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The nexus between standalone risk committees and tax aggressiveness: evidence from Nigeria

Edosa Joshua Aronmwan^{1*} and Sebastine Abhus Ogbaisi²

Abstract

Effective management of risk especially tax risk is arguably hinged on a framework of corporate governance that ensures amongst others that the board of directors is effective and efficient in delegating some of its roles and duties to well-structured committees, without relinquishing its responsibilities. Based on this assertion, this paper inquires into the link between constituting a standalone risk management committee and tax aggressiveness in nonfinancial listed companies in Nigeria. A combination of ex post facto research design and quantitative approach was employed while data were sourced from the financials of eighty (80) firms for twelve (12) years (2008–2019). The censored Tobit estimator was used to evaluate the model for the study, and the finding agrees with the expectation of the agency theory that the presence of a standalone risk committee mitigates tax aggressive practice in Nigeria. The finding has several contributions: first, it extends the literature on the link between corporate governance and organisational behaviour with emphasis on tax aggressiveness. Second, it provides evidence on how the establishment of a risk management committee impacts aggressive tax behaviour, thus, supporting the position of the Nigerian Code of Corporate Governance 2018 on the establishment of risk committees. Flowing from this finding, the study recommends strict regulatory compliance by those charged with governance (internal and external) with the requirements for a risk committee as this will improve governance and reduce the risk emanating from tax aggressiveness.

Keywords: Risk committee, Tax aggressiveness, Corporate governance, Effective tax rate, Nonfinancial companies

JEL Classification: G32, G34, H26

Introduction

The importance of taxation to the economy of every nation cannot be overemphasised. Governments require taxes to augment other revenue sources as well as ensure the provision of public goods. Unfortunately, not every government, especially in developing countries, can achieve optimal tax compliance. In many cases, a significant part of the informal sector is excluded from the tax net [43], while companies in the formal sector try to minimise tax liability by engaging in different tax planning activities [27].

It is not surprising for management to seek avenues to reduce tax liabilities. One logical explanation is the desire to maximise shareholders' wealth even though this affects the revenue capacity of the government [17, 27], which in turn negatively impacts society as it robs it of the availability of public goods. In addition, companies minimise tax liabilities because taxes are outflows from the company's earnings without any likely immediate benefit. This outflow could have increased the net cash position of firms, which in turn could be used to improve investments, fulfil financial obligations, or paid as dividends to shareholders [29].

In quantifiable terms, [54] reports that \$9.6 billion is lost annually by the government to tax planning activities in West African countries while \$2.9 billion

*Correspondence: joshua.aronmwan@uniben.edu

¹ Department of Accounting, University of Benin, Benin City, Nigeria
Full list of author information is available at the end of the article

is lost specifically in Nigeria. The 2016 report by the United Nation Conference on Trade and Development (UNCTD) also corroborates the magnitude of revenue lost by developing nations to the tax planning behaviour of Multinational Enterprises. The report specifically documents that \$100 billion in aggregate is lost by developing nations [14]. These reports are indicative of the effect of aggressive tax behaviour on revenue generation globally and in Nigeria [29].

While corporate tax planning cannot be said to be outright illegal, some aggressive tax avoidance practices may be considered as illegal tax schemes depending on the tax laws of a given jurisdiction [35, 49]. For example, [63] observed that the tax reforms (reduction in corporate tax rate) carried out by the Dutch government in 2006/2007 and the one by the German government in 2007/2008 created an atmosphere where companies were able to engage in tax planning and earnings management. In this case, tax planning by these companies may be difficult to classify as illegal. However, [45, 47] posited that tax aggressiveness may be beneficial in terms of tax savings, but it can equally be detrimental to the firm's operations since defying tax laws poses reputational and litigation risks which could affect either firm value or the solvency of the company in the long-run. Hence, tax aggressiveness is risky and requires control and monitoring.

The concept of corporate governance equally relates to the issue of tax aggressiveness. It is the totality of means by which organisations are controlled and monitored. The overriding importance is to ensure that shareholders' interests are safeguarded. Guluma [23] asserted that the business reason for ensuring sound corporate governance practices is to improve performance and maximise operational and market efficiency by minimising abuse of insider power. However, when it comes to the issue of tax aggressiveness, there are usually multiple conflicts of interest that can lead to abuse of power. One is between management and shareholders while the other is between shareholders and stakeholders. The conflict between management and shareholders is based on the likelihood of rent extraction and opportunistic behaviour of the former [16, 37]. The conflict between shareholders and stakeholders is usually from an ethical/legalistic point of view. Engaging in tax aggressive practices may result in value enhancement for shareholders [15, 22]. However, it also leads to a shortage or reduction in government revenue, which in turn limits the power of the government to meet societal demands and sustainability concerns [12, 55]. Thus, the issue of tax aggressiveness as it relates to governance is double-barrelled and requires putting in place mechanisms to ensure proper monitoring and control. One of such mechanism is the establishment

of board sub-committees such as audit committees, risk committees, and sustainability committees that are tasked with different oversight functions.

A good number of corporate financial scandals in the last two decades were attributed to, inter alia, poor corporate governance and the inability of the board to manage risks. This has led to the clamour for standalone committees to effectively monitor and mitigate various dimensions of risks [1, 21, 31]. The corporate governance codes of different countries, including the 2018 Nigerian Code of Corporate Governance [NCCG], require publicly listed companies to establish a risk management framework, in addition to the statutory audit committee and other board committees, to improve their performances [6]. However, opponents question the requirements of the NCCG 2018 that it leads to duplication of roles and functions in the absence of evidence to support the effectiveness of having a standalone risk committee. Therefore, it is pertinent to evaluate the assertion and statutory requirements for a risk committee backed by empirical evidence.

Traditionally, the responsibility for financial oversight and supervision of a firm's internal control and risk rests on the statutory audit committee [25, 57], however, the various unexpected corporate failures provide a basis to believe that the task of both financial and nonfinancial risk management perhaps has gone beyond the reach and competence of just the audit committee [52]. Abdullah and Shukor [1], Larasati et al. [33] posited that tax risk management also relates to a company's financial risk, thus without an effective audit committee and risk committee, there is the likelihood that management may engage in risky tax avoidance activities that would endanger the reputation of the company. In addition, PricewaterhouseCoopers [46] argues that while it may be a good idea to delegate risk management to the audit committee, this may not be so effective as proper risk management requires a different kind of expertise that audit committee members may not have. Audit committee members are selected based on financial and accounting related expertise, and they may have little expertise when it comes to the management of risk. Fowokan et al. [21] posited that the "recent trend of tax litigation cases in both the developed and developing countries is a signal to the fact that organizations' risk management framework would have to include oversight of compliance with the tax laws and regulations", and this duty should be assigned to a capable committee. Also, [58] asserts that a comprehensive framework for managing risk is needed by every organisation that seeks to efficiently deal with the various dimensions of risk such as regulatory, systematic, operational, financial, and strategic risk ... just to mention a few. Thus, the issue of risk management cannot be wished away.

A growing number of studies [26, 50, 53, 66] have shown that audit committee effectiveness is associated with a lower propensity for risky tax planning. In addition, the presence of a risk management committee significantly reduces a firm's financial risks, including engagement in risky tax avoidance schemes [2, 33]. More directly, the study by [48] showed evidence that the presence of an effective risk committee and audit committee jointly reduce tax aggressiveness. However, the outcomes of these prior studies were based on evidence from developed countries which may not hold when tested within a developing clime like Nigeria.

In Nigeria, companies are required to have committees that may be standalone or combined committees to ensure sufficient oversight of the board. For example, every company is expected to have a statutory audit committee having financial reporting oversight; a nomination and governance committee responsible for nominating and appointing members to the board of directors and oversight of governance matters, respectively; a remuneration committee expected to ensure appropriate remuneration policies, packages and incentives, especially for the managerial cadre; and a risk management committee responsible for oversight matters related to risk [20]. These requirements are relatively new as they are enshrined in the NCCG 2018 which applies to all public companies. However, some argue that having a standalone risk management committee will create overlapping responsibilities between it and audit committees and this may according to the agency theory and resource-based theory, improve monitoring and advisory [33] but on the other hand, the overlapping may also inhibit the effective functioning of the risk committee as its members may be too busy because of the various commitments in other board committees. Consequently, the relationship between standalone risk committees and strategic outcomes such as firm performance, tax planning, and financial reporting quality may not be clear-cut and thus requires more empirical investigations.

Studies in emerging nations [41–43, 62] focused on the impact of corporate governance mechanisms such as the board of directors and firm-level characteristics on tax aggressiveness, but scarcely on the effect of risk committee attributes on tax aggressiveness. The few studies on risk committee [4, 18, 19, 31] have focused on its impact on other aspects such as operational efficiency [58], firm performance, and cybercrime [19], thus leaving other areas open for research. For example, [19] found that risk committee attributes (independence and meetings) had a significant effect on cybercrime within the Nigerian financial sector thus providing evidence that the risk committee is an efficient governance tool to checkmate cyber risk. Similarly, [39] observed that risk

committee size and independence significantly reduced underwriting risk associated with insurance companies in Malaysia. Although these studies report a significant influence of risk committee attributes on organisational outcomes, their focus was on financial companies, and it also excluded tax aggressive behaviour. Consequently, the question of the influence of the risk committee on the level of a firm's tax aggressiveness in nonfinancial companies is considered a valuable research area worthy of empirical investigation. This study aims to therefore examine the influence of the risk management committee on tax aggressiveness in Nigeria.

This study sampled 80 nonfinancial companies listed on the Nigerian Exchange market from 2008 to 2019 (960 firm-year observations). The censored Tobit estimator was used to evaluate the model for the study, and the finding proves that the presence of a standalone risk committee mitigates aggressive tax practices in Nigeria. This shows that risk committees are not just ceremonial or rubber-stamped committees rather they are substantial committees for sound corporate governance and risk control. For regulatory agencies, this finding provides supporting empirical evidence for the position of the Nigerian Code of Corporate Governance 2018 on the establishment of risk committees. For practitioners, this finding indicates that the risk associated with aggressive tax behaviour can be managed by constituting a standalone risk committee.

The rest of the paper is structured to present both conceptual and empirical reviews in section two. Section three presents the methodology of the study while data analysis and discussion are in the fourth section. The fifth section concludes the paper with recommendations and policy implications.

Literature review and hypothesis development

Theoretical framework-agency theory

[30] is generally accredited to have popularised the agency theory although several attempts were made before 1976. The agency theory describes the relationship that exists when a principal employs an agent and grants the agent the authority to act on his behalf [30]. The theory emanated as a result of the conflict that exists between the principal and the agent. The conflict arises as a result of information asymmetry where the agent seems to have more information about the operations of the firm as compared to the principal. These agents tend to use this information to achieve their selfish driven interests to the detriment of the goals of the principals. Consequently, for the principal to curb the issue of agency conflict, they incur cost known as agency cost. This cost goes a long way in motivating agents in preventing unwanted situations.

The agency conflict tends to impact tax aggressiveness. This is premised on the fact that agency problems tend to occur when there are differences in the interests of the agent and that of the principal. The agent may involve in tax aggressive behaviour for rent extraction [16, 37], which is to the detriment of the principal. To checkmate this behaviour, the principal may establish monitoring mechanisms. Setting up a risk management committee is one of the monitoring mechanisms that can be in place. According to [57], “monitoring board committees are seen to provide better quality monitoring, leading to lower opportunistic behaviour by managers” (p.321). However, the actions of the risk management committee can either be advisory-harnessing the advantage of tax planning by ensuring the costs do not outweigh the benefits or monitoring-checking the opportunistic behaviour of management [48]. Whichever, it is obvious that from the agency theory perspective, there should be a link between having a risk committee and engaging in tax aggressiveness.

Tax aggressiveness

Although the concept of corporate tax aggressiveness lacks a universal definition, concepts like tax avoidance, tax management, tax planning, and tax sheltering are all related terms often used in signifying firms’ activities geared towards reducing tax burden or increasing after-tax cash flows through the optimization of the effective tax rate. Slemrod [56] linked tax aggressiveness to tax avoidance and defined it as “anything that corporations do to reduce their tax liability”. Richardson et al. [48] described tax aggressiveness as a scheme put in place by the company with the principal motive of avoiding tax. Taylor and Richardson [60] further defined tax aggressiveness as any transaction, either passive or otherwise, that results in a decline in the tax liability of a company. From the foregoing, one common ideology that subsists in the definitions of tax aggressiveness is arranging the fiscal operations of a firm in a manner that reduces the amount of tax payable.

There are several strategies used by firms in a bid to reduce their tax burden. For example, multinational firms with foreign subsidiaries could set up businesses in a Free Trade Zone [9] or shift their income to low-tax jurisdictions to achieve optimum tax rates [59, 60]. Martinez and Motta [36] also posited that tax planners often choose debt over equity financing by adopting the thin capitalisation strategy. In Nigeria, applicable laws provide the freedom of corporate taxpayers to structure their operations in a manner that minimises their tax liability, as long as it aligns with ethical standards under applicable tax legislation [11]. The Chartered Institute of Taxation of Nigeria equally identifies with tax planning practices that

conform to the tax laws, but not to the extent of being aggressive [13]. Section 22 of the Companies Income Tax Act 2004 also contains the General anti-avoidance rules (GAAR) of tax legislation in Nigeria. The idea behind the creation of the GAARs rules by different countries is to discourage or prevent deliberate and aggressive tax avoidance schemes which could slide into tax evasion [11, 17].

The major identifiable advantage of tax aggressiveness is the resultant tax savings which enhance the after-tax earnings of the company [64]. The tax savings allow the company to embark on fresh investments which could make their shares more attractive and potentially creates a positive signal to foreign investors and capital market players [43, 44]. Although the above is expected to benefit the shareholders, the managers also benefit in terms of compensations when tax liabilities are reduced through tax management, especially where such provisions are made in their contracts. On the other hand, [24] identified the major disadvantages of tax aggressiveness to include tax fines and penalties (i.e. potential punishments), implementation cost, agency costs of rent extraction, corporate reputation damage and loss especially when the effective tax rate becomes too low prompting a tax audit. Abdul-Wahab et al. [3] documented that aggressive tax avoidance schemes inflate agency problems due to the unaligned interest of managers and stockholders regarding tax risk – depending on the tax planning strategy of the firm.

[8, 65] argued that companies often invest large amounts of time and resources in realising a tax reduction strategy via the engagement of top auditing firms as tax consultants. Thus, the cost expended in pursuing tax reductions such as expenses for tax consultancy or for running a tax department might outweigh the eventual tax savings achieved [29]. This is where the need for appropriate corporate governance monitoring mechanisms through the board sub-committees comes into play to ensure a balance between the cost and associated risks of being tax aggressive and the benefit of successful tax planning.

Risk management committee (RMC)

Risk in this context can be described as the likelihood of exposing the business to danger or severe loss due to either internal or external vulnerabilities. A risk management committee (RMC) can thus be described as a board sub-committee that is saddled with the responsibility of overseeing both the nonfinancial and financial risk management strategy of a company. It is a vital part of the firm’s risk management policy and processes for good corporate governance [21]. The provision for the formulation of standalone RMC in Nigeria first appeared

in the 2011 revised Securities and Exchange Commission (SEC) code as a suggestion for public companies. The code stated that companies may consider it if they deem it appropriate depending on their size and sector and that only directors and senior management staff should be members. The NCCG 2018 also suggested the establishment of RMC, but unlike the 2011 code, it insisted in its principle 11.5.2 that the members should consist more of non-executive directors (NED), while the chairman must be NED with relevant professional qualifications and experience [20].

The functions of the RMC in Nigeria includes: (i) evaluating the appropriateness and effectiveness of the company's risk management framework, policies and controls, (ii) assisting the board with oversights of risk management strategy, (iii) exercising oversight over the identification, prevention, detection and risk reporting mechanisms across the company, (iv) reviewing the extent of the company's adherence to applicable laws and regulatory requirements which may affect the risk profile of the company; (v) appraising the variances in the business and economic environment of the company and other related factors that could disrupt the company's business model, strategies, performance, solvability, long-term sustainability, liquidity; and bringing such to the knowledge of the board and management and make recommendations, at least annually; and (vi) overseeing the Information Technology (IT) framework of the company in terms of: developing the IT policies and strategies, monitoring and managing of IT-related risks (cyber threats, attacks, social media issues, data protection, etc.).

Abubakar et al. [4] posited that one of the pros of having RMCs is for early detection and mitigation of probable operational and catastrophic risks, including tax risk. Among all the risks faced by companies, exposure to tax risk is one of the most difficult to quantify and manage [21]. The Australian Tax Office [61] defined tax risk as "the risk that companies may be paying or accounting for an incorrect amount of tax ..., or that the tax positions a company adopts are out of step with the tax risk appetite that the directors have authorized or believe is prudent". While tax risk is considered inevitable as almost all organisations engage in one form of tax planning or the other, the effectiveness of the RMC is dependent on the tax strategy adopted since most corporate experts have limited knowledge of tax [52]. Thus, in establishing the RMC for tax risk management, it is worth considering the cost of risk for sanctions by striking the right balance between the risk of detection and the opportunity of reducing taxes [31].

Despite the much-increased interest in risk committees, which reportedly escalated after the global financial

crisis, studies still claim that their presence is largely witnessed in large financial institutions and still relatively rare outside the financial services industry [46]. Kakanda [31] stated that "risk management is regarded as one of the major phases of corporate governance, particularly in the case of financial institutions" (p. 6). Specifically, in a survey conducted by [46] focusing on 500 listed large companies in the United States (S&P 500), 51% of the directors claimed that their companies do not have RMC and do not need one. According to their report, only about 14% of companies (excluding financial services) in the S&P 500 have RMCs that are combined with finance or audit duties. The findings of the report concluded that only 8% of the S&P 500 have standalone RMC and that percentage drops to just 1% when the financial services companies are excluded. It is worthy of note that the NCCG (2018) requirement for the establishment of a separate RMC did not entirely incorporate coercive rules, unlike the more assertive requirement for RMC in the 2014 Central Bank of Nigeria's code of governance for banks and discount houses – which requires that Nigerian banks and discount houses shall establish RMC and a Chief Risk Officer. As such, the focus of this paper on the Nigerian nonfinancial companies provides an insight into the extent to which the establishment of standalone RMCs are embraced by the nonfinancial sector as well as its impact on tax aggressive behaviours.

Risk management committee and tax aggressiveness

Prior studies have conflicting evidence on the impact of RMC presence on different organisational outcomes, although only a few examined the relationship between RMC and tax aggressiveness. For example, [38] sampled U.S. financial firms and found that the existence of RMC and the independence of its members decreased the risks of insiders trading and led to a reduction in losses particularly during the financial crisis. Richardson et al. [48] investigated the influence of the risk management system on tax aggressiveness of 300 publicly listed companies in Australia in 4 years (2006–2009) and found that the establishment and presence of an effective RMC, together with internal control, significantly reduced tax aggressiveness among the sampled Australian firms. Larasati et al. [33] studied 216 Indonesian firms from 2014 to 2016 and found that the existence of a standalone RMC significantly increased auditor remuneration. A study by [39], which focused on only listed Malaysian insurance firms between 2003–2011, found that while an insignificant association existed between RMC diligence (in terms of the number of meetings) and underwriting risk, the effect of RMC size and independence on underwriting risk is significantly negative. The outcome of another Malaysian study [5] showed that the presence of

RMC increased financial restatement and is less beneficial as projected by regulators in terms of prevention of financial restatement.

Coming to the Nigerian environment, few studies have also examined the impact of RMC presence, but largely not on tax aggressiveness. For example, [18] investigated the influence of different attributes of the RMC (such as chief risk officer presence, independence and activism) on the performance of 11 out of 15 Nigerian banks. Their result revealed a significant positive influence of RMC characteristics on the financial performance in the Nigerian banking industry. In a similar study, [4] also examined how RMC presence affect the performance of 14 banks listed on the NSE from 2014 to 2016. They found that the RMC independence exhibits an inverse significant relationship with bank performance. Also, the study of [31], which sampled 45 financial companies in Nigeria, found risk management size to be inversely and significantly associated with firm performance, while the RMC composition and number of meetings significantly improve firm performance. Irri et al. [28] investigated the influence of audit committee effectiveness and having a risk committee on tax aggressiveness in Nigeria. Based on the analysis carried out, the study found that these two corporate governance attributes exhibited a significant effect on corporate tax aggressive behaviour and concluded that effective monitoring of the risk associated with tax aggressiveness can be accomplished by establishing a standalone risk committee.

Going by the directions of the prior studies in respect of the numerous benefits of having a standalone RMC, the likelihood that the RMC presence could mitigate the level of risky tax avoidance strategies is possible. Therefore, the hypothesis for this study is thus put forward:

H1 There is a significant relationship between the presence of standalone risk committees and tax aggressiveness.

Methods

A combination of the quantitative approach and the ex post facto research design was utilised in this study. The population is all the 169 companies listed in the Nigerian Exchange market as of 31st December 2019. However, the actual sample size of 80 was arrived at after using the data filtering technique to exclude financial companies, natural resources, oil and gas companies, and companies with incomplete information (see Table 1). The study applied a similar data filtering technique applied in the studies of [8, 10].

Data for this study were obtained from the financial statements of the sampled companies from 2008 to 2019. Descriptive statistics and Pearson correlation were used for univariate analysis. In addition, the independent

Table 1 Final sample. Source: Researcher’s Computation (2022)

Sectors	Number
Total listed companies	169
Financial services companies	– 55
Natural resources, oil & gas companies	– 16
Companies with incomplete data	– 18
Sample companies	80

student t-test was conducted to evaluate if the level of tax aggressiveness was different for companies with and without risk committees.

The Tobit regression estimator was used for the multivariate analysis. This estimator was chosen because the dependent variable was censored to have values between one (1) and zero (0) as ETRs with values beyond these boundaries do not have economic/rational implications.

The model used in the study (see Eq. 2) was adapted from [66] who investigated the relationship between audit committee and tax aggressiveness (Eq. 1).

$$\begin{aligned}
 \text{TAXAGG} = & \beta_0 + \beta_1\text{ACIND} + \beta_2\text{ACEXP} \\
 & + \beta_3\text{ACSIZE} + \sum \text{control variables}
 \end{aligned}
 \tag{1}$$

where TAXAGG = tax aggressiveness measured as ETR, BTD, and BTD differential; ACIND = audit committee independence proxy as the proportion of independent directors to total board members; ACEXP = audit committee expertise operationalized using dummy variable of 1 for the presence of financial and legal experts; ACSIZE = audit committee size captured based on the number of audit committee members.

$$\begin{aligned}
 \text{CASHFETR}_{it} = & \beta_0 + \beta_1\text{RSKCM}_{it} + \beta_2\text{ACSIZE}_{it} \\
 & + \beta_3\text{BIND}_{it} + \beta_4\text{FSIZE}_{it} \\
 & + \beta_5\text{INOWN}_{it} + \beta_6\text{LOSS}_{it} + \varepsilon
 \end{aligned}
 \tag{2}$$

Table 2 captures, in summary, the measurements of the variables for the study. Apart from the variable of interest (risk management committee), other variables were introduced as control. Audit committee size, board independence, and institutional ownership were introduced to control for other internal and external corporate governance mechanisms. Also, the size of the company was controlled for since big companies may have deep pockets, connections and economies of scale to engage the services of tax experts or sway tax policies in their interest. Furthermore, big companies are usually exposed to more public scrutiny and monitoring than smaller companies. Lastly, we control for loss firms as this can also impact tax aggressive behaviour.

Table 2 Variable measurement. *Source:* Researcher's compilation (2022)

Variable	Variable type	Code	Measurement	Source
Tax aggressiveness	Dependent	CASHFETR	Cash tax paid divided by net cash flow from operating activities	Salihu et al. [51]
Risk management	Independent	RSKCM	Dummy (Assign 1 if risk management committee is established, otherwise, 0)	Abdullah and Shukor [1]; Larasati et al. [33]
Audit committee size	Control	ACSIZE	Number of members on the committee	Al Lawati and Hussainey [6]
Board independence	Control	BIND	The ratio of independent non-executive directors to total board size	Abdullah and Shukor [1]; Guluma [23]
Firm size	Control	FSIZE	Log of total assets	Hines and Peters [25]
Institutional ownership	Control	INOWN	The ratio of shares held by institutional shareholders to total outstanding shares	Khurana and Moser [32]
Loss firms	Control	LOSS	Dummy (1 = loss, otherwise, 0)	Lee and Swenson [34]

Table 3 Descriptive and correlation analysis for all variables. *Source:* Researcher's compilation (2022)

Variables	Mean	SD	VIF	1	2	3	4	5	6	7
1. CASHFETR	0.139	0.224		1						
2. RSKCM	0.583	0.495	1.126	0.109	1					
3. ACSIZE	5.440	1.177	1.209	0.113	0.279	1				
4. BIND	0.619	0.121	1.056	<i>0.075</i>	0.085	0.138	1			
5. FSIZE	6.877	0.809	1.410	0.046	0.268	0.360	0.120	1		
6. INOWN	0.545	0.264	1.217	<i>-0.066</i>	0.109	0.152	0.196	0.394	1	
7. LOSS	0.245	0.430	1.034	-0.179	-0.015	-0.042	0.019	-0.174	-0.052	1

Bold faces are sig @ 1%; italics are sig @5%

Results and discussions

In this section, emphasis is placed on discussing just the results for tax aggressiveness and risk management committee as they are the focus of the study. The statistics for CASHFETR ($M=0.139$, $SD=0.224$) as shown in Table 3 reveal that companies in the nonfinancial sector are tax aggressive as the mean value is well below the 30% statutory tax rate. However, the standard deviation shows wide variations in tax aggressive behaviour within the industry. Furthermore, the mean value suggests that for every N1 generated from net operating activities, companies pay 13kobo to the government. This agrees with the findings of [18] who observed that the mean for different dimensions of ETR (accounting, cash, and cash flow) for 88 nonfinancial Nigerian companies was between 10.09% and 14.36%. Thus, the effective amount collected from nonfinancial companies as income tax is very much below the actual tax based on the statutory rate. The mean value observed here is an indicator that tax authorities may have to strengthen their tax collection policies.

The mean for RSKCM ($M=0.583$) suggests that more than half of the companies in the nonfinancial industry have standalone risk committees. This invariable shows alignment to the requirements of the NCCG 2018. This finding supports that of [18] who found that 50% of

banks in Nigeria had specially established the office of a risk officer to deal with risk oversight. While the current level is good, regulatory bodies can also intensify their monitoring to ensure higher compliance with the establishment of risk management committees as evidence in the literature shows that this governance mechanism has a positive turn on the overall management of a firm.

From the correlation matrix also in Table 3, it is observed that all the variables except for firm size have strong associations with tax aggressiveness from a univariate point of analysis. The results of the variance inflation factor test reveal the absence of multicollinearity as the VIFs are below the tolerance level of 10 [23]. This is equally supported by the inter-correlations among the independent and control variables, which are all less than 0.7.

To further investigate the magnitude of tax aggressiveness, we divided the sample into two parts based on the presence or absence of a standalone risk committee. Table 4 reveals that more companies have standalone committees.

Also, companies with standalone risk committees are less involved in aggressive tax practices ($M=0.16$, $SD=0.245$) than those without risk committees ($M=0.11$, $SD=0.188$). This provides a preliminary

Table 4 Tax aggressiveness based on risk committee presence. *Source:* Researcher’s compilation (2022)

	Risk committee	N	Mean	SD
Tax aggressiveness	Risk committee present	559	0.16	.245
	Risk committee absent	401	0.11	.188

finding that the presence of standalone risk committees mitigates aggressive tax behaviour in the Nigerian non-financial industry.

To determine if the difference in tax aggressiveness in companies with standalone risk committees is significantly different from companies not having risk committees, an independent sample t-test was conducted. From Table 5, it is observed that the result of the Levene’s test for homogeneity of variance does not sustain the null hypothesis that the variances are the same, thus unequal variance is assumed, and this places reliance on line two (2) of the t-test for equality of mean. Consequently, we find that there is a significant difference $t(953.235) = 3.582, p = 0.000$ in the level of tax aggressiveness for companies with standalone risk committee ($M = 0.16, SD = 0.245$) and those without ($M = 0.11, SD = 0.188$). This provides empirical findings that tax aggressiveness differs within the nonfinancial industry concerning the establishment of standalone risk committees.

The Tobit regression estimator was employed in investigating the relationship between the presence of a standalone risk committee and tax aggressiveness. Tax aggressiveness was captured using cash flow ETR, which is an inverse proxy. Therefore, a positive signed coefficient suggests an inverse relationship while a negative signed coefficient suggests a direct relationship.

From Table 6, it was found that RSKCM has a significant positive relationship ($\beta = 0.04, p = 0.026$) with CASHFETR suggesting that the presence of standalone risk committees mitigates the level of tax aggressiveness. In other words, establishing a risk management committee can potentially undermine aggressive tax behaviours that are detrimental to stakeholders. Consequently, the hypothesis that a significant relationship exists between the presence

Table 6 Censored normal (TOBIT) estimation. *Source:* Researcher’s compilation (2022)

Variable	Coefficient	z-Statistic [^]	Prob
RSKCM	0.0429	2.228*	0.026
ACSIZE	0.0365	4.082**	0.000
BIND	0.1716	2.212*	0.027
FSIZE	0.0139	0.934	0.350
INOWN	-0.1284	-3.234**	0.001
LOSS	-0.1675	-7.100**	0.000
C	-0.2243	-2.269*	0.023

* Sig @ 1%; ** Sig @ 5%

[^] Z statistics are based on robust standard errors

of standalone risk committees and tax aggressiveness is upheld by this study.

One implication of the finding of this study is that risk committee members play a substantial monitoring role and not an advisory or ceremonial role when it comes to tax aggressiveness. Two competing theories provide reasons why a company may establish a risk management committee. One is out of legitimacy concerns and to signal to stakeholders that management is law-abiding. In this instance, the risk committee is likely to be a rubber-stamp committee having ceremonial roles with no significant weight on governance and oversight. The other is based on reducing agency costs and monitoring opportunistic behaviour. When this is the case, such committees have substantial monitoring roles that reduce harmful corporate practices. The finding from this study suggests the latter and corroborates the assertion of [6] that risk arising from tax aggressiveness in any organisation is very sacrosanct, and it falls within the ambit of the board of directors in general and the risk management committee in particular, to identify, assess, and manage it.

Our finding is in tandem with the findings of [48] that the establishment and presence of an effective RMC, together with internal control, significantly reduced tax aggressiveness among the sampled Australian firms. In addition, the finding rests on the prediction of the agency and resource-based theories and equally affirms the assertion by [33] that internal controls (audit

Table 5 Independent t-test for difference in tax aggressiveness. *Source:* Researcher’s compilation (2022)

	Levene’s test for equality of variances		t-test for equality of means			
		F	Sig	t	df	Sig. (2-tailed)
Tax aggressiveness	Equal variances assumed	18.604	0.000	3.435	958	0.001
	Equal variances not assumed			3.582	953.235	0.000

committees, risk committees) lead to improved monitoring and advisory. In Nigeria currently, only the establishment of a standalone audit committee is mandatory others are somewhat voluntary or could be joint committees. However, considering the fast-paced technological advancement and globalisation, companies have become increasingly faced with diverse risks. Therefore, considering the evidence from this study, it will not be out of place to ensure the mandatory establishment of a standalone risk management committee in addition to having a comprehensive structure for enterprise risk management.

Our finding also confirms the finding of [27] who concluded based on an examination of 960 firm-year observations of nonfinancial Nigerian companies that audit committee effectiveness and establishment of risk management committee are two corporate governance mechanisms that can be used to efficiently control aggressive tax behaviour. However, our finding negates the position of [40] that the effectiveness of the risk management system is not statistically associated with the tax aggressiveness by Indonesian companies. PricewaterhouseCoopers [46] in their survey itemised some benefits of having a standalone risk committee such as sending an important signal to stakeholders on the company’s efforts in addressing risk-related issues. This study confirms this position as it establishes that having a risk committee is associated with low levels of tax aggressiveness thus signalling to stakeholders in general and the government in particular that the company is ethical in its dealing.

It is worthy to note that all the control variables except for firm size (FSIZE) also have a significant relationship with CASHFETR.

The Wald test was used to evaluate the overall significance of the model. Based on Table 7, it is observed that the overall regression is statistically significant ($F(6, 952) = 15.72, p < 0.001$). This lends credence to the predictive power of the model. Consequently, all the variables used in this study jointly contribute significantly to the level of tax behaviour observed in the sampled companies.

Additional analysis

To check the consistency of the findings, an additional test that takes into cognisance the issue of endogeneity was conducted. Endogeneity has been mentioned to be

a cause of concern when investigating issues surrounding corporate governance and organisational outcomes such as tax aggressiveness [7, 37]. Therefore, to cater for this, we employed the generalised method of moments (GMM). The reliance on the GMM result is premised on the appropriateness of instruments and the absence of second-order correlation [23]. From Table 8, the insignificance of the J statistics ($p = 0.2193$) and the Arellano and Bond second-order autocorrelation ($p = 0.3808$) prove that the results from the GMM can be relied upon as the null hypotheses for no over-identification of instruments, and no second-order serial correlation cannot be rejected. It is discovered that RSKCM has a significant and positive relationship ($\beta = 0.31, p < 0.001$) with CASHFETR, thereby upholding the initial finding that the presence of standalone risk committees mitigates the level of tax aggressiveness.

Conclusion and recommendations

This study was carried out to investigate the link between having standalone risk committees and tax aggressiveness in Nigerian listed companies. To achieve the objective, 80 nonfinancial firms were sampled, and data were extracted from their annual reports for the period 2008–2019. Aggressive tax behaviour was captured using cash flow effective tax rate. Despite its limitations, this measure is quite popular in literature and easy to compute. It also allows us to compare with prior studies. A battery of analyses was carried out which included the censored Tobit regression technique as the main test tool and the generalised method of moments as an additional test to control for endogeneity. The findings from both analyses sustained the assertion that the presence of standalone risk committees mitigates the level of tax aggressiveness.

Table 8 Additional test (GMM). *Source* Researcher’s compilation (2022)

Variable	Coefficient	T-Stat	P value
CASHFETR(− 1)	0.11472	11.9095*	0.0000
RSKCM	0.31128	8.0422*	0.0000
ACSIZE	− 0.06043	− 5.4436*	0.0000
BIND	− 0.34881	− 5.8404*	0.0000
FSIZE	0.01692	0.5539	0.5798
INOWN	− 0.24468	− 5.4808*	0.0000
LOSS	− 0.0089	− 0.5178	0.6048
J-statistic	57.4223		
Prob(J-statistic)	0.2193		
AR(1) Coeff	− 4.9471		
AR(2) Prob	0.3808		
Instruments/groups	67/80		

* Sig @ 1%; ** Sig @ 5%

Table 7 Wald test for joint significance. *Source:* Researcher’s compilation (2022)

Test statistic	Value	Df	Probability
F-statistic	15.72853	(6, 952)	0.000
Chi-square	94.37116	6	0.000

It also aligns with the agency theory perspective for the establishment of a risk management committee as a governance mechanism to ensure efficient monitoring of agents and curb opportunistic behaviours.

The study makes some important contributions to literature. There are various studies on diverse mechanisms of corporate governance and its effect on organisational outcomes but studies on risk committees and corporate tax behaviour are scanty thus, this study extends previous research by focusing on the risk management committee and using panel data from a developing nation. This study also provides clear empirical support for the position of NCCG 2018 on the formation of risk management committees. However, while the code allows for the combination of the risk management committee with related committees (e.g. the audit committee), this study opines that having the risk committee as a standalone committee will provide more governance and monitoring than when it is merged with other committees. The study recommends strict regulatory compliance by those charged with governance (internal and external) with the requirements of risk committees and sanctions for noncompliance. Furthermore, only the establishment of a standalone audit committee is mandatory in Nigeria, others are somewhat voluntary or could be joint committees. However, considering the fast-paced technological advancement and globalisation, companies have become increasingly faced with diverse risks, this study advises the mandatory establishment of a standalone risk management committee as this will increase governance which in turn will lead to operational and market efficiency.

While the finding of this study is robust, it is still subject to certain limitations. For example, only nonfinancial companies were examined as such, the finding may not apply to companies in financial services. Also, the study relied on just a single but popular measure for tax aggressiveness and did not consider other attributes of the risk committee. Therefore, future studies may consider investigating the effect that multiple attributes of the risk committee may have on tax aggressiveness. In addition, since the NCCG 2018 allows for a combination of committees, future studies may consider the effect of overlapping membership of risk committee members on tax aggressiveness.

Abbreviations

CBN: Central bank of Nigeria; FRC: Financial reporting council of Nigeria; GMM: Generalised method of moments; IT: Information technology; NCCG: Nigerian code of corporate governance; NED: Non-executive directors; RMC: Risk management committee; SEC: Securities and exchange commission; UNCTD: United nation conference on trade and development.

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Author contributions

EJ wrote most parts of this research (abstract, introduction, empirical literature, methods, results and discussion, conclusion, and recommendation). SA wrote the theoretical literature and proofread the final draft. All authors read and approved the final manuscript.

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Availability of data and materials

The data that support the findings of this study are available from the corresponding author, upon reasonable request.

Declarations

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Not applicable.

Consent for publication

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Competing interests

The authors declare that they have no competing interests.

Author details

¹Department of Accounting, University of Benin, Benin City, Nigeria. ²Department of Accounting and Finance, Samuel Adegboyega University, Ogwa, Nigeria.

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References

1. Abdullah M, Shukor ZA (2017) The comparative moderating effect of risk management committee and audit committee on the association between voluntary risk management disclosure and firm performance. *Jurnal Pengurusan* 51:159–172. <https://doi.org/10.17576/pengurusan-2018-51-14>
2. Abdullah WN, Said R (2019) Audit and risk committee in financial crime prevention. *J Financ Crime* 26:223–234. <https://doi.org/10.1108/JFC-11-2017-0116>
3. Abdul-Wahab EAA, Ariff AM, Marzuki MM, Sanusi ZM (2017) Political connections, corporate governance, and tax aggressiveness in Malaysia. *Asian Rev Account* 25:424–451. <https://doi.org/10.1108/ARA-05-2016-0053/FULL/HTML>
4. Abubakar AH, Ado AB, Mohamed MI, Mustapha UA (2018) The effect of risk management committee attributes and board financial knowledge on the financial performance of listed banks in Nigeria. *Am Int J Bus Manag* 1:7–13
5. Ali MM, Besar SST, Mastuki NM (2017) Audit committee characteristics, risk management committee and financial restatements. *Adv Sci Lett* 23:287–291
6. Al-Lawati H, Hussainey K (2021) Risk and financial management: Do overlapped audit committee directors affect tax avoidance? *J Risk Financ Manag* 14:487–501. <https://doi.org/10.3390/jrfm1410>
7. Annuar HA, Salihu IA, Obid SNS (2014) Corporate ownership, governance and tax avoidance: an interactive effects. *Proced Soc Behav Sci* 164:150–160. <https://doi.org/10.1016/j.sbspro.2014.11.063>
8. Armstrong CS, Blouin JL, Jagolinzer AD, Larcker DF (2015) Corporate governance, incentives, and tax avoidance. *J Account Econ* 60:1–17. <https://doi.org/10.1016/J.JACCECO.2015.02.003>
9. Aronmwan EJ, Okafor C (2019) Corporate tax avoidance: review of measures and prospects. *Int J Account Finance* 8:21–42

10. Aronmwan EJ, Okaiwele IM (2020) Measuring tax avoidance using effective tax rate: concepts and implications. *J Account* 10:27–38
11. Banwo F, Ighodalo A (2019) Examining the limits of Tax Planning & Management in Nigeria: Grey Matter. <https://www.banwo-ighodalo.com/grey-matter/examining-limits-tax-planning-management-nigeria>. Accessed 25 Mar 2022
12. Bird R, Davis-Nozemack K (2018) Tax avoidance as a sustainability problem. *J Bus Ethics* 151:1009–1025
13. Chartered Institute of Taxation of Nigeria (2017) Exposure draft: statement of taxation standard 9 on tax planning
14. Cobham A (2015) UNCTAD study on corporate tax in developing countries. <http://uncounted.org/2015/03/26/unctad-study-on-corporate-tax-in-developing-countries/>. Accessed 1 Apr 2022
15. Desai MA, Dharmapala D (2006) Corporate tax avoidance and high-powered incentives. *J Financ Econ* 79:145–179. <https://doi.org/10.1016/J.JFINECO.2005.02.002>
16. Desai MA, Dharmapala D (2009) Corporate tax avoidance and firm value. *Rev Econ Stat* 91:537–546
17. Deslandes M, Fortin A, Landry S (2020) Audit committee characteristics and tax aggressiveness. *Manag Audit J* 35:272–293. <https://doi.org/10.1108/MAJ-12-2018-2109>
18. Erin O, Asiriwuwa O, Olojede P, Ajetunmobi O, Usman T (2018) Does risk governance impact bank performance? Evidence from the Nigerian banking sector. *Acad Account Financ Stud J* 22:1528–2635
19. Erin OA, Kolawole AD, Noah AO (2020) Risk governance and cybercrime: the hierarchical regression approach. *Fut Bus J* 6:12. <https://doi.org/10.1186/s43093-020-00020-1>
20. Financial Reporting Council of Nigeria (2019) Nigerian Code of corporate governance 2018. Nigeria
21. Fowokan T, Oyedokun G, Abdul Z (2018) Comparative analysis of Nigerian and the United Kingdom's corporate governance codes: tax risk management approach. *Caleb Int J Dev Stud* 6–59
22. Graham JR, Tucker AL (2006) Tax shelters and corporate debt policy. *J Financ Econ* 81:563–594. <https://doi.org/10.1016/J.JFINECO.2005.09.002>
23. Guluma TF (2021) The impact of corporate governance measures on firm performance: the influences of managerial overconfidence. *Fut Bus J* 7:50. <https://doi.org/10.1186/s43093-021-00093-6>
24. Hanlon M, Slemrod J (2009) What does tax aggressiveness signal? Evidence from stock price reactions to news about tax shelter involvement. *J Public Econ* 93:126–141. <https://doi.org/10.1016/J.JPUBECO.2008.09.004>
25. Hines CS, Peters GF (2015) Voluntary risk management committee formation: determinants and short-term outcomes. *J Account Public Policy* 34:267–290. <https://doi.org/10.1016/j.jaccpubpol.2015.02.001>
26. Hsu PH, Moore JA, Neubaum DO (2018) Tax avoidance, financial experts on the audit committee, and business strategy. *J Bus Financ Acc* 45:1293–1321. <https://doi.org/10.1111/JBFA.12352>
27. Hutchens M, Rego SO, Williams B (2019) Tax avoidance, uncertainty, and firm risk
28. Irri DO, Aruwa SAS, Mainoma MA (2021) Audit committee effectiveness, risk committee presence and tax aggressiveness in listed non-financial firms in Nigeria. *J Taxat Econ Dev* 20:34–51
29. Jacob M, Rohlfing-Bastian A, Sandner K (2021) Why do not all firms engage in tax avoidance? *RMS* 15:459–495. <https://doi.org/10.1007/S11846-019-00346-3>
30. Jensen MC, Meckling WH (1979) Theory of the firm: managerial behavior, agency costs, and ownership structure. In: Brunner K (ed) *Econ Soc Inst Insights Conf Anal Ideol*. Springer, Dordrecht, pp 163–231
31. Kakanda MM, Salim B, Chandren SA (2018) Risk management committee characteristics and market performance: Empirical evidence from listed financial service firms in Nigeria. *Int J Manag Appl Sci* 2394–7926
32. Khurana IK, Moser WJ (2013) Institutional shareholders' investment horizons and tax avoidance. *J Am Taxat Assoc* 35:111–134. <https://doi.org/10.2139/SSRN.2153188>
33. Larasati DA, Ratri MC, Nasih M, Harymawan I (2019) Independent audit committee, risk management committee, and audit fees. *Cogent Bus Manag*. <https://doi.org/10.1080/23311975.2019.1707042>
34. Lee N, Swenson C (2018) Empirical evidence on the impact of recent Korean tax reforms. *Invest Manag Financ Innovat* 15:35–47. [https://doi.org/10.21511/imfi.15\(4\).2018.03](https://doi.org/10.21511/imfi.15(4).2018.03)
35. Lee R-J, Kao H-S (2018) The impacts of IFRSs and auditor on tax avoidance. *Adv Manag Appl Econ* 8:17–53
36. Martinez AL, Motta FP (2020) Agressividade fiscal em sociedades de economia mista no Brasil. *Revista Contemporânea de Contabilidade* 17:136–148. <https://doi.org/10.5007/2175-8069.2020v17n43p136>
37. Minnick K, Noga T (2010) Do corporate governance characteristics influence tax management? *J Corp Finan* 16:703–718. <https://doi.org/10.1016/J.JCORPFIN.2010.08.005>
38. Minton B, Williamson R, Minton BA, Taillard JPA, College B (2014) Financial expertise of the board, risk taking, and performance: evidence from bank holding companies. *J Financ Quant Anal* 49:351–380
39. Ng T, Chong L, Ismail H (2013) Is the risk management committee only a procedural compliance? *J Risk Finance* 14:71–86. <https://doi.org/10.1108/15265941311288112>
40. Niniek A, Riandoko R, Ramadhan MR (2018) The impact of supervision characteristics of board of commissioners on tax aggressiveness. In: *Proceedings of the 1st economics and business international conference 2017 (EBIC 2017)*. Atlantis Press, pp 147–160
41. Nwezoku NC, Egbunike PA (2020) Board diversity and corporate tax aggressiveness behaviour of quoted healthcare manufacturing firms in Nigeria. *Int J Adv Acad Res Soc Manag Sci* 6:66–96
42. Ogbide SO, Obaretin O (2018) Corporate governance mechanisms and tax aggressiveness of listed firms in Nigeria. *Amity J Corp Gov* 3:1–12
43. Oladipupo AO, Obazee U (2016) Tax knowledge, penalties and tax compliance in small and medium scale enterprises in Nigeria. *iBusiness* 8:1–9. <https://doi.org/10.4236/IB.2016.81001>
44. Onyali CI, Okafor TG (2018) Effect of corporate governance mechanisms on tax aggressiveness of quoted manufacturing firms on the Nigerian stock exchange. *Asian J Econ Bus Account* 8:1–20. <https://doi.org/10.9734/ajeba/2018/38594>
45. Pramudya WH, Harjanto N, Herutono S, Nurim Y (2019) Does the audit committee moderate tax planning's effect on the firm's solvability? *Adv Econ Bus Manag Res* 86:218–221. <https://doi.org/10.2991/ICOBAME-18.2019.47>
46. PricewaterhouseCoopers (2017) How the board can decide if it needs a risk committee. www.pwc.com/us/governanceinsightscenter Accessed 24 Mar 2022
47. Quentin C (2019) Acceptable levels of tax risk as a metric of corporate tax responsibility: theory, and a survey of practice. *Nordic Tax J* 2019:1–15. <https://doi.org/10.1515/NTAXJ-2019-0001>
48. Richardson G, Taylor G, Lanis R (2013) The impact of board of director oversight characteristics on corporate tax aggressiveness: an empirical analysis. *J Account Public Policy* 32:68–88. <https://doi.org/10.1016/J.JACCUPBOL.2013.02.004>
49. Rigueu R, Salhi B, Jarboui A (2020) Do women in board represent less corporate tax avoidance? A moderation analysis. *Int J Sociol Soc Policy* 40:114–132. <https://doi.org/10.1108/IJSSP-10-2019-0211>
50. Robinson JR, Xue Y, Zhang MH (2012) Tax planning and financial expertise in the audit committee. Available at SSRN. <https://doi.org/10.2139/ssrn.2146003> Accessed 24 Mar 2022
51. Salihu IA, Annur HA, Sheikh Obid SN (2015) Foreign investors' interests and corporate tax avoidance: evidence from an emerging economy. *J Contemp Account Econ* 11:138–147. <https://doi.org/10.1016/j.jcae.2015.03.001>
52. Sekome NB, Lemma TT (2014) Determinants of voluntary formation of risk management committees: evidence from an emerging economy. *Manag Audit J* 29:649–671
53. Setiawati L, Ichi I, Suangga A (2019) The effect of company sizes, the number of board of commissioners, board of directors competence and audit committees on tax management. *J Account Bus Issues* 1:22–33
54. Shaxson N (2015) UNCTAD: multinational tax avoidance costs developing countries \$100 billion. <https://taxjustice.net/2015/03/26/unctad-multinational-tax-avoidance-costs-developing-countries-100-billion/>. Accessed 1 Apr 2022
55. Sikka P (2010) Smoke and mirrors: corporate social responsibility and tax avoidance. *Account Forum* 34:153–168. <https://doi.org/10.1016/J.ACCFOR.2010.05.002>
56. Slemrod J (2004) The economics of corporate tax selfishness. *Natl Tax J* 57:877–899. <https://doi.org/10.17310/NTJ.2004.4.06>
57. Subramaniam N, Mcmanus L, Zhang J (2009) Corporate governance, firm characteristics and risk management committee formation in Australian

- companies. *Manag Audit J* 24:316–339. <https://doi.org/10.1108/02686900910948170>
58. Tasmin R, Muazu MH, Nor Aziati AH, Zohadi NL (2020) The mediating effect of enterprise risk management implementation on operational excellence in the Malaysian oil and gas sector: a conceptual framework. *Fut Bus J* 6:7. <https://doi.org/10.1186/S43093-020-00011-2>
59. Taylor G, Richardson G (2012) International corporate tax avoidance practices: evidence from Australian firms. *Int J Account* 47:469–496. <https://doi.org/10.1016/j.intacc.2012.10.004>
60. Taylor G, Richardson G (2014) Incentives for corporate tax planning and reporting: empirical evidence from Australia. *J Contemp Account Econ* 10:1–15. <https://doi.org/10.1016/J.JCAE.2013.11.003>
61. The Australian Tax Office (2018) Tax risk management and governance review guide. <https://www.ato.gov.au/Business/Large-business/In-detail/Key-products-and-resources/Tax-risk-management-and-governance-review-guide/> Accessed 24 Mar 2022
62. Uniamikogbo E, Bennee E, Adeusi SA (2019) Corporate governance and tax aggressiveness in Nigeria. *AE-Funai J Account Bus Finance* 4:20–33
63. Wali K (2021) The detection of earnings management through a decrease of corporate income tax. *Fut Bus J* 7:36. <https://doi.org/10.1186/S43093-021-00083-8>
64. Zaitul ID (2019) Tax aggressiveness and politically connected company. *KnE Soc Sci* 3:10. <https://doi.org/10.18502/kss.v3i14.4294>
65. Zemzem A, Khaoula F, Ftouhi K (2013) The effects of board of directors' characteristics on tax aggressiveness. *Res J Finance Account* 4:140–147
66. Zheng T, Jiang W, Zhao P, Jiang J, Wang N (2019) Will the audit committee affects tax aggressiveness? In: Xu J (ed) Proceedings of the twelfth international conference on management science and engineering management. Springer International Publishing, Cham, pp 1313–1326

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