



Corporate tax planning, the use of SPV, board independence, and firm value

Iman Sofian Suriawinata^{a*}, Siti Almurni^b

^a Sekolah Tinggi Ilmu Ekonomi Indonesia, Jakarta, Indonesia; iman.suriawinata@stei.ac.id*

^b Sekolah Tinggi Ilmu Ekonomi Indonesia, Jakarta, Indonesia; siti_almurni@stei.ac.id

ARTICLE INFO

Article History:

Received 04-18-2022

Revised 08-07-2022

Accepted 02-06-2023

Kata Kunci:

Perencanaan pajak korporasi, nilai perusahaan, special purpose vehicles, independensi dewan komisaris

Keywords:

Corporate tax planning, firm value, special purpose vehicles, board independence

ABSTRAK

Banyak penelitian yang membahas peran penting special purpose vehicles (SPV) di dalam perencanaan pajak korporat, namun belum ada penelitian empiris yang mempelajari relevansi penggunaan SPV tersebut di dalam menciptakan nilai perusahaan. Penelitian ini mengisi kesenjangan tersebut dengan menginvestigasi dampak penggunaan SPV dalam konteks perencanaan pajak terhadap nilai perusahaan. Karena perencanaan pajak adalah kegiatan yang berisiko, maka perlu diketahui peran tata-kelola perusahaan di dalam memastikan bahwa perusahaan memilih tingkat aktivitas perencanaan pajak korporat yang optimal, sekaligus menghindari penyalahgunaan manajemen atas arus kas yang bersumber dari penghematan pajak. Dengan menggunakan moderated regression analysis terhadap 119 sampel perusahaan publik non-finansial dari tahun 2013 sampai 2017, penelitian ini menemukan bahwa penggunaan SPV dalam perencanaan pajak korporat meningkatkan nilai perusahaan, dan perencanaan pajak yang dimoderasi oleh independensi dewan komisaris juga meningkatkan nilai perusahaan.

ABSTRACT

Although many studies discuss the significant role of special purpose vehicles (SPVs) in the corporate tax planning context, no prior empirical research exists on the value relevance of such use. Our study fills the gap by investigating the impact of the use of SPVs in corporate tax planning on firm value. Since tax planning is a risky endeavor, of particular interest is the role of corporate governance mechanisms in ensuring that firms select optimal levels of corporate tax planning activities and preventing managerial diversion of tax-saving related cash flows. Using moderated regression analysis on a sample of 119 listed non-financial firms from 2013 to 2017, we find that the use of SPVs in corporate tax planning enhances firm value and that corporate tax planning moderated by board independence also increases firm value.

*Corresponding Author

INTRODUCTION

Based on the neo-classical financial economics theory, the objective of the firm is the maximization of the shareholder wealth, which is equivalent to the maximization of firm value (Brigham & Daves, 2019; Fama & Miller, 1972; Ross *et al.*, 2019; Weston & Shastri, 2014). A firm can maximize its value through various financial and non-financial strategies that will maximize its after-tax free cash flows, which are then discounted by its cost of capital to obtain firm value (Damodaran, 2012; Koller *et al.*, 2020). Corporate tax planning is one such strategy where firms or corporations implement tax planning strategies to maximize their after-tax cash flows or returns. Additionally, an effective tax planning must consider the role of taxes when implementing the decision rule of maximizing after-tax returns (Scholes *et al.*, 2015). Lastly, Schwab *et al.* (2022) emphasize that effective corporate tax planning focuses on maximizing after-tax returns, not merely on minimizing corporate taxes.

Hoffman (1961) is an early contributor to the development of the theory of tax planning. Hoffman (1961) defines that tax planning as the taxpayer's ability to arrange financial activities in such a manner to obtain a minimum tax expense. Furthermore, Hoffman (1961) asserts that tax planning involves the use of foresight, strongly associated with tax-related consequences of future activities, and the ultimate goal of the tax planning process is tax avoidance. However, tax avoidance should be distinguished from tax evasion. Tax evasion implies fraudulent undertakings by intentionally misrepresenting or omitting important financial information to evade legally enforceable taxes. Organisation for Economic Co-operation and Development (OECD) defines tax evasion as illegal arrangements where liability to tax is hidden or ignored, i.e. the taxpayer pays less tax than legally obligated to pay by hiding income or information from the tax authorities (OECD, 2020). On the other hand, tax avoidance is acceptable as long as tax laws or regulations are not violated. The US Supreme Court (1935) stated that "the legal right of a taxpayer to decrease the amount of what otherwise would be his taxes, or altogether avoid them, by means which the law permits, cannot be doubted." In practice, tax avoidance may be achieved by means of taking advantage of existing tax loopholes (Khaoula & Ghardallou, 2020) or profiting from tax arbitrage opportunities (Phillips *et al.*, 2021).

In the literature, tax planning and tax avoidance are used interchangeably, and they both refer to the efforts of reducing tax liabilities without violating the prevailing tax laws or regulations. Some researchers, such as Armstrong *et al.* (2012); Hong & Smart (2010); Taylor & Richardson (2014); Wahab & Holland (2012); Wilde & Wilson (2018) use the tax planning term. While other researchers, such as Amidu *et al.* (2016); Beladi *et al.* (2018); Chan *et al.* (2016); Chen *et al.* (2014); Mihir A. Desai & Dharmapala (2009); Jiménez-Angueira (2018); McGuire *et al.* (2012) use the tax avoidance term. As in Armstrong *et al.* (2015), we utilize corporate tax planning and tax avoidance interchangeably.

Extending on Hoffman Jr. (1961); Scholes *et al.* (2015), we define corporate tax planning as the arrangements of present and future business and financial transactions with inherent tax consequences that will result in optimal corporate tax liabilities that maximize after-tax cash flows and firm value. Tax planning strategies vary from as simple as choosing a double-declining depreciation method for tax purposes with the results of paying lower tax liabilities in earlier periods but paying higher taxes in later periods to as complex as structuring business transactions involving an establishment of a special purpose vehicle in a tax-treaty or tax-haven country to maximize global after-tax cash flows.

Previous empirical studies on the relationship between corporate tax planning and firm value have provided mixed results. For instance, Desai & Dharmapala (2009) find no significant relationship between tax avoidance and firm value. However, when they interact tax avoidance with institutional ownership, they find a positive relationship between tax planning and firm value. They conclude that corporate governance, as proxied by institutional ownership, plays an important role in moderating the effect of tax avoidance on firm value. Other studies that find positive relationships between corporate tax planning and firm value Chan *et al.* (2016); Inger (2014); Inger & Vansant (2019). Like Desai & Dharmapala (2009); Dewanata & Achmad, (2017) also find a non-significant relationship between tax planning and firm value but find a positive relationship when the tax planning is moderated with corporate governance.

On the other hand, studies by Chen *et al.* (2014); Prastiwi & Walidah (2020); Wahab & Holland (2012) find negative relationships between corporate tax planning and firm value. Using smoothness in taxable income as a proxy for tax-planning strategy, Mayberry *et al.* (2015) highlight that tax planning is negatively related to stock returns. Lastly, Pradnyana & Noviari (2017) also find a negative relationship between tax planning and firm value but find a positive relationship between tax planning moderated by financial reporting transparency and firm value.

There are numerous studies relating to the impact of corporate tax planning on firm value, either independently or moderated by some corporate characteristics deemed important (e.g. corporate governance, financial reporting transparency, and corporate social responsibility). However, there is one area of corporate tax research that is relatively underexplored, and yet it is commonly practiced in the business world. That is, the use of special purpose vehicles or SPVs established in the tax-treaty or tax-haven countries by corporations as part of their global tax-planning strategies. Although many studies explore and discuss the significant role of SPVs in corporate tax planning settings (e.g. Bird & Karolyi (2017); Feng *et al.* (2009); Han *et al.* (2015); Taylor *et al.* (2015); Weyzig, (2013a, 2013b)), no prior research exists on the value relevance of the use of SPVs in a corporate tax planning context.

A corporate tax planning strategy may or may not involve the use of SPVs.

However, with the use of SPVs established in tax-treaty or tax-haven countries, corporations will save more taxes by routing their business transactions through their SPVs. In other words, a corporate tax planning strategy that involves the use of SPVs in its tax-saving scheme should generate more after-tax cashflows compared to other corporate tax planning strategies that do not use SPVs. As a consequence, corporations that use SPVs established in tax-treaty and tax-haven countries in their tax planning strategies should have larger firm values compared to corporations that do not use SPVs, *ceteris paribus*.

Motivated by the assertion that firms use SPVs to attain lower costs of financing, reduce global taxes, and manage reported earnings, a prior study by Suriawinata (2019) shows that the use of SPVs enhances firm value. However, the source of additional value from the use of SPVs in Suriawinata (2019) cannot be specifically identified. It could be from their use in attaining either one or all of the objectives previously mentioned.

On the other hand, using panel data from a sample of 119 non-financial firms listed on the Indonesia Stock Exchange (IDX) covering the period of 2013-2017, our study is the first to fill the research gap of providing direct empirical evidence on the value impact of the use of SPVs in the corporate tax planning context. Following Armstrong *et al.* (2015) findings on the role of board independence and financial sophistication in determining the optimal level of corporate tax planning, our study also explores the moderating effect of board independence on the relationship between corporate tax planning and firm value. Lastly, to consider other factors deemed to affect firm value, we also include several control variables in our analyses.

LITERATURE REVIEW AND HYPOTHESES

Theories on Corporate Tax Planning and Firm Value

Based on the works of Desai *et al.* (2007); Desai & Dharmapala (2009); Hanlon & Heitzman (2010); Kirkpatrick & Radicic (2020) develop three different theoretical frameworks on the relationship between corporate tax planning and firm value. The first framework is built on the aligned shareholder interest theory, which assumes that managers embark on corporate tax planning to maximize after-tax profits. This framework, known as the traditional theory - developed based on the shareholder-wealth maximization paradigm, predicts a positive relationship between corporate tax planning and firm value. The second framework is the management diversion theory - developed based on the managerial-wealth or managerial-utility maximization paradigm, which predicts a negative relationship between corporate tax planning and firm value on the ground that the resulting tax savings are diverted by managers for their personal use. Lastly, the third framework predicts no relationship between corporate tax planning and firm value, which prediction is founded on the assumptions that shareholders are risk-neutral and managers are provided with the right incentive

schemes to maximize after-tax cash flows.

Our study has a different view from that of Kirkpatrick & Radicic (2020); instead of three frameworks, we only propose two. We concur with the first two frameworks developed by Kirkpatrick & Radicic (2020) but disagree with the third framework of no association or relationship between corporate tax planning and firm value. Corporate tax planning is a complex and advanced endeavor that involves a combination of unique expertise and knowledge in accounting, finance, taxation, and the relevant law. Undoubtedly, a corporation that implements effective corporate tax planning will have higher after-tax cash flows than other corporations that do not have corporate tax planning in place. However, the remaining question is who benefits from the tax savings obtained from corporate tax planning. It could be the shareholders, the managers, or both. This is an empirical question that has been investigated by many researchers with contradictory results.

Our first framework is based on the shareholder wealth maximization paradigm, which aligns with the traditional theory that predicts a positive relationship between corporate tax planning and firm value. However, our view is based on Armstrong *et al.* (2015) that regard corporate tax planning as a standard investment project, where corporate managers select optimal corporate tax planning strategies that maximize the expected future after-tax free cash flows over the life of the projects and provide the highest expected NPVs (net present value). Previous studies that find positive relationships between corporate tax planning and firm value, among others, are Chan *et al.* (2016); Inger (2014); Inger & Vansant (2019).

Nevertheless, Armstrong *et al.* (2015) further assert that in the absence of effective monitoring through corporate governance mechanisms, there is a tendency for firms to either under-invest or over-invest in corporate tax planning activities. Under-invest refers to the reluctance of corporate managers to optimally engage in value-enhancing tax planning activities, which might be due to a lack of tax expertise or relatively high managerial risk aversion. On the other hand, over-invest refers to the excessive or abusive tax planning practices that might expose firms to damaging reputational costs and penalties imposed by tax authorities, which potentially reduce firm value. Armstrong *et al.* (2015) provide evidence that board independence and financial sophistication mitigate the problems of under- and over-investment in corporate tax planning. They find that board independence and financial sophistication have a positive relationship with tax planning at low levels of corporate tax planning, but have a negative association with tax planning at high levels of corporate tax planning. In short, as proxied by board independence and financial sophistication, effective corporate governance encourages corporate managers to do more tax planning activities at low levels of tax planning and reduce tax planning activities at high levels of tax planning. Hence, an optimal level of tax planning activities is achieved.

The second framework is based on the managerial utility or wealth maximization paradigm, where managers implement corporate tax planning to save taxes and set aside additional funds resulting from the tax savings for their personal benefits. In short, as contended by Desai *et al.* (2007); Desai & Dharmapala (2009); Desai & Dharmapala (2006), increases in free cash flows from tax savings would create larger opportunities for managerial diversion of corporate funds. This view fits well with the concept of agency cost of free cash flows as propounded by Jensen (1999), where managers diverted corporate funds for personal perks consumption or value-reducing empire-building activities at the expense of shareholders. Under this view, tax planning is negatively related to firm value. Prior studies that find negative relationships between tax planning and firm value (Chen *et al.*, 2014; Kirkpatrick & Radicic, 2020; Prastiwi & Walidah, 2020; Wahab & Holland, 2012).

A recent study by Shams *et al.* (2022), which investigates the relationship between corporate tax avoidance and managerial empire-building provides interesting results. Using a sample of 35,060 firm-year observations from the United States for the period of 1991–2015, Shams *et al.* (2022) find that tax avoidance is positively associated with managerial empire-building ventures as measured by a composite index developed based on four proxies, i.e. acquisition ratio; the level of capital expenditure; total assets growth; and growth in property, plant, and equipment. Additionally, while Shams *et al.* (2022) find that tax planning is positively associated with firm value, the results of their study also reveal that empire-building motivated tax planning reduces firm value. Though not explicitly stated in their findings, Shams *et al.* (2022) show that tax planning benefits both shareholders through increased firm valuation as well as managers through diversion or deployment of either part or all of the tax savings for their personal gain, such as satisfying their empire-building ambition. Finally, empire-building per se does not necessarily harmful to shareholders, as evidenced by Shams *et al.* (2022) findings of a positive relationship between empire-building and firm value.

Although extant literature on the relationship between corporate tax planning and firm value supports both the seemingly opposing paradigms of the shareholder wealth maximization vis-a-vis the managerial utility maximization objectives, we argue that corporate tax planning could benefit both shareholders and managers as implied by Shams *et al.* (2022) findings. Therefore, our study supports the shareholder-wealth maximization paradigm and hypothesizes the following:

H1: Based on the shareholder-wealth maximization paradigm, corporate tax planning has a positive effect on firm value.

The Use of Special Purpose Vehicle in Corporate Tax Planning

A special purpose vehicle (SPV) is a legal entity created by a sponsoring or originating firm through a legal and financial engineering process, which could be

complex or straightforward, to carry out a specific or several business purposes or activities. The purpose of using SPVs, among others, are: (i) to reduce bankruptcy costs (Gorton & Souleles, 2005), (ii) to obtain lower costs of external financing (Feng *et al.*, 2009; Kim *et al.*, 2017; Visconti, 2013), (iii) to obtain liquidity from illiquid assets (Lemmon *et al.*, 2014), and (iv) to reduce global taxes (Han *et al.*, 2015; Hanlon *et al.*, 2015; Weyzig, 2013a, 2013b).

Studies by Hanlon *et al.* (2015); Richardson *et al.* (2013); Richardson & Taylor (2015); Taylor *et al.* (2015); Weyzig (2013a, 2013b) show that firms with international operations use SPVs established in tax-treaty and or tax-haven countries to reduce their tax liabilities. A tax-treaty country is a country that has a tax treaty with another country to avoid the imposition of double taxation on residents of the two treaty countries. Tax treaties can be multilateral or bilateral, but since countries rarely have equal standings, tax treaties are usually bilateral and comprehensively complex (Townsend, 2001). Bilateralism causes the number of tax treaties between any two countries to increase exponentially at the global level. This provides opportunities for firms with international operations to do tax-treaty shopping, which refers to the conduct of firms seeking benefits from existing bilateral tax treaties in various countries around the world. According to Arel-Bundock (2017) and Shukla *et al.* (2020), firms with international operations actively engage in tax-treaty shopping and subsequently develop complex and sophisticated corporate structures in many countries to optimize their taxes by channeling their international transactions through SPVs established in countries that have advantageous portfolios of bilateral tax treaties.

In addition to utilizing SPVs established in tax-treaty countries, firms can also set up their SPVs in tax-haven countries to reduce their global tax liabilities. Dharmapala & Hines (2009) defines a tax-haven country as a country with very low tax rates, with the primary objective of attracting foreign investors. Examples of tax-haven countries, among others, are Andorra, Bermuda, British Virgin Islands, Cayman Islands, Netherlands Antilles, Panama, and Switzerland (Bilicka & Fuest, 2014). Taylor *et al.* (2015) provide evidence that Australian firms use SPVs established in tax-haven countries for tax planning purposes. Han *et al.* (2015) find increases in the use of SPVs by US financial institutions when corporate tax increases; hence lending supports the assertion that firms use SPVs for tax planning purposes. Phillips *et al.* (2017) report the use of SPVs for tax purposes by Fortune 500 companies.

As part of their tax planning strategies, firms use SPVs established in a tax treaty or tax haven countries to increase their global after-tax free cash flows and firm value. Kollruss (2012) illustrates how a tax-effective financial investment structure involving the use of SPVs established in off-shore low-tax financial centres could increase the after-tax cashflows as well as the value of the financial investments. The additional value is the present value of the tax savings originating from the use of SPVs established in low-tax off-shore financial centers, and Kollruss (2012) identifies the resulting tax savings as tax-structuring tax-shield.

On the value relevance of the use of SPVs, Suriawinata (2019) finds evidence of a positive relationship between the use of SPVs and firm value. However, Suriawinata (2019) investigates the value impact of the use of SPVs in a more general context, based on the assertion that firms use SPVs to obtain a lower cost of external financing, reduce global taxes, and manage reported earnings. Therefore, the additional value from the use of SPVs might result from their use either for financing strategy purposes, corporate tax planning activities, achieving certain earnings management objectives, or all of the aforementioned purposes. In other words, the results in Suriawinata (2019) do not specifically identify the sources of additional firm value resulting from the use of SPVs.

Our study directly and specifically investigates the value relevance of the use of SPVs in the corporate tax planning context, and hypothesizes the following:

H2: The use of SPVs has a positive moderating effect on the relationship between corporate tax planning and firm value.

The Role of Board Independence

Even though corporate tax planning potentially enhances firm value, yet it is regarded as a risky endeavor, especially relating to the risks of having different unfavorable interpretations by the tax authorities or the tax court decisions on certain tax regulations that provide the basis for tax planning activities by firms that resulted in lower tax liabilities. The impact is that firms will be subjected to the risks of being imposed tax penalties and incurring reputational costs. Furthermore, Balakrishnan *et al.* (2019) find evidence that aggressive corporate tax planning is associated with lower corporate transparency. Lower levels of corporate transparency might trigger stringent tax audits by the tax authorities or provide opportunities for managerial diversion of the tax savings as predicted by the agency costs of free cash flow hypothesis (Jensen, 1999).

According to Armstrong *et al.* (2015), because corporate tax avoidance is a risky positive expected net present value investment, they argue that unresolved agency problems due to the absence of monitoring may cause managers to choose sub-optimal levels of corporate tax avoidance, i.e. either under-invest or over-invest in corporate tax avoidance. While Armstrong *et al.* (2015) link sub-optimal levels of corporate tax planning with managers' equity incentive, we conjecture that managers tend to under-invest in corporate tax planning if they are more risk-averse and decide to "play safe" by passing up tax-saving opportunities from corporate tax planning. On the other hand, risk-seeking managers tend to over-invest in corporate tax planning (i.e. pursuing aggressive tax planning), either because their incentives are linked to after-tax profits (Armstrong *et al.*, 2015); or because they want to have more tax savings for managerial diversion (Desai & Dharmapala, 2009); or simply to maximize shareholders wealth as in the traditional theory, albeit overzealously.

Relating to the problem of suboptimal levels of corporate tax planning, Armstrong *et al.* (2015) find an evidence that corporate governance mechanisms as proxied by board independence and financial sophistication alleviate the problem of under- and over-investment in corporate tax planning. In the literature, the moderating effect of corporate governance on the relationship between corporate tax planning and firm value is investigated using the interaction between the corporate tax planning variable and the corporate governance variable. Extant studies provide mixed results on the moderating role of corporate governance on the relationship between corporate tax planning and firm value. For example, Chen *et al.* (2014); Desai & Dharmapala (2009); Dewanata & Achmad (2017); Pradnyana & Noviari (2017) find a significant and positive moderating effect of certain corporate governance mechanisms on the relationship between corporate tax planning and firm value. However, Khaoula & Dabboussi (2019); Wahab & Holland (2012) find a significant and negative moderating effect of corporate governance on the relationship between corporate tax planning and firm value.

Despite contradictory findings mentioned above, our study follows Armstrong *et al.* (2015) assertion that corporate governance mitigates under- and over-investment in corporate tax planning due to unresolved agency problems as well as mitigating the agency costs of free cash flow relating to the tax savings obtained (Desai & Dharmapala, 2009; Jensen, 1999), and therefore hypothesizes the following:

H3: Board independence has a positive moderating effect on the relationship between tax planning and firm value.

Control Variables

To control for other factors that are deemed to affect firm value, our study includes financial institution share ownership, profitability, leverage, and firm size as control variables. According to Chung & Zhang (2011), because of their larger stakes compared to those of individual investors, financial institutions (e.g. commercial banks, investment banks, insurance companies, and pension funds) that have equity stakes in firms have a much stronger incentive to monitor those firms. Financial institutions are generally regarded as having the necessary resources and expertise to monitor managerial conduct and performance. Therefore, based on the preceding argument, financial institutions' share ownership is expected to positively affect firm value. Karpavičius & Yu (2017) find evidence that equity holdings by institutional investors that invest in firms' stocks on behalf of their clients have a positive impact on firm value.

However, there is also a possibility that financial institution share ownership is negatively related to firm value, especially when such financial institutions (e.g. commercial banks) have business relationships with firms whose shares they owned. Limpaphayom *et al.* (2019) argue that banks may extract value from firms by charging

higher interest rates to firms in which they both lend and invest in equity, and they find evidence that bank equity ownership has a negative effect on firm value.

Following Suriawinata & Nurmalita (2022), profitability is expected to positively affect firm value. Higher profitability leads to higher expected future dividends, positively affecting share price and firm value. Leverage may have either a positive or a negative effect on firm value, depending on whether the level of debt in question is below or above the optimal level. Below the optimal level, additional debt increases firm value because the marginal benefits of tax savings exceed the marginal costs of financial distress. On the other hand, additional debt beyond the optimal level decreases firm value due to higher additional expected costs of financial distress compared to the additional benefits from the tax savings. Finally, firm size may have either a positive or a negative effect on firm value as well. Based on the economies of scale hypothesis, firm size is predicted to have a positive relationship with firm value (Rasmussen, 2013). On the other hand, based on the diseconomies of scale and or loss of control hypotheses, firm size is predicted to have a negative relationship with firm value (Canback *et al.*, 2006; Williamson, 1975, 1996).

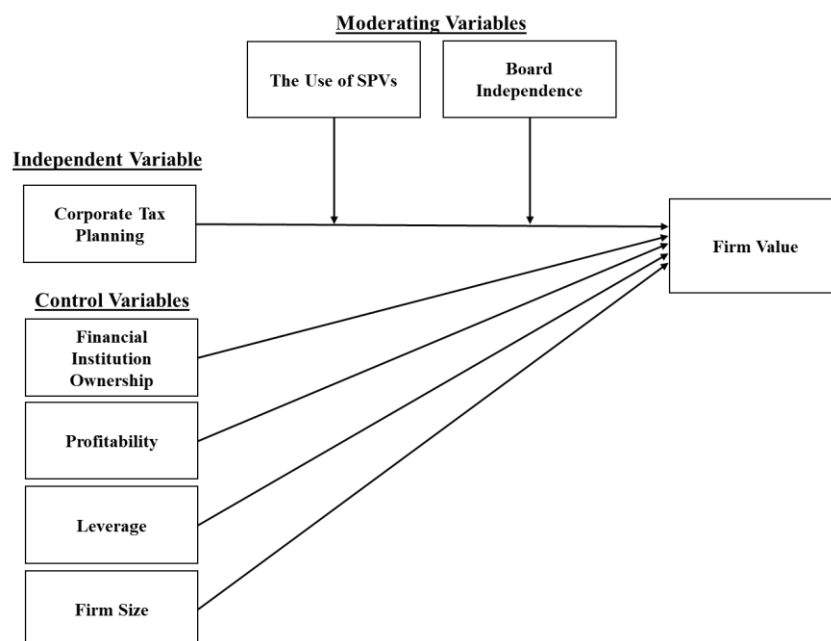


Figure 1
The Research Conceptual Framework

Figure 1 shows the research conceptual framework of our study that focuses on the value impact of: (i) corporate tax planning, (ii) corporate tax planning moderated by the use of SPVs, and (iii) corporate tax planning moderated by board independence. In our analyses, the use of SPVs and board independence are both pure moderators (Sharma *et al.*, 1981). Additionally, as depicted in Figure 1 we also include four control variables that are known to affect firm value, i.e., financial institution equity ownership, profitability, leverage, and firm size.

RESEARCH METHODS

We employ a purposive sampling method. The initial sample includes all non-financial firms listed on the Indonesia Stock Exchange from 2013 to 2017, excluding real estate and property, transportation, retail, and services sectors that have unique business characteristics. However, to be included in the final sample, a firm must: (i) have a complete set of audited financial statements, including the notes to financial statements, (ii) have adequate disclosure of subsidiaries and affiliates, and (iii) have a positive book value of equity at year-end during the period of study.

Imposing the above criteria yields a total sample of 119 non-financial firms, with 595 firm-year observations covering the 5-year period of 2013-2017. Information about a firm use of SPVs is obtained manually from notes to financial statements under the headings of subsidiaries and affiliates. Sample firms are identified as SPV users based on the findings that these firms report having one or more subsidiaries or affiliates engaged in trading or investment activities and incorporated or established in tax-haven or tax-treaty countries.

Variable Definitions and Measurements

Our study utilizes Tobins' Q (Q) as a proxy for firm value, defined as the ratio of the firm's market value to the replacement cost of its assets (Chung & Pruitt, 1994). There are several methods in the literature for measuring Tobins' Q (e.g. Chung & Pruitt (1994); Lewellen & Badrinath (1997); Lindenberg & Ross (1981)); however, we adopt the modified version of the approximate Tobins' Q originally introduced by Chung & Pruitt (1994) and uses the following specification:

$$Q = (MVE + DEBT)/TA \dots\dots\dots 1$$

where Q is Tobin's Q, while MVE is the market value of equity derived from the product of a firm's stock price and the number of shares outstanding. DEBT is the book value of the total debts, and TA is the book of the total assets. A value-creating firm is expected to have a Tobins' Q value of >1. Firms with Tobins' Q values of < 1 indicate that those firms fail to create value for their shareholders.

There are various measures of tax planning (e.g. Dunbar *et al.* (2010); Hanlon & Heitzman (2010)), but our study uses book-tax differences (BTD) computed as the difference between book-tax expense and current tax expense divided by the total asset. To examine the value relevance of SPVs used in the corporate tax planning context, our study employs an SPV dummy (D_SPV) that equals 1 if a firm uses one or more SPVs engaging solely in trading or investments businesses that are established in a tax treaty or tax haven countries, and 0 otherwise. Board independence (BoardInd) is measured by the number of independent members of the board of commissioners to the total number of board members.

Model Specification

To examine the effect of corporate tax planning with the use of SPVs on firm value, we employ a panel data regression analysis. Firm value as measured by Tobin's Q (Q) is the dependent variable, while corporate tax planning (BTD) and the interaction variable between corporate tax planning and the use of SPVs (BTD*D_SPV) are the independent variables of interest. We employ the interaction variable BTD*D_SPV to account for the moderating effect of the use of SPVs on the relationship between corporate tax planning (BTD) and firm value (Q). The interaction variable BTD*D_SPV also represents corporate tax planning with the use of SPVs.

Following Armstrong *et al.* (2015) assertion that board independence contributes to the attainment of an optimal level of corporate tax planning, we also investigate the role of board independence (BoardInd) in moderating the effect of corporate tax planning (BTD) on firm value (Q). To account for the aforementioned moderating effect, we employ the interaction variable BTD*BoardInd.

Finally, we also include financial institution equity ownership (FinOwn), profitability (PROF), leverage (LEV), and firm size (SIZE) as control variables. The purpose is to take into account the influence of those variables, which, based on empirical finance research, play an important role in determining firm value. Hence, with the inclusion of those control variables, a more valid causal relationship between corporate tax planning, the use of SPVs, and the moderating role of board independence on one side and firm value on the other side could be confidently established. Based on the research conceptual framework presented in Figure 1, the following equation (2) specifies the panel data regression model employed by this study:

$$Q_{it} = \alpha + \beta_1 BTD_{it} + \beta_2 (BTD_{it} * D_SPV_{it}) + \beta_3 (BTD_{it} * BoardInd_{it}) + \beta_4 FinOwn_{it} + \beta_5 PROF_{it} + \beta_6 LEV_{it} + \beta_7 SIZE_{it} + \varepsilon_{it} \dots\dots\dots 2$$

where: i is individual firm observation, t is the year of observation; Q = firm value as measured by Tobin's Q; BTD = book-tax difference; D_SPV = dummy variable of the use of SPVs; FinOwn = fraction of financial institution equity ownership; PROF = return on equity; LEV = interest-bearing debt-to-total asset ratio; and SIZE = natural logarithm of book value of total assets.

Equation (2) is basically a moderated regression analysis (MRA) model, where D_SPV and BoardInd both individually moderate the effect of corporate tax planning on firm value. Based on Sharma *et al.* (1981), D_SPV and BoardInd are both pure moderators, where they individually interact with the corporate tax planning (BTD) to modify the later relationship with firm value (Q).

RESULTS AND DISCUSSION

Results

Table 1 presents descriptive statistics for the dependent, independent, and control variables. As shown in Table 1, Tobins' Q (*Q*) has a mean value of 1.2607, indicating that, on average, observed market values of sample firms exceed their book values. Book-tax difference (*BTD*) has a mean value of -0.0008, meaning that on average book tax expense is less than current tax expense. Dummy SPV (*D_SPV*) has a mean value of 0.4891, indicating that almost half of the observed samples use SPVs in their business activities. Of the total 595 firm-year observations, a total number of 291 observations use SPVs, meaning that 48.91 percent of the total sample uses SPVs. Board independence (*BoardInd*) has a mean value of 0.3877, which means that on average 38.77 percent of board members are independent. Regarding the control variables, financial institution equity ownership (*FinOwn*) has a mean value of 0.0216 or 2.16 percent share ownership; profitability (*PROF*) as measured by return on equity (*ROE*) has a mean value of 0.0173; leverage (*LEV*) as measured by interest-bearing debt-to-total has a mean value of 0.5862; and lastly, using its original value, firm size (*SIZE*) has a mean value of IDR 11,823.4 billion.

Table 2 reports the results of the multicollinearity test using the variance inflation factor (*VIF*) measure, which shows that each of the independent variables has a *VIF* value of less than 10. Therefore, the results of the *VIF* test indicate that the regression model in equation (2) does not have the problem of multicollinearity.

Table 1
Descriptive Statistics

Variables	Mean	Standard Deviation	Max	Min
Tobins' Q (<i>Q</i>)	1.261	0.801	7.980	0.301
Book-tax difference (<i>BTD</i>)	-0.001	0.014	0.066	-0.148
Dummy SPV (<i>D_SPV</i>)	0.489	0.500	1.000	0.000
BoardInd	0.388	0.116	1.000	0.000
FinOwn	0.022	0.061	0.393	0.000
Profitability (<i>PROF</i>)	0.017	0.577	3.503	-11.040
Leverage (<i>LEV</i>)	0.586	0.193	1.168	0.019
Firm Size (<i>SIZE</i>)*	11,823.4	27,554.1	295,646.0	136.6

Note: *) In Billions of IDR

Table 2
Variance Inflation Factor

	Coefficient Variance	Centered VIF
Book-tax difference (<i>BTD</i>)	5.463	1.021
Dummy SPV (<i>D-SPV</i>)	0.005	1.158
BoardInd	0.074	1.010
FinOwn	0.283	1.080
Profitability (<i>PROF</i>)	0.003	1.045
Leverage (<i>LEV</i>)	0.027	1.035
Firm Size (<i>SIZE</i>)	0.001	1.152

To test the hypothesized relationship between corporate tax planning and firm value, this study develops four regression models to show the moderating effects of the use of SPVs and the role of board independence on the relationship between the said two variables being studied. Based on the Chow, LM, and Hausman tests (not reported here), the most appropriate panel regression model is the fixed-effect model (FEM). Additionally, since the problems of cross-section dependence and cross-section heteroskedasticity are encountered, the empirical model of equation (2) and its three variants (discussed below) are regressed using the estimated generalized least squares or EGLS (Greene, 2018) with cross-section weights and white-corrected robust standard errors.

Table 3 reports the results of the four regression models, where Model 1 is the “barebone” model consisting of only the corporate tax planning variable (BTD) and the four control variables. Model 2 and Model 3 are basically Model 1 with each added with the interaction variables of BTD*D_SPV and BTD*BoardInd respectively. While Model 4 is the complete testable model as represented by equation (2).

Table 3
Regression Results for Firm Value (Tobin's Q)

Independent Variables	Model 1	Model 2	Model 3	Model 4
Constant				
coefficient	3.076***	3.272***	3.095***	3.233***
standard error	[0.115]	[0.133]	[0.143]	[0.144]
BTD				
coefficient	1.148***	0.128	-1.096	-2.592
standard error	[0.269]	[0.549]	[1.079]	[1.799]
BTD*D_SPV				
coefficient		1.639***		1.664**
standard error		[0.690]		[0.779]
BTD*BoardInd				
coefficient			4.896**	6.569**
standard error			[2.155]	[3.316]
FinOwn				
coefficient	0.537***	0.451***	0.610***	0.534***
standard error	[0.134]	[0.156]	[0.140]	[0.155]
PROF				
coefficient	0.013	0.021*	0.020	0.022**
standard error	[0.014]	[0.012]	[0.013]	[0.010]
LEV				
coefficient	0.182***	0.189***	0.168***	0.189***
standard error	[0.034]	[0.035]	[0.045]	[0.041]
SIZE				
coefficient	-0.236***	-0.261***	-0.238***	-0.256***
standard error	[0.015]	[0.016]	[0.018]	[0.017]
<i>A number of firm-year obs.</i>	595	595	595	595
<i>DW-statistic</i>	1.937	1.954	1.936	1.950
<i>Adj. R-squared</i>	0.878	0.879	0.878	0.879
<i>F-statistic</i>	35.861	35.642	35.414	35.356
<i>Prob (F-statistic)</i>	0.000	0.000	0.000	0.000

Note: ***, **, and * indicate statistical significance at the 1%, 5% and 10% levels.

Discussion

Model 1 shows a significant positive relationship between corporate tax planning and firm value, which is similar to the results of Chan *et al.* (2016); Inger (2014); Inger & Vansant (2019). This finding supports the shareholder maximization paradigm, where it is asserted that managers implement corporate tax planning to maximize after-tax cash flows for the benefit of shareholders. However, when the interaction variable $BTD \cdot D_SPV$ is included in Model 2, the corporate tax planning variable (BTD), albeit remains positive, loses its significance in affecting firm value. On the other hand, the interaction variable $BTD \cdot D_SPV$ has a positive and significant effect (at a 1 percent level) on firm value. Since D_SPV is a dummy variable that takes the value of 1 if a firm uses SPVs and 0 otherwise, then this latter result suggests that corporate tax planning with the use of SPVs is more effective in maximizing shareholder wealth and firm value compared to the one without.

Moreover, by comparing the magnitude of the regression coefficient of BTD in Model 1 which is 1.148 to the regression coefficient of $BTD \cdot D_SPV$ in Model 2 which is 1.639, it can be concluded that the use of SPVs enhances the positive effect of corporate tax planning on firm value. This finding corroborates the assertion that firms do tax-treaty shopping and use SPVs established in tax treaty and tax haven countries to save global taxes, increase global after-tax cash flows, and maximize firm value and shareholders' wealth.

The primary purpose of including the interaction variable $BTD \cdot BoardInd$ in Model 3 is to test the role of board independence in effectively monitoring the levels of tax planning activities by firms. The results of Model 3 regression analyses show that $BTD \cdot BoardInd$ has a positive and significant effect on firm value, which is the same as the results of Chen *et al.* (2014); Desai & Dharmapala (2009); Dewanata & Achmad (2017); Pradnyana & Noviori (2017). These results signify the role of board oversight in ensuring that firms conduct optimal levels of corporate tax planning activities as hypothesized by Armstrong *et al.* (2015). Similar to the results of Model 2, the corporate tax planning variable (BTD) is not statistically significant in affecting firm value. However, the direction of BTD in Model 3 changes to negative.

To summarize, while Model 1 shows a positive and significant effect of corporate tax planning on firm value, the results of Model 2 and Model 3 show that the individual effect of corporate tax planning on firm value becomes statistically insignificant. However, the interaction variables of $BTD \cdot D_SPV$ (in Model 2) and $BTD \cdot BoardInd$ (in Model 3) are positive and statistically significant in affecting firm value (Q). In other words, D_SPV and $BoardInd$ have positive moderating effects on the relationship between corporate tax planning and firm value. Based on these results, it can be interpreted that to be able to create value more effectively, the conduct of corporate planning strategies should be coupled with the use of SPVs (Model 2), and/or combined with adequate board oversight (Model 3).

Model 4 is the complete testable model based on equation (2), and the results show that, as evidenced by the positive and statistically significant relationship between $BTD \times D_SPV$ and firm value, corporate tax planning with the use of SPVs is more effective than the one without. This result is the same as that of Model 2. To the best of our knowledge, this is the first study that provides empirical evidence on the value relevance of the use of SPVs in corporate tax planning activities. Additionally, as in Model 3, the interaction variable $BTD \times BoardInd$ in Model 4 that accounts for the moderating effect of board independence on the relationship between corporate tax planning and firm value, is positive and significant in affecting firm value. These two findings unambiguously signify the importance of the use of SPVs and the role of board independence in enhancing firm value within the context of corporate tax planning. As stated before, the use of SPVs (D_SPV) and board independence ($BoardInd$) in Model 2, Model 3, and Model 4 are both pure moderators.

Regarding the effect of control variables on firm value, the results from the four regression models generally show that financial equity ownership ($FinOwn$) is positive and significant, which indicates that financial institution ownership mitigates managerial diversion of corporate resources. Profitability ($PROF$) is positive and significant in Model 4 but not significant in the other three models. Nevertheless, based on the complete model (Model 4), it can be concluded that higher profitability increases firm value. Leverage (LEV) is positive and significant in all four models, indicating that the benefits from tax savings exceed the expected costs of financial distress associated with external debt financing. Finally, firm size ($SIZE$) is found to be negative and significant in affecting firm value, supporting the diseconomies of scale and loss of control hypothesis as proposed by Canback *et al.* (2006); Williamson (1975, 1996). Overall, the findings on the effects of profitability ($PROF$), leverage (LEV), and firm size ($SIZE$) on firm value are more or less similar to those of Suriawinata & Nurmalita (2022).

CONCLUSION

Our overall conclusion is that corporate tax planning indeed increases firm value. However, more value can be obtained if firms utilize SPVs established in tax-treaty and tax-haven countries as part of their corporate tax planning strategies. With the use of such SPVs, firms can reduce their global tax liabilities, increase after-tax cash flows, enhance firm value, and maximize shareholders' wealth. Whether or not it is morally justified to use SPVs established in tax-treaty and tax-haven countries to reduce worldwide corporate taxes is beyond the scope of this study. Also, whether in the future, firms will still be able to optimally utilize SPVs established in the tax-treaty and tax-haven countries as part of their tax planning activities remain to be seen.

Another important finding of our study is the empirical confirmation of the role of board independence in ensuring that firms embark on optimal levels of corporate

tax planning, as argued by Armstrong *et al.* (2015). Board independence may also prevent managerial diversion or moral hazard relating to the use of tax-saving related cash flows resulting from corporate tax planning (Desai & Dharmapala, 2009; Jensen, 1999).

In considering the results of our study, it must be noted that there are at least a couple of limitations. Firstly, though might be well-justified based on the observed tax-treaty shopping phenomenon, classifying trading and investment companies established in the tax-treaty countries as SPVs may not be as obvious as those established in the tax-haven countries. Therefore, the number of SPVs users identified by our study could be overstated. Secondly, corporate tax planning is a long-term strategy involving investment and financing decisions with multi-year effects on firms' financials. As a consequence, the use of the current period book-tax difference is an imperfect measure of corporate tax planning, as it does not entirely reflect the long-term impact of corporate tax planning strategies. It is suggested that future research develop more accurate corporate tax planning measures that reflect the long-term effects of corporate tax planning pursued by firms. Additionally, as more data become available in the future, applying a dynamic panel analysis on a more extended data period is recommended.

REFERENCES

- Amidu, M., Yorke, S. M., & Harvey, S. (2016). The effects of financial reporting standards on tax avoidance and earnings quality: A case of an emerging economy. *Journal of Accounting and Finance*, 16(2), 11–27.
- Arel-Bundock, V. (2017). The unintended consequences of bilateralism: Treaty shopping and international tax policy. *International Organization*, 71(2), 349–371. <https://doi.org/10.1017/S0020818317000108>
- Armstrong, C. S., Blouin, J. L., Jagolinzer, A. D., & Larcker, D. F. (2015). Corporate governance, incentives, and tax avoidance. *Journal of Accounting and Economics*, 60(1), 1–17. <https://doi.org/10.1016/j.jacceco.2015.02.003>
- Armstrong, C. S., Blouin, J. L., & Larcker, D. F. (2012). The incentives for tax planning. *Journal of Accounting and Economics*, 53(1–2), 391–411. <https://doi.org/10.1016/j.jacceco.2011.04.001>
- Balakrishnan, K., Blouin, J. L., & Guay, W. R. (2019). Tax aggressiveness and corporate transparency. *The Accounting Review*, 94(1), 45–69. <https://doi.org/10.2308/accr-52130>
- Beladi, H., Chao, C. C., & Hu, M. (2018). Does tax avoidance behavior affect bank loan contracts for Chinese listed firms? *International Review of Financial Analysis*, 58, 104–116. <https://doi.org/10.1016/j.irfa.2018.03.016>

- Bilicka, K., & Fuest, C. (2014). With which countries do tax havens share information? *International Tax and Public Finance*, 21(2), 175–197. <https://doi.org/10.1007/s10797-013-9267-y>
- Bird, A., & Karolyi, S. A. (2017). Governance and taxes: Evidence from regression discontinuity. *The Accounting Review*, 92(1), 29–50. <https://doi.org/10.2308/accr-51520>
- Brigham, E. F., & Daves, P. R. (2019). *Intermediate financial management* (13th ed.). Cengage Learning, Inc.
- Canback, S., Samouel, P., & Price, D. (2006). Do diseconomies of scale impact firm size and performance? A theoretical and empirical overview. *Journal of Managerial Economics*, 4(1), 27–70.
- Chan, K. H., Mo, P. L. L., & Tang, T. (2016). Tax avoidance and tunneling: Empirical analysis from an agency perspective. *Journal of International Accounting Research*, 15(3), 49–66. <https://doi.org/10.2308/jiar-51345>
- 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. <https://doi.org/10.1108/NBRI-10-2013-0037>
- Chung, K. H., & Pruitt, S. W. (1994). A simple approximation of Tobin's q. *Financial Management*, 23(3), 70–74. <https://doi.org/10.2307/3665623>
- Chung, K. H., & Zhang, H. (2011). Corporate governance and institutional ownership. *Journal of Financial and Quantitative Analysis*, 46(1), 247–273. <https://doi.org/10.1017/S0022109010000682>
- Damodaran, A. (2012). *Investment valuation: Tools and techniques for determining the value of any asset* (3rd ed.). John Wiley & Sons, Inc.
- Desai, M. A., & Dharmapala, D. (2006). Corporate tax avoidance and high-powered incentives. *Journal of Financial Economics*, 79(1), 145–179. <https://doi.org/10.1016/j.jfineco.2005.02.002>
- Desai, M. A., & Dharmapala, D. (2009). Corporate tax avoidance and firm value. *Review of Economics and Statistics*, 91(3), 537–546. <https://doi.org/10.1162/rest.91.3.537>
- Desai, M. A., Dyck, A., & Zingales, L. (2007). Theft and taxes. *Journal of Financial Economics*, 84(3), 591–623. <https://doi.org/10.1016/j.jfineco.2006.05.005>
- Dewanata, P., & Achmad, T. (2017). Pengaruh perencanaan pajak terhadap nilai perusahaan dengan kualitas corporate governance sebagai variabel moderasi (Studi empiris pada perusahaan manufaktur yang terdaftar di BEI pada tahun 2012-2014). *Diponegoro Journal of Accounting*, 6(1), 1–7.
- Dharmapala, D., & Hines, J. R. (2009). Which countries become tax havens? *Journal*

- of Public Economics*, 93(9–10), 1058–1068.
<https://doi.org/10.1016/j.jpubeco.2009.07.005>
- Dunbar, A., Higgins, D. M., Phillips, J. D., & Plesko, G. A. (2010). What do measures of tax aggressiveness measure? *103rd Annual Conference on Taxation*, 18–26.
- Fama, E. F., & Miller, M. H. (1972). *The theory of finance*. Dryden Press.
- Feng, M., Gramlich, J. D., & Gupta, S. (2009). Special purpose vehicles: Empirical evidence on determinants and earnings management. *The Accounting Review*, 84(6), 1833–1876. <https://doi.org/10.2308/accr.2009.84.6.1833>
- Gorton, G., & Souleles, N. S. (2005). Special purpose vehicles and securitization. In *NBER Working Paper No. 11190*.
- Greene, W. H. (2018). *Econometric analysis* (8th ed.). Pearson Education Inc.
- Han, J., Park, K., & Pennacchi, G. (2015). Corporate taxes and securitization. *The Journal of Finance*, 70(3), 1287–1321. <https://doi.org/10.1111/jofi.12157>
- Hanlon, M., & Heitzman, S. (2010). A review of tax research. *Journal of Accounting and Economics*, 50(2–3), 127–178. <https://doi.org/10.1016/j.jacceco.2010.09.002>
- Hanlon, M., Maydew, E. L., & Thornock, J. R. (2015). Taking the long way home: U.S. tax evasion and offshore investments in U.S. equity and debt markets. *The Journal of Finance*, 70(1), 257–287. <https://doi.org/10.1111/jofi.12120>
- Hoffman Jr., W. H. (1961). The theory of tax planning. *Accounting Review*, 36(2), 274–281.
- Hong, Q., & Smart, M. (2010). In praise of tax havens: International tax planning and foreign direct investment. *European Economic Review*, 54(1), 82–95. <https://doi.org/10.1016/j.euroecorev.2009.06.006>
- Inger, K. K. (2014). Relative valuation of alternative methods of tax avoidance. *Journal of the American Taxation Association*, 36(1), 27–55. <https://doi.org/10.2308/atax-50606>
- Inger, K. K., & Vansant, B. (2019). Market valuation consequences of avoiding taxes while also being socially responsible. *Journal of Management Accounting Research*, 31(2), 75–94. <https://doi.org/10.2308/jmar-52169>
- Jensen, M. C. (1999). Agency cost of free cash flow, corporate finance, and takeovers. *American Economic Review*, 76(2), 323–329. <https://doi.org/10.2139/ssrn.99580>
- Jiménez-Angueira, C. E. (2018). The effect of the interplay between corporate governance and external monitoring regimes on firms' tax avoidance. *Advances in Accounting*, 41, 7–24. <https://doi.org/10.1016/J.ADIAC.2018.02.004>

- Karpavičius, S., & Yu, F. (2017). How institutional monitoring creates value: Evidence for the free cash flow hypothesis. *International Review of Economics and Finance*, 52, 127–146. <https://doi.org/10.1016/j.iref.2017.10.016>
- Khaoula, F., & Dabboussi, M. (2019). The moderating effect of the board of directors on firm value and tax planning: Evidence from European listed firms. *Borsa Istanbul Review*, 19(4), 331–343. <https://doi.org/10.1016/j.bir.2019.07.005>
- Khaoula, F., & Ghardallou, W. (2020). International tax planning techniques: a review of the literature. *Journal of Applied Accounting Research*, 21(2), 329–343. <https://doi.org/10.1108/JAAR-05-2019-0080>
- Kim, J.-B., Song, B. Y., & Wang, Z. (2017). Special purpose entities and bank loan contracting. *Journal of Banking & Finance*, 74, 133–152. <https://doi.org/10.1016/j.jbankfin.2016.10.006>
- Kirkpatrick, A. K., & Radicic, D. (2020). Tax planning activities and firm value: A dynamic panel analysis. In J. Hasseldine (Ed.), *Advances in Taxation* (Vol. 27, pp. 103–123). Emerald Publishing Limited. <https://doi.org/10.1108/S1058-749720200000027004>
- Koller, T., Goedhart, M., & Wessels, D. (2020). Valuation: Measuring and managing the value of companies. In *McKinsey & Company Inc.* (7th ed.). John Wiley & Sons, Inc.
- Kollruss, T. (2012). Tax structuring and the value of the firm. Utilization of affiliated financial intermediary SPEs and hybrid instruments in investment banking. *Investment Management and Financial Innovations*, 9(2), 128–135.
- Lemmon, M., Liu, L. X., Mao, M. Q., & Nini, G. (2014). Securitization and capital structure in nonfinancial firms: An empirical investigation. *The Journal of Finance*, 69(4), 1787–1825. <https://doi.org/10.1111/jofi.12128>
- Lewellen, W. G., & Badrinath, S. G. (1997). On the measurement of Tobin's q. *Journal of Financial Economics*, 44(1), 77–122. [https://doi.org/10.1016/S0304-405X\(96\)00013-X](https://doi.org/10.1016/S0304-405X(96)00013-X)
- Li, Y., & Ma, M. (Shuai). (2022). Are tax havens and offshore financial centers cracked down on? A study on the international standard of exchange of information on request. *The Accounting Review*, 97(7), 295–318. <https://doi.org/10.2308/TAR-2019-0553>
- Limpaphayom, P., Rogers, D. A., & Yanase, N. (2019). Bank equity ownership and corporate hedging: Evidence from Japan. *Journal of Corporate Finance*, 58, 765–783. <https://doi.org/10.1016/j.jcorpfin.2019.07.001>
- Lindenberg, E. B., & Ross, S. A. (1981). Tobin's q ratio and industrial organization. *The Journal of Business*, 54(1), 1–32. <https://doi.org/10.1086/296120>

- Mayberry, M. A., McGuire, S. T., & Omer, T. C. (2015). Smoothness and the value relevance of taxable income. *Journal of the American Taxation Association*, 37(2), 141–167. <https://doi.org/10.2308/atax-51252>
- McGuire, S. T., Omer, T. C., & Wang, D. (2012). Tax avoidance: Does tax-specific industry expertise make a difference? *The Accounting Review*, 87(3), 975–1003. <https://doi.org/10.2308/accr-10215>
- OECD. (2020). *Glossary of tax terms*. OECD.Org. <https://www.oecd.org/ctp/glossaryoftaxterms.htm>
- Phillips, R., Gardner, M., Robins, A., & Surka, M. (2017). Offshore shell games 2017: The use of offshore tax havens by Fortune 500 companies. In *Institute on Taxation and Economic Policy (ITEP) and U.S. PIRG Education Fund*.
- Phillips, R., Petersen, H., & Palan, R. (2021). Group subsidiaries, tax minimization and offshore financial centres: Mapping organizational structures to establish the ‘in-betweeners’ advantage. *Journal of International Business Policy*, 4(2), 286–307. <https://doi.org/10.1057/s42214-020-00069-3>
- Pradnyana, I. B. G. P., & Noviari, N. (2017). Pengaruh perencanaan pajak terhadap nilai perusahaan dengan transparansi perusahaan sebagai variabel moderasi. *E-Jurnal Akuntansi Universitas Udayana*, 18(2), 1398–1425.
- Prastiwi, D., & Walidah, A. N. (2020). Pengaruh agresivitas pajak terhadap nilai perusahaan: Efek moderasi transparansi dan kepemilikan institusional. *Jurnal Ekonomi Dan Bisnis*, 23(2), 203–224. <https://doi.org/10.24914/jeb.v23i2.2997>
- Rasmussen, S. (2013). *Production economics: The basic theory of production optimisation* (2nd ed.). Springer.
- Richardson, G., & Taylor, G. (2015). Income shifting incentives and tax haven utilization: Evidence from multinational U.S. firms. *The International Journal of Accounting*, 50(4), 458–485. <https://doi.org/10.1016/j.intacc.2015.10.001>
- Richardson, G., Taylor, G., & Lanis, R. (2013). The impact of board of director oversight characteristics on corporate tax aggressiveness: An empirical analysis. *Journal of Accounting and Public Policy*, 32(3), 68–88. <https://doi.org/10.1016/j.jaccpubpol.2013.02.004>
- Ross, S. A., Westerfield, R. W., Jaffe, J., & Jordan, B. D. (2019). *Corporate finance* (12th ed.). McGraw-Hill Inc.
- Scholes, M. S., Wolfson, M. A., Erickson, M. M., Hanlon, M. L., Maydew, E. L., & Shevlin, T. J. (2015). *Taxes and business strategy* (5th ed.). Pearson Education, Inc.
- Schwab, C. M., Stomberg, B., & Williams, B. M. (2022). Effective tax planning. *The Accounting Review*, 97(1), 413–437. <https://doi.org/10.2308/TAR-2019-0020>

- Shams, S., Bose, S., & Gunasekarage, A. (2022). Does corporate tax avoidance promote managerial empire building? *Journal of Contemporary Accounting & Economics*, 18(1), 100293. <https://doi.org/10.1016/j.jcae.2021.100293>
- Sharma, S., Durand, R. M., & Gur-Arie, O. (1981). Identification and analysis of moderator variables. *Journal of Marketing Research*, 18(3), 291–300. <https://doi.org/10.1177/002224378101800303>
- Shukla, G., Pandey, S. K., & Lingam, S. (2020). Tax effects of treaty shopping and OECD's BEPS implications. *FIIB Business Review*, 9(2), 85–93. <https://doi.org/10.1177/2319714520907245>
- Suriawinata, I. S. (2019). Does the use of special purpose entities affect firm value? Evidence from Indonesian listed nonfinancial firms. *Proceedings of the 5th Annual International Conference on Management Research (AICMaR 2018)*, 45–49. <https://doi.org/10.2991/aicmar-18.2019.10>
- Suriawinata, I. S., & Nurmalita, D. M. (2022). Ownership structure, firm value and the moderating effects of firm size: Empirical evidence from Indonesian consumer goods industry. *Jurnal Manajemen Dan Kewirausahaan*, 24(1), 91–104. <https://doi.org/10.9744/jmk.24.1.91-104>
- Taylor, G., & Richardson, G. (2014). Incentives for corporate tax planning and reporting: Empirical evidence from Australia. *Journal of Contemporary Accounting & Economics*, 10(1), 1–15. <https://doi.org/10.1016/j.jcae.2013.11.003>
- Taylor, G., Richardson, G., & Lanis, R. (2015). Multinationality, tax havens, intangible assets, and transfer pricing aggressiveness: An empirical analysis. *Journal of International Accounting Research*, 14(1), 25–57. <https://doi.org/10.2308/jiar-51019>
- Taylor, G., Richardson, G., & Taplin, R. (2015). Determinants of tax haven utilization: Evidence from Australian firms. *Accounting & Finance*, 55(2), 545–574. <https://doi.org/10.1111/acfi.12064>
- Townsend, J. A. (2001). Tax treaty interpretation. *The Tax Lawyer*, 55(1), 219–307.
- US Supreme Court. (1935). *Gregory v. Helvering*, 293 U.S. 465, 469 (1935) (p. 465).
- Visconti, R. M. (2013). Evaluating a project finance SPV: Combining operating leverage with debt service, shadow dividends and discounted cash flows. *International Journal of Economics, Finance and Management Sciences*, 1(1), 9–20.
- Wahab, N. S. A., & Holland, K. (2012). Tax planning, corporate governance and equity value. *The British Accounting Review*, 44(2), 111–124. <https://doi.org/10.1016/j.bar.2012.03.005>

-
- Weston, J. F., & Shastri, K. (2014). *Financial theory and corporate policy* (4th ed.). Pearson Education Limited.
- Weyzig, F. (2013a). International finance and tax avoidance via Dutch special purpose entities. *Paper for Presentation at Research Seminar, Radboud University Nijmegen, 21 October 2013*.
- Weyzig, F. (2013b). Tax treaty shopping: Structural determinants of foreign direct investment routed through the Netherlands. *International Tax and Public Finance*, 20(6), 910–937. <https://doi.org/10.1007/s10797-012-9250-z>
- Wilde, J. H., & Wilson, R. J. (2018). Perspectives on corporate tax planning: Observations from the past decade. *Journal of the American Taxation Association*, 40(2), 63–81. <https://doi.org/10.2308/atax-51993>
- Williamson, O. E. (1975). *Markets and hierarchies: Analysis and antitrust implications: A study in the economics of internal organization*. The Free Press.
- Williamson, O. E. (1996). *The mechanisms of governance*. Oxford University Press.

