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Beyond the balance sheet: Unraveling the impact of accounting conservatism and values on tax avoidance

Antonios Persakis^{1*} and Georgios Kolias²

¹Department of Accounting and Finance, School of Economic and Business Administration, University of Thessaly, Thessaly, Greece.

²Department of Accounting and Finance, Faculty of Economics and Administrative Sciences, University of Ioannina, Greece.

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This research aims to demonstrate the influence of accounting conservatism and Gray's accounting values on the practice of corporate tax avoidance. By analyzing a dataset consisting of 14,500 firms from 75 countries over the period of 2000 to 2022, and utilizing the generalized method of moments (GMM) methodology, the study demonstrates a positive correlation between accounting conservatism and elevated effective tax rates. This finding implies a decrease in tax avoidance. The study combines agency and deterrence theories with the theory of reasoned action to analyze the impact of accounting practices on corporate behavior. The findings suggest a positive relationship between professionalism and secrecy in accounting and higher levels of tax avoidance. Conversely, a negative association is observed between uniformity and conservatism in accounting and tax avoidance. This study makes a substantial contribution to the fields of accounting and finance by demonstrating the intricate relationship between accounting practices, cultural values, and tax strategies.

Key words: Tax avoidance, accounting conservatism, professionalism, uniformity, conservatism, secrecy.

INTRODUCTION

Tax compliance refers to taxpayers' decisions to adhere to tax rules and regulations, including filing, reporting, and paying taxes (Andreoni et al., 1998; Onu and Oats, 2015; Bornman and Ramutumbu, 2019). Conversely, tax noncompliance presents a significant challenge for governments globally, affecting revenue collection and the fair distribution of fiscal responsibilities (Alley and James, 2005). This study aims to explore the relatively unexplored area of how accounting practices, particularly accounting conservatism and inherent accounting values, impact tax noncompliance behaviors in businesses. Specifically, it examines how accounting conservatism, a

key principle in financial reporting, affects corporate tax avoidance across different cultural and regulatory contexts. By analyzing the intersection of accounting practices and tax avoidance, this research addresses a critical gap in contemporary accounting literature and highlights the broader implications of these practices in the global financial ecosystem.

Accounting conservatism requires cautious reporting of financial statements to avoid overestimating assets and revenues and is recognized as a fundamental component of sound accounting practices (Leventis et al., 2013; Orthaus et al., 2023). The literature on accounting

*Corresponding author. E-mail: apersakis@uth.gr.

conservatism's impact on tax avoidance is convoluted and often inconclusive (Rudianti and Hermawan, 2023; Dewi and Andriyani, 2023). Sjahputra (2019) suggests that conservatism deters tax avoidance, while Purwantini (2017) and Yuniarsih (2018) find no significant effect. Studies from Nigeria by Suleiman (2020), Suleiman and Barnabas (2021), and Sa'ad et al. (2023) offer insights into this relationship, with Suleiman (2020) noting conservatism's moderating effect on tax avoidance in firms with female audit committee directors, and Sa'ad et al. (2023) reporting a significant adverse effect of conservatism on corporate tax avoidance. This research posits that strong adherence to accounting conservatism can reduce tax avoidance risks and tendencies by creating a financial reporting environment less prone to aggressive tax strategies (Ruch and Taylor, 2015; Zhong and Li, 2017).

The importance of Gray's (1988) accounting values, such as ethical standards, professional integrity, and transparency, in influencing tax compliance is also significant (Wenzel, 2002; Eendenich and Trapp, 2020; Svetlozarova Nikolova, 2023). These values act as ethical guides preventing noncompliance (Parker et al., 2009; Hirth-Goebel and Weißenberger, 2019).

Studies by Tsakumis et al. (2007), Richardson (2008), Bame-Aldred et al. (2013), Mahaputra et al. (2018), Hutchinson (2019), and Ermasova et al. (2021) connect culture and tax evasion, though empirical research on how Gray's values specifically affect corporate tax avoidance is sparse (Khlif, 2016). This study hypothesizes that a strong ethical framework in an organization's accounting department can deter tax avoidance while fostering a culture of integrity and accountability. We suggest that professionalism and secrecy correlate with higher tax avoidance, while uniformity and conservatism correlate with lower tax avoidance.

In this study, we adopt the Arellano and Bover (1995), followed by Blundell and Bond (1998), approach that significantly enhances the precision of estimations, treating any endogeneity issues. By analyzing a substantial dataset consisting of 14,500 firms from 75 countries spanning the years 2000 to 2022, we discover a positive association between greater levels of accounting conservatism and higher effective tax rates, as well as a decrease in discrepancies between book and tax values. These findings indicate a decrease in the use of strategies to avoid paying taxes, reinforcing the notion that adopting conservative accounting methods restricts the use of aggressive tax planning and enhances the clarity of financial reporting.

Moreover, the study uncovers an intricate correlation between various accounting principles (professionalism, uniformity, conservatism, and secrecy) and the act of avoiding taxes. The level of professionalism in accounting has a direct and positive relationship with tax avoidance. This implies that accounting professionals who prioritize

high levels of professionalism are more likely to participate in tax avoidance activities. The implementation of consistent accounting practices demonstrates a decrease in the practice of avoiding taxes, suggesting that standardization restricts the use of aggressive tax strategies. The practice of conservatism in accounting is associated with a decrease in tax avoidance, as it is in line with the principles of cautious financial reporting. Increased levels of confidentiality in financial reporting are associated with greater levels of tax avoidance, indicating that a culture of secrecy may amplify these behaviors.

These results combine the theories of agency and deterrence with the theory of reasoned action, providing a more complete picture of how values and conservative accounting affect tax avoidance. These findings imply that there is an intricate relationship between accounting practices and corporate behavior, highlighting the necessity to reevaluate existing models and theories in the fields of accounting and corporate governance.

This study makes several unique contributions to the current body of literature on accounting conservatism and tax avoidance. Firstly, by incorporating a dataset of 14,500 firms from 75 countries over the period 2000 to 2022, this research significantly broadens the empirical scope. This extensive dataset enhances the ability to identify genuine impacts of accounting conservatism on tax avoidance, reducing the likelihood of Type II errors. Additionally, the large and diverse sample size increases the representativeness and generalizability of the findings, which is crucial in accounting where practices can vary widely across different countries and firm types (Bornstein et al., 2013; Peters et al., 2022).

This study also clarifies the previously inconclusive findings in the literature regarding the relationship between accounting conservatism and tax avoidance. Previous studies have shown mixed results, especially in specific countries like Indonesia, Nigeria, and the USA. Examples of such studies include those conducted by Purwantini (2017), Trisusanti and Lasdi (2018), Sjahputra (2019), Ratnasari et al. (2019), Suleiman (2020), Lismiyati and Herliansyah (2021), Ardillah and Halim (2022), Sa'ad et al. (2023), and Rudianti and Hermawan (2023). By employing agency and deterrence theories, the study demonstrates that accounting conservatism, through timely loss recognition and transparent reporting, effectively reduces tax avoidance (Ball and Shivakumar, 2006; Dimitropoulos and Asteriou, 2008; Iatridis, 2011; Dularif et al., 2019; Dularif and Rustiarini, 2022). This finding supports the notion that conservative accounting practices hinder aggressive tax planning and enhance financial transparency.

Moreover, this research explores the impact of national culture on tax avoidance, focusing on Gray's (1988) accounting values. This aspect of the study is particularly novel, as it delves into how cultural dimensions such as professionalism, uniformity, conservatism, and secrecy

influence corporate tax strategies (Khlif, 2016). The findings reveal that higher levels of professionalism and secrecy in accounting correlate with increased tax avoidance, whereas greater uniformity and conservatism are associated with reduced tax avoidance. These insights highlight the significant role of cultural values in shaping corporate tax behavior and suggest that fostering a strong ethical framework within accounting departments can mitigate tax avoidance.

Finally, the study's comprehensive analysis and integration of agency and deterrence theories with the theory of reasoned action provide a deeper understanding of the mechanisms through which accounting practices and cultural values impact tax avoidance. This theoretical integration presents a nuanced perspective that challenges and extends existing models in accounting and corporate governance (Ajzen, 1991; Ajzen and Fishbein, 1980; Allingham and Sandmo, 1972; Casey and Scholz, 1991).

The rest of this paper is organized as follows: part 2 explains the background of the theory and literature review related to tax compliance. Part 3 describes the research methodology. The results are presented in Part 4, followed by a discussion and analysis of the results in part 5. Finally, the conclusions and implications are presented in part 6.

Prior literature and hypotheses development

Tax avoidance theories

The primary theories that substantiate the formation of the hypotheses are agency theory, deterrence theory for elucidating the connection between tax avoidance and accounting conservatism, and the theory of reasoned action for elucidating the link between tax avoidance and accounting values, based on prior research. The deterrence theory, which emerged from Allingham and Sandmo's (1972) research, contends that people and businesses engage in tax evasion by carefully weighing the likelihood of detection, the severity of sanctions, and their level of risk aversion. This theoretical framework operates under the presumption that utility alone determines decisions, disregarding any moral or civic considerations. Based on the research conducted by Casey and Scholz (1991), Dularif et al. (2019), and Dularif and Rustiarini (2022), the deterrence theory of tax avoidance suggests that individuals and businesses are less inclined to engage in tax evasion when they perceive the risks and negative consequences to outweigh the potential benefits.

Several fundamental elements support this hypothesis. First, the gravity of penalties and fines serves as a crucial deterrent. It is believed that imposing stricter punishments can more effectively deter tax dodging. Furthermore, the anticipated likelihood of being detected is of utmost importance. The effectiveness, creativity, and attention

of tax authorities largely determine the outcome. The increased probability of detection, combined with the potential for experiencing repercussions, is thought to decrease the occurrence of tax avoidance.

Agency theory is a concept in the fields of economics and organizational studies that elucidates the dynamic between principals, such as shareholders, and agents, such as corporate executives (Lambert, 2006; Heath, 2009). Chyz and White (2014) and Putra et al. (2018) establish that agency theory, when applied to tax avoidance, emphasizes the inherent conflict that can arise between firm managers (agents) and shareholders (principals). Managers may employ aggressive tax avoidance tactics to increase the company's immediate earnings, potentially augmenting their own compensation, particularly if it is tied to financial performance criteria that benefit from reduced tax rates. Nevertheless, this strategy may conflict with the stockholders' long-term interests. Although tax avoidance may lead to immediate financial benefits, it also entails potential hazards such as legal consequences, harm to reputation, and the need to revise financial accounts, all of which can ultimately undermine the value of shareholders' investments.

The theory of reasoned action, proposed by Ajzen and Fishbein (1975) and further developed by Ajzen and Fishbein (1980), posits that an individual's behavior is influenced by their intention to engage in that behavior, which is in turn shaped by their attitude towards the behavior and the subjective norms they perceive. Ajzen (1991) expands upon this theory by incorporating a third factor: the belief that the behavior will result in the desired outcome. According to Ajzen and Fishbein (1980) and Ajzen (1991), individual behavior is influenced by intention, which is determined by three factors: attitude (personal attitude towards the action), subjective norms (personal beliefs about what others think), and perceived behavioral control (the level of control and supervision over the behavior).

According to Terry and O'Leary (1995) and Rhodes and Courneya (2003), an individual's intention to perform a behavior is higher when they have a more positive attitude, stronger subjective norms, and a greater sense of perceived control. The studies conducted by Bobek and Hatfield (2003), Kogler and Kirchler (2020), and Taing and Chang (2021) show that the concept of reasoned action is applicable to tax avoidance. It suggests that an individual's choice to avoid taxes is determined by four interrelated factors: attitudes, subjective norms, intention, and behavior. Attitudes refer to an individual's personal opinions and evaluations of the outcomes of tax avoidance, including the apparent financial advantages. Secondly, subjective norms pertain to the perceived social pressures or expectations related to tax avoidance, which are impacted by friends, family, or societal perspectives. The initial two elements of the theory of reasoned action, namely the individual's intention and preparedness to engage in tax avoidance,

play a crucial role in shaping their behavior. Ultimately, when combined with the essential resources and opportunities, this desire manifests as the concrete action of avoiding taxes. By comprehending these elements, one might develop tactics to modify attitudes and norms, thereby potentially decreasing the inclination toward tax avoidance.

Accounting conservatism and tax avoidance

The scholarly discourse on corporate tax avoidance is extensive and inconclusive. This literature encompasses a broad spectrum of factors influencing tax avoidance behaviors in corporations. These factors are categorized into internal and external elements. Internal factors include intrinsic characteristics of a company, such as corporate governance.

Numerous researchers have carried out significant studies in this field, including Lee et al. (2015), Riedel (2018), Kovermann and Velte (2019), and Wang et al. (2020). These studies explore the intricate dynamics within a company, such as firm size (Rego, 2003; Wilson, 2009), leverage (Lin et al., 2014), business strategy (Robinson et al., 2010; Higgins et al., 2015), and ownership structure (Desai and Dharmapala, 2009; Chen et al., 2010). A lot of research has also been done on internal factors like the firm's debt policy (Richardson et al., 2014; Kubick and Lockhart, 2017), dividend policies (McClure et al., 2018), the impact of financial analysts (Allen et al., 2016), and the ways it is governed (Dyreg et al., 2010; Armstrong et al., 2012).

In addition, external factors pertain to the broader environment in which a company operates. These include the rigidity of tax enforcement (Hoopes et al., 2012; Atwood et al., 2012), the pressures exerted by external market forces (Kubick et al., 2015; Edwards et al., 2016), and the impact of social networks (Brown and Drake, 2014; Kim and Zhang, 2016; Cai and Cao, 2023). Recent academic investigations have expanded to include management incentives in tax avoidance, as seen in the work of Delgado et al. (2023). This diversification of research perspectives indicates an evolving understanding of tax avoidance, encompassing both the internal mechanics within firms and the external pressures and incentives that shape their tax-related decisions.

The examination of the relationship between earnings management and tax avoidance has been a prominent focus in accounting research, with studies presenting varied and sometimes contradictory findings in specific countries. Notably, several researchers identify a significant positive relationship, suggesting that firms engaging in aggressive financial reporting are also more likely to pursue aggressive tax strategies. For instance, Frank et al. (2009) observe this trend among U.S. corporations, while Richardson et al. (2016) and Tang et al. (2017) corroborate these findings within the context of the Chinese market. These studies collectively imply that

the pursuit of aggressive financial reporting often coincides with the adoption of aggressive tax avoidance measures. Additionally, Kubick and Masli (2016) extend this argument by linking CFOs' compensation incentives to increased tax aggressiveness, further substantiating the interconnectedness of internal corporate governance structures with tax behavior.

Contrastingly, other studies reveal a more nuanced, if not contradictory, perspective. Wang and Mao (2021) provide evidence of a negative impact of earnings management on tax avoidance in the Chinese context, challenging the commonly held notion of a unidirectional relationship. This finding suggests that in certain environments or under specific regulatory frameworks, aggressive financial reporting may not necessarily align with aggressive tax strategies. Similarly, Delgado et al. (2020) discover that in Europe's largest economies, earnings management leads to higher effective tax rates, implying a reduction, rather than an intensification, in tax avoidance efforts. This unexpected result shows that the relationship between managing earnings and avoiding taxes depends on a number of things, such as the type of management of earnings (real versus accrual-based) and the cost-benefit analysis that companies do. Furthermore, the study by Kaldowski and Jewartowski (2020) highlights that firms engaged in real earnings management, particularly those striving to meet or exceed benchmark earnings, tend to eschew aggressive tax planning, suggesting a divergence in strategy based on the nature of earnings management.

In a similar vein, the examination of the relationship between accounting conservatism and tax avoidance across various studies presents a complex and often inconclusive picture. Notably, several studies conducted on Indonesian companies, such as those by Purwantini (2017), Trisusanti and Lasdi (2018), Yuniarsih (2018), Muhsin (2019), Sjahputra (2019), Ratnasari et al. (2019), Lismiyati and Herliansyah (2021), Ardillah and Halim (2022), Rudianti and Hermawan (2023), and Dewi and Andriyani (2023), demonstrate varied results. While some, like Sjahputra (2019), find that accounting conservatism deters tax avoidance, others, including Purwantini (2017) and Yuniarsih (2018), observe no significant impact. Similarly, studies conducted in Nigeria by Suleiman (2020), Suleiman and Barnabas (2021), and Sa'ad et al. (2023) offer insights into the dynamics between accounting conservatism and tax avoidance, with Suleiman (2020) noting a moderate effect of conservatism on tax avoidance in firms with female directors on audit committees. In contrast, Sa'ad et al. (2023) find a significant negative effect of accounting conservatism on corporate tax avoidance.

The aforementioned research papers indicate a potential connection between earnings management and tax avoidance. Additionally, some evidence suggests that accounting conservatism may discourage tax avoidance.

However, the overall lack of definitive conclusions from these studies emphasizes the necessity for a more

detailed comprehension of the relationship between accounting practices and tax strategies. Hence, the utilization of agency and deterrence theories aims to elucidate the impact of accounting conservatism on the practice of tax avoidance. According to agency theory, adopting a conservative accounting approach results in the prompt identification of expenses and losses while delaying the recognition of income (Ball and Shivakumar, 2006). Managers' capacity to engage in aggressive tax planning can be diminished as a result of the financial statements reflecting decreased profits or increased losses. Furthermore, according to agency theory, the implementation of accounting conservatism has a tendency to enhance the clarity and openness of financial statements (Dimitropoulos and Asteriou, 2008; Iatridis, 2011).

This can hinder managers' ability to employ tax evasion tactics that depend on obscure financial reporting. According to agency theory, accounting conservatism can limit managers' choices in financial reporting, hence reducing their capacity to manipulate earnings (Chen et al., 2007; Haider et al., 2021). The decrease in flexibility can restrict the opportunities for tax evasion, which frequently depends on controlling the timing and acknowledgment of revenue and expenses.

Similarly, the theory of deterrence suggests that the fear of punishment or unfavorable outcomes might dissuade individuals or entities from participating in undesirable actions. This theoretical viewpoint, known as deterrence theory, could be influential in comprehending the impact of accounting conservatism on the avoidance of taxes. Conservatism in accounting promotes a prudent and transparent method of financial reporting, resulting in the timely acknowledgment of probable losses and liabilities (Dularif et al., 2019; Dularif and Rustiari, 2022). This level of transparency, in accordance with deterrence theory, serves as a strong disincentive against the use of aggressive tax avoidance tactics.

Companies are discouraged from engaging in tax evasion due to the fear of legal consequences, which is intensified by the transparent and cautious financial disclosures, as well as the concern for potential damage to their reputation among stakeholders. Therefore, by employing deterrence theory, accounting conservatism indirectly decreases tax evasion by increasing the perceived risks and repercussions associated with such behaviors, thereby reducing their appeal or feasibility for corporations. Based on the above analysis, we suggest that accounting conservatism, through its principles of prompt loss recognition and transparent reporting (as postulated by agency theory) and the heightened perception of risk and consequences (as suggested by deterrence theory), acts as a significant impediment to tax avoidance activities in corporations. Therefore, we formulate the following hypothesis:

Hypothesis 1: Accounting conservatism negatively

impacts the practice of tax avoidance in corporations.

Accounting values and tax avoidance

The examination of the relationship between accounting values and corporate tax avoidance has been largely overlooked. However, there is limited empirical data concerning the influence of national culture on corporate tax evasion practices. Notably, Yoo and Lee (2019) utilize a dataset comprising Global Ultimate Owners from 31 nations within the industrial sector, spanning the years 2008 to 2015. Their findings indicate that multinational corporations based in nations characterized by lower levels of uncertainty avoidance, individualism, and power distance but higher masculinity tend to exhibit greater tax avoidance compared to those headquartered in countries with opposite cultural dimensions. Furthermore, it is observed that the cultural attributes of the parent company exert a more significant impact on tax avoidance behavior at the group level than those of its subsidiaries. In a subsequent study by Toumi et al. (2022), which analyzed 944 cases from 2016, the impact of national culture on corporate tax avoidance is further explored. This research reveals a negative correlation between individualism and masculinity and effective tax rates, particularly under regimes of low tax aggressiveness. Conversely, a positive association is found between long-term orientation and effective tax rates, a relationship that becomes more dominant in environments with aggressive tax strategies.

Another strand of literature investigates the illegal part of tax noncompliance (namely tax evasion). This body of research exploring the direct and indirect influence of culture on tax evasion is both extensive and nuanced. Various studies have delved into this relationship, often with divergent outcomes. Among the pioneering works in this field is the study by Tsakumis et al. (2007), which utilizes Hofstede's cultural dimensions to analyze data from 50 countries between 2000 and 2002. This study identifies a distinct profile for noncompliant countries marked by high uncertainty avoidance, low individualism, low masculinity, and high power distance. Subsequent studies, like those by Richardson (2008) and Bame-Aldred et al. (2013), expanded on these findings. Richardson's (2008) research, based on data from 47 countries over 2002 to 2004, confirms the link between uncertainty avoidance and collectivism but finds inconsistencies in power distance and feminism. Bame-Aldred et al. (2013) approach the topic from a different angle, examining how individualistic societies that prioritize success might encourage deviant behaviors, including tax evasion. They find that cultures with high achievement orientation and assertiveness are more prone to such illegal practices.

Further expanding the discourse, Mahapatra et al. (2018), Hutchinson (2019), and Ermasova et al. (2021)

offered unique insights into the cultural underpinnings of tax evasion. Mahaputra et al. (2018), using online questionnaires in Bali, identify connections between several of Hofstede's cultural dimensions and the perceived ethics of tax evasion, though they note no significant links with short- or long-term orientation or indulgence or restraint. Hutchinson's (2019) exploratory study, using World Bank data from 2005 to 2010, suggested that cultural indices may be less significant when other socio-economic indicators are considered. Lastly, Ermasova et al. (2021) compare cultural impacts on tax evasion perceptions in Germany and the United States. Their study highlights differences in masculinity, long-term orientation, and uncertainty avoidance between the two countries, affecting attitudes towards tax evasion.

The above discussion indicates that the examination of the complex relationship between national culture and tax evasion has been a focal point in prior research, albeit with a predominant emphasis on the direct impacts and less on the underlying mechanisms. For instance, Brink and Porcano's (2016) study delves into the interplay between national culture and tax evasion through the lens of tax morale, analyzing data from various countries during 2000 to 2005. Their findings reveal a notable correlation where individualism and power distance positively, and masculinity negatively, relate to tax morale. This, in turn, inversely affects tax evasion levels, suggesting that countries with lower tax morale experience higher tax evasion. The study further identifies that only uncertainty avoidance and masculinity have significant direct ties to tax avoidance, although these associations vary between developed and developing nations.

In contrast, Sutrisno and Dularif's (2020) research adopts a meta-analytical approach, aggregating findings from 14 distinct articles published over a span of nearly three decades to scrutinize the roles of social norms and religiosity in tax evasion, with national culture as a potential moderating factor. Their synthesis indicates that, while social norms have limited efficacy in curbing tax evasion, religiosity emerges as a significant deterrent. However, their findings suggest that national culture, while influential in moderating the relationship between social norms and tax evasion, does not have a similar moderating effect on the religiosity-tax evasion nexus. Additionally, Hien's (2021) paper explores how historical and cultural factors, specifically the church-state conflict in 19th-century Italy, have shaped contemporary tax behaviors, underscoring that tax evasion in Italy is not merely a rational response to potential audits or inadequate public services but also a consequence of a deep-rooted mistrust towards the state. Lastly, Allam et al.'s (2023) study on European Union countries (2004 to 2018) further elucidates the indirect impact of national culture on tax evasion, highlighting the significant role of institutional environment quality in mediating this relationship. Their findings imply that aspects like power

distance, uncertainty avoidance, collectivism, and restraint in national cultures correlate with higher tax evasion levels, but this can be mitigated by enhancing institutional qualities such as the rule of law, regulatory quality, and government effectiveness.

According to the aforementioned papers, while there is existing evidence on the influence of culture on tax evasion, there is a lack of previous empirical evidence on how culture, particularly accounting values, impacts corporate tax avoidance (Khlif, 2016). Gray's (1988) framework for comparing international accounting systems is founded on Hofstede's (1980) cultural elements. This suggestion encompasses four accounting principles: professionalism vs. statutory control, uniformity versus flexibility, conservatism versus optimism, and secrecy versus transparency. These values demonstrate the extent to which a nation's cultural values influence its accounting practices. Consequently, hypotheses are currently formulated to examine the possible connections between accounting values and tax avoidance in different countries.

According to Gray (1988), the first dimension of accounting value contrasts the tendency toward individual professional discretion and self-governance in accounting (professionalism) with the tendency toward adherence to legal rules and regulations (statutory control). Within the context of accounting, in nations where there is a high level of professional discretion, accountants may employ more assertive methods of tax planning and avoidance (Murphy, 2004; Graham et al., 2014). This inclination is influenced by the theory of reasoned action, which posits that individuals' behavior is molded by their attitudes and subjective norms. In this context, accountants may perceive aggressive tax planning as a valid and advantageous component of their job, in line with the expectations of their professional network and clients. This view, combined with the societal expectation to adhere to these standards, encourages a desire to employ imaginative and assertive interpretations of tax legislation. As a result, accountants working in these settings are more inclined to develop tactics that actively reduce tax obligations, demonstrating a professional ethos that prioritizes the strategic optimization of tax advantages within the bounds of the law. Consequently, this discussion gives rise to the subsequent hypothesis:

Hypothesis 2: The higher the level of professionalism, the higher is the level of tax avoidance in corporations.

The second dimension of Gray's (1988) accounting value is uniformity versus flexibility. This dimension assesses the extent to which countries emphasize uniform accounting practices (uniformity) as opposed to allowing flexibility in response to the specific circumstances of individual companies (flexibility) (Gray, 1988). Under this dimension of accounting values, uniform accounting

standards may make it harder for companies to engage in tax avoidance as they have to adhere to strict rules (Chan et al., 2010; De Simone, 2016). In contrast, flexibility might allow for more creative accounting techniques that can facilitate tax avoidance.

According to the theory of reasoned action, Gray's (1988) second dimension of accounting values, which is the contrast between uniformity and flexibility, has a significant impact on the development of tax avoidance behaviors. In cultures that prioritize consistent accounting standards, corporations and accountants are prone to cultivating unfavorable attitudes towards tax avoidance. This is primarily owing to the rigorous adherence to transparent regulations as well as the social and professional pressures (subjective norms) that discourage such actions. Consequently, it leads to a decreased inclination to participate in tax avoidance. In situations where accounting flexibility is permitted, attitudes may be more inclined towards employing innovative accounting techniques, such as tax avoidance schemes, influenced by lenient subjective norms. This may result in an increased propensity to participate in tax avoidance, ultimately impacting the tangible actions of firms with regards to their tax policies.

The theory of reasoned action posits that the level of consistency or adaptability in accounting rules has a direct influence on the intents and actions associated with tax avoidance. Consequently, this discussion gives rise to the subsequent hypothesis:

Hypothesis 3: The higher the level of uniformity, the lower is the level of tax avoidance in corporations.

The third dimension of Gray's (1988) accounting value is conservatism versus optimism. Optimism is characterized by a more aggressive, risk-taking approach that may anticipate future gains, whereas conservatism in accounting refers to a cautious approach to measurement that allows for uncertainty and the possibility of future losses (Gray, 1988). Under this perspective, conservative accounting practices, which involve a cautious approach to measurement and recognition in financial statements, might limit aggressive tax avoidance strategies (Christensen et al., 2015). On the other hand, optimistic accounting might allow for more aggressive interpretations of tax laws (Hanlon and Slemrod, 2009).

Under the theory of reasoned action, the effect of the third dimension of accounting values on tax avoidance can be understood through the lens of attitudes and subjective norms towards financial risk and compliance. Conservative accounting aligns with negative attitudes towards aggressive tax avoidance and a tendency to adhere to societal and regulatory norms, leading to less aggressive tax avoidance. In contrast, optimistic accounting can foster a more positive attitude towards such strategies, especially if supported by subjective norms, potentially leading to more aggressive tax avoidance behavior. Consequently, this discussion gives

rise to the subsequent hypothesis:

Hypothesis 4: The higher the level of conservatism, the lower is the level of tax avoidance in corporations.

The fourth dimension of Gray's (1988) accounting value is secrecy versus transparency. This value dimension deals with the level of disclosure in financial reporting. Secrecy refers to a preference for confidentiality and restricted disclosure, while transparency implies a preference for openness and full disclosure in financial statements (Gray, 1988). Under this assumption, high levels of secrecy in financial reporting can provide cover for tax avoidance activities (Prabowo et al., 2022). Greater transparency, however, might deter such practices, as it increases the likelihood of detection by tax authorities and scrutiny by the public and shareholders (Oats and Tuck, 2019).

Under the theory of reasoned action, which suggests that an individual's behavior is driven by their intention and influenced by attitudes and subjective norms, the choice between secrecy and transparency in financial reporting significantly impacts a company's inclination towards tax avoidance. When a company favors secrecy, characterized by limited disclosure, this preference may stem from positive attitudes towards the perceived benefits and low risks of tax avoidance, reinforced by lenient subjective norms from stakeholders or regulatory bodies. This environment potentially increases the company's intention to engage in tax avoidance.

Conversely, a preference for transparency, marked by full disclosure, reflects attitudes shaped by the perceived risks of tax avoidance, such as legal consequences or reputational damage, and is bolstered by subjective norms that emphasize ethical practices and compliance with tax laws. Under this perspective, the company's intention to avoid tax avoidance is stronger, demonstrating how financial reporting practices, viewed through the lens of the theory of reasoned action, can substantially influence corporate behavior in the context of tax avoidance. Consequently, this discussion gives rise to the subsequent hypothesis:

Hypothesis 5: The higher the level of secrecy, the higher is the level of tax avoidance in corporations.

MATERIALS AND METHODS

Data, variables, and the empirical models

Sample selection

The initial sample comprises 57,961 firms, with a total of 1,148,250 firm-year observations collected from 102 countries. The data were taken from the Thomson Reuters Datastream database and covers the period from 2000 to 2022. The refinement process is as follows. First, firms without any data are eliminated, amounting to 31,741 firms. Second, in accordance with the suggestions of Lanis and Rischardson (2012), financial industry firms are excluded from the sample due to the unique impact of governmental laws on their effective tax rates, which differs from other firms in various

economic sectors (a total of 5,857 firms). Third, in accordance with the suggestions of Ortas and Gallego-Álvarez (2020), firms that account for less than 1% of the entire sample are excluded from the analysis to guarantee sample representativeness. This results in a total of 5,310 firms being deleted from the sample. Fourth, in accordance with the suggestions of Zimmerman (1983), firms with negative income are excluded from the sample because their effective tax rates (ETRs) are distorted (a total of 553 firms). This results in a total of 5,310 firms being deleted from the sample.

Following the aforementioned modifications, a total of 14,500 firms (comprising 97,599 firm-year observations) spanning the years 2000 to 2022 were included in the final panel. These firms were spread throughout 75 different nations. As recommended by Bonsall et al. (2017), winsorization is applied to all continuous variables at the 1st and 99th percentiles in order to minimize the impact of outliers. It is important to emphasize that after the aforementioned modifications to the initial sample, which led to the examination of the final sample of 14,500 firms, future researchers are strongly encouraged to undertake research focusing on the financial industry firms due to their unique regulatory environment, which significantly influences their effective tax rates. Financial firms operate under distinct governmental laws that create unique tax avoidance strategies and accounting practices, differing from other sectors (Lanis and Rischardson, 2012). Additionally, their systemic importance to the economy means that understanding their tax behavior has broader implications for economic stability and policy-making. The complex financial structures of these firms often obscure true tax liabilities, making detailed case studies essential for uncovering the intricacies of their tax practices (Lanis and Rischardson, 2012). Insights from such research can directly inform policymakers, leading to more targeted and effective regulatory interventions to curb tax avoidance in the financial sector.

Variables

Tax avoidance

In measuring corporate tax avoidance, Hanlon and Heitzman (2010), Lee et al. (2015), and Badertscher et al. (2019) find that most previous studies have mainly focused on non-conforming tax avoidance, which involves reducing taxable income without reducing accounting income. Thus, according to the studies conducted by Anuar et al. (2014) and Gebhart (2017), it is recommended to use effective tax-based and book-tax differential metrics to accurately assess tax avoidance. These measures should account for deferral tactics, non-conforming tax avoidance, and be computable by jurisdiction.

The cash effective tax rate (CAETR) is used to capture the effective tax-based measure of tax avoidance. CAETR is calculated by dividing the cash tax paid by pre-tax income (Dyrenge et al., 2010; McGuire et al., 2012; Badertscher et al., 2013; Gallemore and Labro, 2015). A higher (lower) value of CAETR indicates a lower (higher) value of tax avoidance.

Total book tax difference (TOBTD) is used to capture the book-tax difference measure of tax avoidance. TOBTD is calculated by the pre-tax income minus taxable income (Manzon and Plesko, 2001; McGuire et al., 2012; Taylor and Richardson, 2012). Taxable income is calculated by dividing the current tax expense by the statutory tax rate. A higher (lower) value of TOBTD indicates a higher (lower) value of tax avoidance.

Accounting values

Following Hope et al. (2008), Braun and Rodriguez (2008), and Heidhues and Patel (2011), we calculate the four dimensions of accounting values identified by Gray (1988), which are based on

the three operationalized dimensions of national culture developed by Hofstede (1980) (uncertainty avoidance, individualism versus collectivism, and power distance), namely professionalism versus statutory control, uniformity versus flexibility, conservatism versus optimism, and secrecy versus transparency. Gray's (1988) dimensions of accounting values are extensively used in previous literature (e.g., Chanchani and Willett, 2004; Noravesh et al., 2007; Hope et al., 2008; Braun and Rodriguez, 2008; Heidhues and Patel, 2011; Borker, 2012; Salter et al., 2013; Borker, 2013).

The first accounting dimension we examine is professionalism versus statutory control (PROFE). According to Gray (1988), this dimension refers to professional judgment and self-regulation in contrast to compliance with perspective legal requirements and statutory control. It is proposed as a significant accounting value dimension by Gray (1988) because accountants are perceived to adopt independent attitudes and to exercise their individual professional judgments to a greater or lesser extent everywhere in the world. It is calculated by country as the Hofstede and Hofstede (2005) individualism score minus the sum of uncertainty avoidance and power distance scores. A higher ranking in terms of individualism and a lower ranking in terms of uncertainty avoidance and power distance are indicative of professionalism (Gray, 1988).

The second accounting dimension we examine is uniformity versus flexibility (UNIF). The uniformity versus flexibility dimension refers to the level of enforcement of standardized and consistent accounting practices and seems to be a significant accounting value dimension because attitudes about uniformity, consistency, or comparability are incorporated as a fundamental feature of accounting principles worldwide (Gray, 1988). It is calculated by country as the Hofstede and Hofstede (2005) uncertainty avoidance score plus power distance score minus individualism score. Higher uncertainty avoidance and power distance rankings and lower individualism are indicative of a preference for uniformity (Gray, 1988).

The third accounting dimension we examine is conservatism versus optimism (CONS). This dimension of accounting values refers to a vigilant approach to accounting measurement as opposed to a more optimistic and risk-taking approach (Gray, 1988) and seems to be a significant accounting value dimension because it is arguably the most ancient and probably the most pervasive principle of accounting valuation (Sterling, 1967). It is calculated by country as the Hofstede and Hofstede (2005) uncertainty avoidance score minus the sum of the individualism and masculinity scores. Higher uncertainty avoidance and lower individualism and masculinity are indications of a preference for conservatism (Gray, 1988).

The fourth accounting dimension we examine is secrecy versus transparency (SECR). According to Gray (1988), secrecy versus transparency refers to confidentiality and the constraint of disclosure of information, as opposed to a more transparent and publicly accountable approach, and seems to be a significant accounting value dimension that stems as much from management as it does from the accountant, owing to the influence of management on the quantity of information disclosed to outsiders (Jaggi, 1975). It is calculated by country as the Hofstede and Hofstede (2005) uncertainty avoidance score plus the power distance score minus the sum of the individualism and masculinity scores. A higher ranking in terms of uncertainty avoidance and power distance and a lower ranking in terms of individualism and masculinity are indicative of a preference for secrecy (Gray, 1988).

The data on the three national cultures developed by Hofstede (1980) (uncertainty avoidance, individualism versus collectivism, and power distance) are extracted from the website www.hofstede-insights.com.

Accounting conservatism

There are various definitions and measurements of accounting

conservatism. However, most of the previous literature does not consider the actual economic environment and does not distinguish between different types of conservatism (e.g., Bliss, 1924; Devine, 1963; Watts and Zimmerman, 1990). In this regard, it is difficult to measure accounting conservatism, and scholars reach contradictory conclusions (Zhong and Li, 2017). Therefore, for the purpose of this research, we use the total accruals approach proposed by Givoly and Hayn (2000) to assess accounting conservatism.

Givoly and Hayn (2000) suggest that when net profit exceeds cash flow from operations, it may result in negative accruals in future months. Therefore, it is anticipated that conservative firms will disclose negative future accruals. Consequently, a decrease in the amount of accruals is associated with a greater degree of accounting conservatism. Consistent with prior research (Ahmed and Henry, 2012), we assess conservatism using accruals (CACC). This measure is calculated as the sum of total income before extraordinary items and depreciation, minus cash flow from operations, divided by total assets. The average value is computed over a three-year period. Averaging over a three-year period has the benefit of eliminating the impact of any transiently high value of accruals (Ahmed and Henry, 2012). We multiply CACC by -1 so that higher values of CACC represent greater accounting conservatism.

Control variables

The econometric model includes various control variables that have traditionally been linked to tax avoidance in prior research to avoid biased estimates. The variables examined in this study include firm leverage (LEV), firm profitability (PROF), firm value (FV), firm growth (FG), and firm liquidity (LIQ) (Lanis and Richardson, 2012; Tang et al., 2017; Guenther et al., 2017; Trisusanti and Lasdi, 2018; Sjahputra, 2019; Wang et al., 2020; Kałdoński and Jewartowski, 2020; Wang and Mao, 2021; Thalita et al., 2022; Dewia and Andriyani, 2023; Budiarto and Achyani, 2023; Cai and Cao, 2023).

The data for these control variables were obtained from the DataStream database. Appendix A provides a comprehensive description of the variables employed in this study and their various sources.

Empirical models

This study employs the Arellano-Bover/Blundell-Bond system estimator, a robust two-step generalized method of moments (GMM) estimator (Arellano and Bover, 1995; Blundell and Bond, 1998). The selection of this methodology is particularly pertinent for addressing the endogeneity issue prevalent in our dataset, which includes firm-year observations across multiple countries. Endogeneity, often arising from omitted variables, simultaneity, or measurement errors, can lead to biased and inconsistent parameter estimates if not properly addressed (Wooldridge, 2010).

The GMM estimator is chosen because it effectively mitigates this issue by using lagged levels and differences of the independent variables as instruments. This approach ensures that the instrumental variables are not correlated with the contemporaneous error term, thus enhancing the consistency and reliability of the parameter estimates (Roodman, 2009). Specifically, the lagged values serve as instruments that are less likely to be correlated with the error term while maintaining correlation with the endogenous variables, thereby improving estimation precision (Baum et al., 2003).

The general model used is as follows:

$$Y_{it} = \alpha_{it} + \delta Y_{it-1} + \beta X_{it} + u_{it}$$

where Y_{it} is the dependent variable for firm i in year t ; α_{it} is firm specific effects; X_{it} is the vector of independent variables contains exogenous and endogenous variables; u_{it} is the error term and δ and β the parameters to be estimated. In this paper dependent variables are $Y = \{tobtd, caetr\}$ while independent $X = \{cacc, lev, prof, fv, liq\}$. With this specification the outline of the Bover/Blundell–Bond system estimator is as follows:

We assume that there is no autocorrelation in the error term u_{it} , hence, Δu_{it} are correlated with Δu_{it-1} but uncorrelated with Δu_{it-k} for $k > 2$. This assumption can be tested by Arellano–Bond test (Arellano and Bond, 1991).

In our model, the dependent variable's lag also serves as a regressor, necessitating first-differencing for fixed effects elimination. Under this framework, lags Y_{it-2} , Y_{it-3} ... become instrumental in the first-differenced model.

Arellano and Bover (1995) and Blundell and Bond (1998) significantly enhanced the precision of estimations by introducing the condition $E(\Delta Y_{it-1} u_{it}) = 0$. This key addition integrates the level equation model, instrumented by ΔY_{it-1} , with the first-differenced equation. We performed this estimator by using STATA 17 program.

One potential limitation of using the GMM estimator is the requirement for a large sample size to achieve reliable results. The estimator's reliance on numerous instrumental variables can lead to overfitting, which might weaken the model's validity. To mitigate this, we employ Sargan's test to verify the validity of the instrumental variables, ensuring that the instruments are appropriate and not over-identified (Cameron and Trivedi, 2010).

Additionally, the model assumes no autocorrelation in the error term, an assumption tested by the Arellano-Bond test for autocorrelation. The results indicated significant negative first-order autocorrelation, consistent with the differencing process used to remove fixed effects, and no evidence of second-order autocorrelation, affirming the robustness of our model.

The chosen GMM methodology is particularly suited for this study as it handles the dynamic panel data structure efficiently, accounting for unobserved heterogeneity and providing more precise estimates by addressing endogeneity concerns. This is crucial for examining the intricate relationships between accounting conservatism, accounting values, and tax avoidance across a diverse and extensive dataset encompassing 14,500 firms from 75 countries over 22 years.

Moreover, by integrating agency and deterrence theories with the theory of reasoned action, this study presents a comprehensive framework to understand how conservative accounting practices and cultural accounting values influence tax avoidance behaviors. This theoretical integration not only enhances the robustness of our empirical analysis but also contributes to the broader understanding of corporate tax behavior in a global context.

EMPIRICAL RESULTS

Descriptive and correlation analysis

Table 1 presents the descriptive statistics for the model variables. The mean effective tax rate (CAETR) of approximately 22% suggests that, on average, firms in the sample have this level of tax rate. The standard deviation indicates significant variability in tax rates among different entities. The range, from 0 to nearly 1, further supports this variability, indicating that some firms have very low effective tax rates, while others are close to the maximum.

Table 1. Summary of the variables' main descriptive statistics.

Variable	Obs.	Mean	Std. Dev.	Min.	Max.
CAETR	94.599	0.220	0.168	0.000	0.999
TOBTD	94.599	8.338	1.229	4.904	11.557
CACC	94.599	0.015	0.073	-0.271	0.278
PROFE	94.599	66.489	39.462	-48	156
UNIF	94.599	-66.489	39.462	-156	48
CONS	94.599	42.675	33.097	-50	106
SECR	94.599	15.619	42.053	-75	106
LEV	94.599	0.736	1.000	0.001	7.810
PROF	94.599	0.074	0.060	0.000	0.311
FV	94.599	1.299	3.701	0.002	32.127
FG	94.599	9.524	1.135	7.082	12.728
LIQ	94.599	2.051	1.491	0.325	9.980

This table presents a summary of the main descriptive statistics of the model variables. See Appendix A for variable definitions.

For TOBTD, Table 1 illustrates a higher mean and a wider range compared to CAETR, indicating more pronounced variability in the total book tax difference across the sample. The higher standard deviation also reflects this greater dispersion. Regarding the accounting dimensions (PROFE, UNIF, CONS, and SECR), the mean, minimum, and maximum values indicate that the sample includes companies from countries with significant differences in terms of their accounting values and beliefs.

PROFE, with a mean of 66.49 and a broad range from -48 to 156, exhibits significant disparity among countries in balancing individualism against uncertainty avoidance and power distance, as indicated by its high standard deviation of 39.46.

On the other hand, UNIF has a negative mean (-66.49), suggesting that people tend to be more independent when they are avoiding uncertainty and keeping their power distance high. The range of values for UNIF is similar to that of PROFE. CONS displays a moderate average level (mean of 42.67) but with considerable variance (standard deviation of 33.10), spanning from -50 to 106.

Finally, SECR shows a relatively lower average inclination (mean of 15.62), with a wide range (-75 to 106) and a high standard deviation (42.05), reflecting diverse preferences for secrecy among different countries.

These statistics of accounting values underscore the substantial heterogeneity in cultural attributes across the countries sampled, highlighting the diversity in individualism, power distance, uncertainty avoidance, and masculinity in shaping accounting and cultural norms and practices.

Table 2 presents the pairwise correlations between tax avoidance and accounting conservatism, accounting values, and control variables. As hypothesized, Table 1

shows that tax avoidance measures are negatively associated with accounting conservatism. In particular, the weak positive correlation between CAETR and CACC and the similarly weak negative correlation with TOBTD suggest that conservative accounting choices may have small effects on tax metrics. This is in line with the idea that conservative accounting might slightly change reported profits and tax obligations.

Regarding the correlations between accounting values and tax avoidance, Table 2 shows that professionalism and secrecy values are positively associated with tax avoidance, whereas uniformity and conservatism values are negatively associated with tax avoidance. In particular, the relationships between PROFE, CAETR, and TOBTD suggest that profit efficiency has a small impact on CAETR but a moderately positive impact on TOBTD. This could mean that efficient profit generation is linked to bigger differences between book and taxable income. UNIF's very weak correlations with both CAETR and TOBTD hint at a negligible to modest impact on tax variables. There is a weak positive correlation between CONS and CAETR and a moderate negative correlation with TOBTD. This suggests that there is a small link with higher tax rates and smaller book-tax differences, which may be due to conservative financial reporting.

Finally, SECR's moderate negative correlation with CAETR and positive correlation with TOBTD indicate a more significant role in determining tax rates and differences, possibly due to effective tax management strategies.

Influence of accounting conservatism and accounting values on tax avoidance

According to Table 3, CAETR and TOBTD show that accounting conservatism (CACC) has a significant impact

Table 2. Pairwise correlations between the tax avoidance, accounting conservatism, accounting values and control variables.

Correlation	CAETR	TOBTD	CACC	PROFE	UNIF	CONS	SECR	LEV	PROF	FV	FG	LIQ
CAETR	1											
TOBTD	0.090*	1										
CACC	0.042*	-0.041*	1									
PROFE	-0.012*	0.195*	0.064*	1								
UNIF	0.012*	-0.195*	-0.064*	-0.618*	1							
CONS	0.010*	-0.218*	-0.061*	-0.797*	0.797*	1						
SECR	-0.161*	0.225*	0.082*	0.729*	-0.929*	-0.913*	1					
LEV	-0.028*	0.009	-0.038*	-0.056*	0.056*	0.035*	-0.061*	1				
PROF	-0.068*	0.267*	0.356*	0.049*	-0.049*	-0.066*	0.068*	-0.218*	1			
FV	0.010*	-0.051*	-0.024*	-0.077*	0.077*	0.002	-0.079*	0.050*	0.025*	1		
FG	-0.051*	0.777*	-0.001	0.234*	-0.234*	-0.277*	0.268*	0.078*	0.103*	-0.068*	1	
LIQ	0.005	-0.094*	0.049*	0.032*	-0.032*	0.010*	0.005	-0.275*	0.102*	-0.006*	-0.176*	1

This table shows pairwise correlations between tax avoidance and accounting conservatism, accounting values, and control variables. See Appendix A for variable definitions. * Significant at the 10% level.

on tax avoidance strategies in firms. More precisely, the regression analysis reveals a favorable coefficient for CACC in relation to CAETR and an unfavorable coefficient in relation to TOBTD. These findings link increased levels of accounting conservatism to greater effective tax rates and reduced discrepancies between book and tax values, thereby indicating a decrease in tax avoidance. Thus, along with the findings of Sjahputra (2019) and Budiarto and Achyani (2023), our study confirms Hypothesis 1, which states that accounting conservatism has a detrimental effect on tax evasion behaviors in corporate entities. This means that higher levels of accounting conservatism are associated with higher effective tax rates and reduced tax avoidance, indicating that conservative accounting practices deter aggressive tax planning and promote transparency in financial reporting. For corporate entities, this means adopting conservative accounting practices can lead to greater compliance with tax laws and reduced risks associated with tax evasion. Future researchers should explore how specific elements of conservatism, such as timely loss recognition and cautious revenue reporting, contribute to this deterrent effect. Agency and deterrence theories support the aforementioned findings. According to agency theory, conservative accounting methods restrict managers' ability to engage in aggressive tax planning by promptly acknowledging losses and expenses while postponing income recognition. This is evident in the financial accounts through reduced profits or heightened losses, thereby limiting options for tax avoidance. The deterrence theory reinforces these findings by proposing that transparency and caution in financial reporting, which are distinctive features of accounting conservatism, serve as deterrents against aggressive tax avoidance tactics. The fear of legal repercussions and damage to their reputation among stakeholders deters companies from engaging in tax

avoidance.

Table 3 presents the results of the regression analysis, which examines the associations between accounting values (PROFE, UNIF, CONS, and SECR) and tax avoidance (CAETR and TOBTD). The analysis examines the impact of accounting conservatism, the balance between professionalism and statutory regulation, the trade-off between uniformity and flexibility, and the contrast between secrecy and transparency on corporate tax avoidance. PROFE exhibits an inverse relationship with CAETR and a direct relationship with TOBTD. This suggests that, according to TOBTD and CAETR measurements, there is a positive correlation between higher levels of accounting professionalism and higher levels of tax avoidance. Consequently, our findings support Hypothesis 2. This suggests that accounting professionals who highly value professionalism may engage in more sophisticated tax avoidance strategies. Corporate entities should ensure that professional standards are aligned with ethical guidelines to prevent misuse. Future research could focus on developing frameworks that balance professional competence with ethical behavior to mitigate tax avoidance. According to the theory of reasoned action, accounting professionals who perceive high professionalism as essential and highly regarded by their colleagues are more inclined to adopt practices that may involve tax avoidance methods. The presence of this belief and societal influence can result in an increased inclination towards tax avoidance.

Furthermore, according to Table 3, there is a positive correlation between UNIF and CAETR and a negative correlation between UNIF and TOBTD. This suggests that implementing standard accounting practices may decrease tax avoidance, as assessed by TOBTD, but raise CAETR. Thus, Hypothesis 3 is supported. It means that standardized accounting practices (uniformity) are associated with reduced tax avoidance, indicating that

Table 3. Influence of accounting conservatism and accounting values on tax avoidance.

Variable	CAETR				TOBTD			
	Coefficient	std. err.	z	p-value	Coefficient	std. err.	z	p-value
Intercept	0.541	0.222	2.430	0.015	-1569	0.219	-7.150	0.000
CACC	0.193	0.030	6.250	0.000	-0.244	0.026	-9.290	0.000
PROFE	-0.003	0.001	-1.850	0.064	0.002	0.001	2.230	0.026
LEV	-0.017	0.004	-3.430	0.001	-0.004	0.003	-1.120	0.263
PROF	-0.062	0.053	-1.180	0.238	1.967	0.054	35.990	0.000
FV	-0.000	0.000	-0.130	0.898	0.001	0.000	2.040	0.042
FG	-0.053	0.022	-2.350	0.019	0.823	0.024	33.360	0.000
LIQ	0.008	0.002	3.020	0.003	-0.002	0.002	-0.900	0.367
Time effects (controlled)								
Obs.	94.599				94.599			
Arellano/Bond test Order 1	z =-36.103, prob > z = 0.000				z =-34.051, prob > z = 0.000			
Arellano/Bond test Order 2	z =1.108, prob > z =0.2677				z =0.913, prob > z =0.5405			
Sargan test	$\chi^2 =78.758$, prob > $\chi^2 = 0.6502$				$\chi^2 =101.456$, prob > $\chi^2 = 0.0944$			

This Table presents the estimates of model 1. See Appendix A for variable definitions. When using the variables UNIF, CONS, and SECR as independent variables instead of PROFE, the results remain stable, and the coefficients of these variables are nearly identical in absolute value. Both models presents highly negative of z-statistic with p-values <0.001 indicate significant negative first-order autocorrelation, which is consistent with the differencing process used in these models to remove fixed effects. The second test for the two models indicates that there is no evidence of second-order autocorrelation. This suggests that the differencing and instrument process is appropriately addressing autocorrelation. The Sargan test of over-identifying restrictions indicates that the null hypothesis of the instruments being valid cannot be rejected for CI 95% at least so, the instruments appear appropriate.

adherence to uniform standards limits opportunities for aggressive tax strategies. Encouraging uniform accounting standards across firms can help reduce tax avoidance. Future research should investigate the impact of international accounting standards on tax compliance and explore how harmonization of standards can be optimized to deter tax avoidance. Based on the theory of reasoned action, professionals are likely to follow accounting standards if there is a strong emphasis on uniformity in accounting and if these standards are socially endorsed. Conforming to these norms can lead to reduced tax avoidance, as standardized methods may limit opportunities for aggressive tax planning.

Table 3 also demonstrates a positive correlation between CONS and CAETR as well as a negative correlation between CONS and TOBTD. These findings suggest that employing conservative accounting standards can result in decreased tax avoidance, as evaluated by CAETR and TOBTD. Consequently, our findings support Hypothesis 4. The study supports that conservatism in accounting practices leads to reduced tax avoidance, reinforcing the notion that prudent financial reporting discourages aggressive tax planning. Firms should adopt conservative accounting principles to ensure transparency and reduce the likelihood of tax avoidance. Future researchers could examine the specific mechanisms through which conservatism influences corporate tax behavior and its long-term effects on financial health.

Within the framework of the theory of reasoned action,

the presence of a strong emphasis on conservatism within the accounting profession, which is also socially encouraged, can influence financial reporting and tax procedures to be more cautious. Consequently, this can lead to a reduced tendency for tax avoidance.

Table 3 shows that SECR has a negative relationship with CAETR and a positive relationship with TOBTD. This means that more secrecy in financial reporting is linked to more people not paying their taxes. The findings support Hypothesis 5. It means that increased secrecy in financial reporting correlates with higher levels of tax avoidance, suggesting that lack of transparency facilitates tax evasion. Secrecy in financial reporting can facilitate tax avoidance by obscuring financial information. Corporate entities should enhance transparency in their financial reporting to reduce tax avoidance behaviors. Future research should explore the impact of transparency initiatives on tax avoidance and assess the effectiveness of different transparency measures across various regulatory contexts. Based on the theory of reasoned action, when there is a strong emphasis on secrecy in financial reporting among professionals, it can promote actions that prioritize keeping information confidential. This, in turn, can result in increased levels of tax avoidance due to reduced transparency.

CONCLUSIONS AND IMPLICATIONS

The objective of the research is to examine certain

unresolved issues regarding the correlation between tax avoidance, accounting conservatism, and accounting values. This research makes several contributions to the existing literature.

Firstly, it expands the scope of the dataset by including 14,500 firms from 75 countries over the period of 2000 to 2022. Secondly, it investigates the influence of accounting conservatism on tax avoidance. Lastly, it explores the relationship between Gray's (1988) accounting values and tax avoidance.

The study reveals a positive correlation between heightened levels of accounting conservatism and elevated effective tax rates, as well as diminished disparities between book and tax values. This indicates a decline in the practice of avoiding taxes, consistent with the findings of Sjahputra (2019) and Budiarto and Achyani (2023). These findings are consistent with the principles of agency and deterrence theories. Conservative accounting practices limit the ability of managers to engage in aggressive tax planning, while transparent financial reporting serves as a deterrent against aggressive tax avoidance.

Furthermore, our analysis uncovers valuable insights into the correlations among different accounting values, such as professionalism, uniformity, conservatism, secrecy, and tax avoidance. The study reveals a positive correlation between increased professionalism in accounting and the practice of tax avoidance. These findings indicate that accounting professionals who prioritize high levels of professionalism are more likely to participate in tax avoidance activities.

Similarly, placing a significant focus on consistency in accounting practices demonstrates a reduction in the act of avoiding taxes. This suggests that the implementation of standardized accounting practices may limit the possibilities for aggressive tax planning, but it could unintentionally lead to an increase in other methods of avoiding taxes. Moreover, the analysis suggests that employing conservative accounting practices is linked to reduced levels of tax avoidance.

This result indicates that adopting a prudent strategy in financial reporting can reduce the inclination towards engaging in tax avoidance. Finally, there is a direct correlation between heightened secrecy in financial reporting and an elevated level of tax avoidance. The finding suggests that a culture of secrecy within the accounting profession can result in less clear-cut practices, potentially intensifying tax avoidance activities. By applying the theory of reasoned action, we investigated the impact of Gray's (1988) accounting values on tax avoidance. Our findings indicate that in cultures characterized by high professionalism and transparency, attitudes and norms tend to discourage tax avoidance, resulting in reduced occurrences of this behavior. In contrast, in cultures that prioritize statutory control and secrecy, attitudes and norms may be more tolerant of tax avoidance, potentially leading to a higher prevalence of such behavior.

In overall, the paper's findings offer valuable insights into the intricate dynamics of accounting practices and tax avoidance, making significant theoretical and practical contributions to the fields of accounting and finance. More precisely, the findings have significant ramifications for individuals who have an interest in the company and those who are responsible for its management. It emphasizes the need to adopt cautious accounting practices to reduce the risks associated with aggressive tax strategies. These practices improve the clarity and openness of financial reporting, fostering confidence among investors, customers, and regulators, which is essential for ensuring long-term viability. Managers are advised to carefully consider the ethical and legal implications when making tax decisions, as these strategies have a substantial effect on corporate reputation and relationships with stakeholders. This approach promotes the idea of finding a middle ground between making money and following ethical rules. It highlights the importance of using ethical accounting methods to build strong relationships with stakeholders and guarantee the long-term success of the company.

The results also have significant theoretical implications. The authors illustrate the amalgamation of agency and deterrence theories with the theory of reasoned action, offering a nuanced comprehension of how accounting conservatism and values impact tax avoidance. This integration presents a novel viewpoint in the domain of accounting, which questions and broadens conventional theories. It implies a nuanced interaction between accounting practices and corporate behavior, necessitating a reassessment of current models and theories in accounting and corporate governance.

CONFLICT OF INTERESTS

The authors have not declared any conflict of interests.

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Appendix A. Variable definition and sources.

Variable		Description	Source
Dependent variable			
CAETR	Tax avoidance	Cash effective tax rate is calculated by dividing the cash tax paid by pre-tax income.	Datastream
TOBTD	Tax avoidance	Total book tax difference is calculated by the pre-tax income minus taxable income.	Datastream
Independent variable			
CACC	Accounting conservatism	Average total accruals calculated as net profit before extraordinary items less cash flow from operations plus depreciation scaled by total assets multiplied by -1 and averaged over three-year period (Givoly and Hayn, 2000).	Datastream
PROFE	Professionalism	Professionalism is calculated by country as the Hofstede and Hofstede (2005) individualism score minus the sum of uncertainty avoidance and power distance scores.	Hofstede and Hofstede (2005) https://www.hofstede-insights.com/
UNIF	Uniformity	Uniformity is calculated by country as the Hofstede and Hofstede (2005) uncertainty avoidance score plus power distance score minus individualism score.	Hofstede and Hofstede (2005) https://www.hofstede-insights.com/
CONS	Conservatism	Conservatism is calculated by country as the Hofstede and Hofstede (2005) uncertainty avoidance score minus the sum of the individualism and masculinity scores.	Hofstede and Hofstede (2005) https://www.hofstede-insights.com/
SECR	Secrecy	Secrecy is calculated by country as the Hofstede and Hofstede (2005) uncertainty avoidance score plus power distance score minus the sum of the individualism and masculinity scores.	Hofstede and Hofstede (2005) https://www.hofstede-insights.com/
Control variable			
LEV	Firm leverage	Firm leverage is calculated by dividing long-term debt by common equity.	Datastream
PROF	Firm profitability	Firm profitability is measured using return on assets calculated by dividing net income before extraordinary items by total assets.	Datastream
FV	Firm value	Firm value is measured using Tobin's Q	Datastream
FG	Firm growth	Firm growth is calculated as the difference between current year's and previous year's revenue over the previous year's revenue.	Datastream
LIQ	Firm liquidity	Firm liquidity is calculated by dividing current assets by current liabilities.	Datastream