnamese government collects fewer taxes for budgets. We finally contend that these research findings align with the traditional theory and challenge the agency theory about whether state-controlled shareholders set off tax revenue for their stock price.
CONCLUSIONS AND RECOMMENDATIONS

We find that state ownership plays a crucial role in determining the firm’s goal, particularly the significantly negative impact of the effective tax rate on firm value. The magnitude of the effect is more prominent in state-controlled firms to state-owned firms in more detail. Collectively, tax decisions benefit state-controlled shareholders, but state-owned firms are less attentive to the value of tax planning.

Our research contributes to academic literature. First, we provide further evidence on the significant role of state ownership in tax planning firms’ value. Second, non-state-owned firms experience meaningless tax activities. Third, this research proposes state-controlled shareholders consider between tax revenue and their stock price.

Future research can explore the national and local government’s particular role in firms’ tax activities. In addition, the firm size factor should be considered to clarify the political connection of state-controlled firms.

REFERENCES

Atwood, T., Drake, M. S., Myers, J., & Myers, L. A. (2012). Home Country Tax System Characteristics and Corporate Tax Avoidance: International Evidence. The Accounting Review, 87, 1831-1860.

Bhagiawan, G., & Mukhlasin, M. (2020). Effect of corporate governance on tax planning & firm value. International Journal of Commerce and Finance, 6(2), 72–80.

Bhattarai, K., Nguyen, D. T. T., & Nguyen, C. V. (2019). Impacts of Direct and Indirect Tax Reforms in Vietnam: A CGE Analysis. Economies, 7(10), 1–36.

Bird, A., & Karolyi, S. A. (2017). Governance and Taxes: Evidence from Regression Discontinuity (Retracted). The Accounting Review, 92(1), 29–50.

Bradshaw, M., Liao, G., & Ma, M. S. (2019). Agency costs and tax planning when the government is a major shareholder. Journal of Accounting and Economics, 67(2–3), 255–277.

Chen, X., Hu, N., Wang, X., & Tang, X. (2014). Tax avoidance and firm value: evidence from China. Nankai Business Review International, 5(1), 25–42.

Christina, S. (2019). The Effect of Corporate Tax Planning On Firm Value. Accounting and Finance Review, 4(1), 1–4.

Desai, M. A., & Dharmapala, D. (2009). Corporate tax avoidance and firm value. The Review of Economics and Statistics, 91(3), 537–546.

Dyreng, S. D., Hanlon, M., & Maydew, E. L. (2010). The effects of executives on corporate tax avoidance. The Accounting Review, 85(4), 1163–1189.

Fernández-Rodríguez, E., García-Fernández, R. & Martínez-Arias, A. (2019). Influence of Ownership Structure on the Determinants of Effective Tax Rates of Spanish Companies. Sustainability, 11, pp. 1-19.

Ftouhi, K., Ayed, A., & Zemzem, A. (2015). Tax planning and firm value: evidence from European companies. International Journal Economics & Strategic Management of Business Process, 4(1), 73–78.

Graham, J. R., Hanlon, M., Shevlin, T., & Shroff, N. (2014). Incentives for tax planning and avoidance: Evidence from the field. The Accounting Review, 89(3), 991–1023.

Nguyen, T. T. H. & Phan, G. Q. (2017). The relationship between state ownership and tax avoidance level: empirical evidence from Vietnamese firms. Journal of Asian Business Strategy, 7(1), 1–12.

Hanlon, M., & Heitzman, S. (2010). A review of tax research. Journal of Accounting and Economics, 50(2–3), 127–178.

Hilling, A., Lundtofte, F., Sandell, N., Sonnerfeldt, A., & Vilhelmsson, A. (2021). Tax avoidance and state ownership—the case of Sweden. Economics Letters, 208, 110063.

Ilaboya, O. J., Izevbekhai, M. O., & Ohiokha, F. I. (2016). Tax planning and firm value: A review of literature. Business and Management Research, 5(2), 81–91.

Khan, M., Srinivasan, S., & Tan, L. (2017). Institutional ownership and corporate tax avoidance: New evidence. The Accounting Review, 92(2), 101–122.

Lestari, N., & Wardhani, R. (2015). The effect of the tax planning to firm value with moderating board diversity. International Journal of Economics and Financial Issues, 5(15), 315–323.

McGuire, S. T., Omer, T. C., & Wang, D. (2012). Tax avoidance: Does tax-specific industry expertise make a difference? The
Nguyen, M. H., Pham, T. A., Xiao-Guang, Y. & Nguyen, H. P. N. (2021). The impact of tax avoidance on the value of listed firms in Vietnam. *Cogent Business & Management, 8*(1), 1930870, Doi: 10.1080/23311975.2021.1930870.

Nguyen, T. L. (2007). *Financial Management*. Vietnam: Statistical Publishing House.

Nwaobia, A. N., Kwarbai, J. D., & Ogundajo, G. O. (2016). Tax planning and firm value: Empirical evidence from Nigerian consumer goods industrial sector. *Research Journal of Finance and Accounting, 7*(12), 172–183.

Razali, M. W. M., Ghazali, S. S., Lunyai, J., & Hwang, J. Y. T. (2018). Tax Planning and Firm Value: Evidence from Malaysia. *International Journal of Academic Research in Business and Social Sciences, 8*(11), 210–222.

Do, T. T. N. D., & Pham, H. (2016). Cash Holding, State Ownership and Firm Value: The Case of Vietnam. *International Journal of Economics and Financial, 6*(56), 110–114. http://www.econjournals.com

Tijjani, B., & Peter, Z. (2020). Ownership structure and tax planning of listed firms: Evidence from Nigeria. *Journal of Accounting and Taxation, 12*(3), 99–107.

Van Horne, J.C. & Wachowicz, J.M. (2008), *Fundamentals of Financial Management (13th edition)*, Prentice Hall (England).

Vu, T. A. T., & Le, H. V. (2021). The Effect of Tax Planning on Firm Value: A Case Study in Vietnam. *The Journal of Asian Finance, Economics, and Business, 8*(2), 973–979.

Wahab, N. S. A., & Holland, K. (2012). Tax planning, corporate governance and equity value. *The British Accounting Review, 44*(2), 111–124.

Zeng, T. (2010). Ownership concentration, state ownership, and effective tax rates: Evidence from China’s listed firms. *Accounting Perspectives, 9*(4), 271–289.

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