

Does Good corporate governance matter in corporate tax avoidance? A case of Chinese stock market



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Abstract This study demonstrates that poor governance standards contributed to the global financial crisis and company financial scandals, leading to an increase in tax avoidance. Research in China analyzing the relationship between tax avoidance information and good corporate governance is a relatively new and inconsistent approach and is the primary focus of this study. The study utilized the avoidance tax rate proxy to calculate the extent of tax avoidance by firms. The study population consisted of manufacturing industries listed on the Chinese Stock Exchange from 2019--2023 that were presumed to have engaged in tax avoidance. A total of 112 companies were selected for the study via purposive sampling. The indicators of good corporate governance are identified via qualitative techniques through interviews with CEOs or top management. The dynamic panel analysis revealed that the audit committee, board diversity, independent directors and board size had the most significant negative effects on tax avoidance, whereas CEO duality had a significant positive effect on tax avoidance. This study suggests that the combined impact of corporate governance and tax avoidance leads to improved corporate governance as a control mechanism and balancing power. Poor corporate governance mechanisms facilitate corporations in engaging in tax avoidance practices.

Keywords: good corporate governance, corporate tax avoidance, China, panel data, manufacturing sectors

1. Introduction

The business scandals and failures of Enron, Dynegy, GlaxoSmithKline, WorldCom, and Tyco were related to tax avoidance through aggressive tax strategies. According to Hines (2010), tax shelters have evolved from being hidden behind scenes to being a major concern in corporate governance. The board of directors now consider tax concerns more seriously because of the financial and reputational implications associated with tax avoidance methods (Kovermann & Velte, 2019). We propose investigating the monitoring responsibilities of the board of directors with respect to corporate tax avoidance. Taxation involves the corporation transferring wealth to the state (Hasan et al., 2021). Shareholders urge management to be more proactive in dealing with taxes to prompt them to engage in tax avoidance strategies (Bachas & Soto, 2021). Engaging in tax avoidance strategies can increase cash flow and positively impact shareholder wealth (Kovermann & Velte, 2019). Tax avoidance is now a common practice among firms for many reasons, ultimately benefiting them. First, taxes decrease a minimum of one-third of profits before the corporation taxes, according to Mappadang (2021). Second, the company's business and financial policy aims to maximize value after tax (Mappadang, 2021).

Corporate governance and corporate taxes have recently garnered significant interest from accounting and corporate finance scholars, leading to a surge in inquiries into this relationship. Various aspects of corporate governance have been addressed, particularly corporate tax avoidance (Chen et al., 2022; Choi & Park, 2022; Sunarto et al., 2021). The literature does not discuss the selection criteria for corporate governance components. A company's governance component is influenced by government policies, regulatory organizations, and sociodemographics. Thus, this study utilized a qualitative technique to identify the components of corporate governance in China. In the qualitative phase 12, top management decides or ranks the component of corporate governance for the manufacturing industry in China. The interview process identified the five components of good corporate governance. The five components ranked are the audit committee, independent directors, board diversity, board size, and CEO duality.

The inconsistent findings concerning the relationship between corporate tax avoidance and good corporate governance suggest the need for a new method to study this link. The current study uses a distinctive strategy to investigate how good corporate governance affects corporate tax avoidance. This study differs from prior studies in two unique ways. The study employed a mixed-method approach to examine the proposed model. Second, this study chose China because it is stable and has consistently improved its governance in the manufacturing industry. This study targeted the manufacturing industry from



2019--2023 via the purposive sampling technique. Good corporate governance, as assessed by the audit committee and board diversity, independent directors, and board size, has a negative correlation with company tax avoidance but a positive correlation with CEO duality. The quantitative analysis ranks the indicators differently between good governance and qualitative outcomes.

2. Literature review and hypothesis development

Tax avoidance is an important problem related to both corporate and tax agency strategies (Mocanu et al., 2021). Corporate tax avoidance is a strategy to minimize the taxes of companies (Hendrati et al., 2023). Many companies use different strategies to reduce the financial burden or expenses associated with taxation, commonly known as tax avoidance. The objective of corporate tax avoidance is to minimize the tax obligations of companies (Dewinta & Setiawan, 2016). Typically, tax avoidance strategies are implemented with companies' leadership without any intentionality. Typically, corporate taxes are treated as a burden on companies' sustainability. However, the government imposed taxes on firms, which contributed to the revenue of the state (Kalbuana et al., 2023).

Past research has shown that board characteristics play a significant role in corporate governance behavior (Elad et al., 2018). Many studies have shown that corporate tax avoidance is related to corporate liability (Lanis & Richardson, 2015; Watson, 2015). Agency theory is used to describe the relationship between board characteristics and corporate tax avoidance (Dakhli, 2022). Agency theory by Jensen and Meckling (1976) is used to explain the relationship between managers and shareholders. The main aim of agency theory is to increase shareholders' wealth. Thus, the corporate governance structure minimizes agency conflicts (Allam, 2018). Numerous studies have examined the impact of corporate governance mechanisms on effective tax rates (Aparicio & Kim, 2023; Badertscher et al., 2019; Hasan et al., 2024; Kalbuana et al., 2023; Khuong et al., 2019; Sholikhah & Nurdin, 2022; Siew Yee et al., 2018; Tran et al., 2023). Multiple factors may be associated with corporate tax avoidance. These include board size, independent directors, gender diversity, financial distress, audit committees and CEO duality. This corporate governance mechanism has a significant influence on the tax avoidance of companies. However, corporate governance is a mechanism used to examine the relationship between management and the principal. This may reduce agency conflicts among management and shareholders and increase firm value (Murtaza et al., 2021).

A study by Minnick and Noga (2010) stated that good corporate governance mechanisms contribute to long-term tax management. The good governance structure included a qualified and large board of directors. Those directors had more opportunities to increase firm performance and minimize tax avoidance risk. Sholikhah and Nurdin (2022) argued that an independent board of directors can monitor and control firm performance. A good corporate governance structure minimizes agency issues. Another study by Choi and Park (2022) revealed a significant negative impact of corporate tax avoidance and firm valuation. Agency issues have a significant positive or negative influence on taxes (Zemzem & Ftouhi, 2013). In addition, Tran et al. (2023) determined the impact of board characteristics on corporate tax avoidance and corporate risk tolerance. The findings of this study suggest that board characteristics have a significantly positive relationship with tax avoidance behavior. A larger board size, duality, and board independence directors may increase the degree of tax avoidance of firms. Amri et al. (2023) examined the internal and external corporate mechanisms of corporate tax aggressiveness. The findings revealed that board size controls and monitors the team effectively and improves firm performance.

Prior studies have shown that gender diversity is an important corporate element of company decision-making. Board diversity creates good corporate governance (Alhejji & Garavan, 2021). Research by Dakhli (2022) has examined the impact of board diversity on tax avoidance. The findings revealed a negative relationship between board diversity and corporate tax avoidance. Multiple studies have reported a significant negative association between board diversity and a company's degree of tax avoidance (Lanis & Richardson, 2015; Murtaza & Azam, 2019; Suleiman & Abubakar, 2021). Similarly, Riguen et al. (2020) suggested that board diversity moderates the relationship between audit quality and corporate tax avoidance. Female directors may reduce the corporate tax in the dynamic market.

2.1. Independent Directors and Corporate Tax Avoidance

Corporate governance is an important mechanism for solving agency problems between shareholders and management (Murtaza et al., 2021). Both executive and nonexecutive directors are responsible for solving agency issues. They are responsible for controlling and monitoring the board's activities. A larger number of independent directors have more control over managerial operations. Furthermore, it increases corporate tax avoidance. Therefore, independent directors have a significantly positive relationship with corporate tax avoidance (Tran et al., 2023). In another study, Murni, Sudarmaji, and Sugihyanti (2016) reported that independent directors have no significant effect on corporate tax avoidance. Thus:

H1. There is a significant negative relationship between independent directors and corporate tax avoidance.

2.2. Audit Committee and Corporate Tax Avoidance

The corporate governance structure is used to control and monitor organizational operations and improve firm valuation (Murtaza et al., 2021). However, the audit committee is a team that is responsible for assessing and evaluating the

tax management system (Guedrib et al., 2015). Higher risky and complex tax planning may create opportunities for leaders to distract funds for personal interest. Hence, the audit committee has more expertise in handling the issue. This committee provides useful advice to management related to tax planning operations (Armstrong et al., 2015; Gaaya et al., 2017). Past studies have reported a negative relationship between audit committees and corporate tax avoidance (Amri et al., 2023; Hsu et al., 2018). Silaban and Purba (2020) showed that there is no significant impact of audit committees on tax avoidance. Hence:

H2. There is a significant negative relationship between audit committees and corporate tax avoidance.

2.3. Board size and corporate tax avoidance

Board size is related to the total number of board directors, including both executive and nonexecutive directors (Utami & Pernamasari, 2019). It is not only revealed quantitatively. However, the number of board directors must be adjusted with prevailing functions and activities, and they focus more on decision-making efficiency (Kalbuana et al., 2023). Each firm has a different board size due to firm needs and requirements. A larger board uses less debt and has effective control over management (Murtaza & Azam, 2019). They have a diverse nature of information and increase the value of companies. Board size is an important corporate governance mechanism for reducing agency issues among management and shareholders (Murtaza et al., 2021). A good corporate governance mechanism minimizes tax rates, and this structure leads to tax avoidance (Aparicio & Kim, 2023; Khan et al., 2022). It is commonly known as tax avoidance to increase the board size of companies. Thus:

H3. There is a significant negative relationship between board size and corporate tax avoidance.

2.4. Board Diversity and Corporate Tax Avoidance

Board diversity has received more attention in the last few decades. Board diversity is associated with female members of directors in firms (Mans-Kemp & Viviers, 2015). Gender diversity is more important at the strategic level of decision-making (Rusdiyanto et al., 2020). An increasing number of female directors improves firm growth and performance (Habib et al., 2022). Compared with men, female directors have different levels of decision-making; they exhibit less tolerance behavior and are more risk averse (Gull et al., 2018) and corporate tax planning (Winasis & Yuyetta, 2017). Compared with male directors, female directors are more sensitive to losing their reputation and having less tax aggressiveness (Garcia-Blandon et al., 2022; Kalbuana et al., 2023; Lanis et al., 2017). Past research has described a negative relationship between board diversity and corporate tax avoidance (Pertiwi & Prihandini, 2021; Zemzem & Ftouhi, 2013). Therefore, a greater number of female directors may reduce corporate tax avoidance (Garcia-Blandon et al., 2022; Suleiman & Abubakar, 2021). Hence:

H4. There is a significant negative relationship between board diversity and corporate tax avoidance.

2.5. CEO Duality and Corporate Tax Avoidance

Typically, duality is examined in the context of firm performance. However, few studies have determined the impact of CEO duality on tax aggressiveness. A CEO is a chairperson who performs multiple tasks for companies and determines the vision, mission and strategies of the business. The CEO has a strong position in the business. He determined the growth and development of companies. Moreover, he will actively participate in the tax strategies of the company. (Endarto et al., 2021; Indrawati et al., 2021). There are multiple results concerning the duality of tax aggressiveness. Some studies have reported negative results with respect to tax avoidance (Minnick & Noga, 2010). Some research has shown a positive association between CEO duality and tax avoidance (Boussaidi & Hamed-Sidhom, 2021; Halioui et al., 2016; Khaoula & Ali, 2012). However, some studies have stated that duality has no significant influence on corporate tax avoidance (Wahab et al., 2017). Therefore, CEO duality may increase the likelihood of corporate tax avoidance. Thus, the following is formulated:

H5. There is a significant positive relationship between CEO duality and corporate tax avoidance.

3. Methodology

This study uses qualitative methodology to determine good indicators of corporate governance. The qualitative method aids in creating an empirical model that is evaluated via quantitative data. This section discusses the research methods for the proposed model. The section includes the qualitative approach, data collection and sample selection criteria followed by the measurement of the proposed variables and model specifications to estimate the model.

3.1. Qualitative Approach

This study employed a qualitative method to pinpoint the indicators of corporate governance. Researchers in the literature utilize many components for governance. The literature does not address the selection of criteria. This study developed an interview guide (see Table 1) for top management to determine the most crucial components related to company tax avoidance. The interviews followed a semi-structured format, allowing for open-ended responses and deeper probing when necessary. Each interview lasted approximately 45 to 60 minutes and was conducted either in person or via secure video conferencing platforms. Interviews were audio-recorded with the consent of participants and subsequently transcribed for analysis. The interviewee selection criteria are based on a convenient sample technique, and 12 respondents are willing to

participate in the interview or answer questions. Participants were selected from firms that met specific criteria: (i) listed on the Chinese stock exchange, (ii) operating in the manufacturing sector, and (iii) exhibiting strong transparency and disclosure practices in annual reports, particularly concerning governance. All participants held senior management roles such as CEOs, CFOs, or board members, ensuring familiarity with governance practices and tax-related strategies. The selected indicators or elements are referred to as good corporate governance. These indicators are independent directors, audit committees, board size, board diversity and CEO duality. Qualitative responses were coded thematically using software to identify recurring governance indicators mentioned across interviews. The frequency and context of each indicator's appearance across interviews helped prioritize which indicators were operationalized. This technique is crucial for creating thorough frameworks that capture the distinct difficulties and dynamics of corporate governance in China, ultimately improving the efficiency of governance processes and promoting sustainable business practices.

Table 1 Interview Guide.

S.No	Interview Questions
1	Do you believe corporate governance is important?
2	What are the key signs of good corporate governance in your organization?
3	What are the fundamental elements of good corporate governance?
4	How can companies ensure good corporate governance?
5	Do you prioritize the components that you believe are vital for corporate governance in the context of corporate tax avoidance?

This study utilized secondary data from 2019--2023 obtained from the annual reports of companies listed on the Chinese stock market. The reason for this timeframe is that the Chinese government updated the corporate governance code. We intentionally restricted the analysis to focus on the manufacturing sector and deliberately excluded the financial services sector. The financial services sector is omitted because of regulation by central banks and the SEC. This increased regulation guarantees that financial organizations adhere carefully to established norms of conduct, potentially biasing the study's conclusions if they are included. This study recognizes a restriction by not including financial institutions and recommends that future research compare different sectors to provide a more detailed understanding of the effects of corporate governance improvements. We selected a sample of 112 nonfinancial organizations from a total of 4697 listed companies in the nonfinancial sector in China to represent the population. The 112 firms were chosen through purposive sampling. The purposive criteria aim to identify organizations with a robust history of corporate governance during a specified period, along with accessible company tax records. The conceptual framework, which is based on a combination of past theoretical and empirical literature, helps identify the variables being studied and assists researchers in developing study hypotheses. This approach evolves from established theoretical and empirical facts. Table 1 in our study provides definitions and measurements of the variables, which are backed by empirical evidence and pertinent references. The data for corporate governance and corporate tax avoidance were collected from financial statements sourced from the official websites of the Chinese Stock Exchange and the firms themselves.

3.2. Measurements

3.2.1. Corporate tax avoidance

The avoidance tax rate (ATR) was used to determine the amount of tax avoidance committed by the corporation, and the dependent variable was measured. The ATR was created by calculating the effective tax rates. Previous research has used effective tax rates, but this study calculates the proportion of the decrease in tax avoidance based on companies. The effective tax rate value was subtracted from the current tax rate. If the tax avoidance rate is positive, the corporation pays less than the applicable tax rate. If the tax avoidance value is negative, the company's tax rate exceeds the appropriate tax rate. The tax rate is 25%.

ETR measurements were conducted as outlined by Hanlon and Heitzman in 2010.

$$TAR = TRA - ETR \quad (1)$$

TAR=Tax avoidance rate

TRA=Tax rate applied

ETR= Effective Tax Rate

$$ETR_{it} = \frac{TTE_{it}}{EBT_{it}} \quad (2)$$

TTE= Total Tax Expense

EBT=earnings before tax

i= Represents the company

t= represents the year

Independent Variables

3.2.2. Independent Directors



Independent directors are the first and most crucial component of good corporate governance (GCG). Independent directors are individuals who serve on a board with external capacity and do not have strong or direct ties to the company. The compliance statement typically offers a lengthy explanation of its objective, which is to provide an impartial viewpoint, and its presence varies between firms. Researchers use a variety of measurement criteria. The research assesses the proportion of independent directors and assigns a significant value depending on whether the ratio exceeds or falls below 50%. The results below 50% are deemed inconsequential, whereas those above 50% suggest major discoveries. Furthermore, the researcher claims that there should be at least one independent director. However, in this study, the measurement criterion for independent directors is that one-third of the board members are independent. The criteria are provided by the Chinese regulatory authority.

3.2.3. Audit Committee

The audit committee is the second most crucial indicator of good corporate governance. The audit committee, a functional committee of a company's board of directors, supervises financial reporting and transparency. An audit committee at a firm enhances the efficiency of tax management through consistent monitoring and competence. A competent audit committee is a prerequisite for publicly traded companies to remain listed on a stock exchange. The study represents the audit committee as a binary variable with values of "0" and "1". Each "1" represents the presence of an audit committee, whereas "0" indicates its absence.

3.2.4. Board size

Board size is the third most crucial indicator of good corporate governance. The recommended board size is estimated to be approximately 9.2 members per the company's corporate report; however, other experts suggest that an ideal board should have a minimum of 7 directors. The varying dimensions of a board may reflect the extent of a company's engagement in its activities. The board structure functions as a supervisory tool in corporate tax avoidance and prevents controlling owners from making choices that could harm other shareholders. This analysis excludes companies with fewer than 7 members, as it significantly impacts the ratio of independent directors and audit committees.

3.2.5. Board Diversity

Board gender diversity ranks as the fourth most crucial element of effective company governance. Board diversity was assessed by determining the proportion of female directors on a company's board, as demonstrated in Adams and Ferreira (2009) and Campbell & Mínguez-Vera (2008).

3.2.6. CEO Duality

CEO duality occurs when the CEO of a corporation also serves as the chairperson. Boards of directors oversee the CEO's performance on behalf of the company's shareholders. CEO duality is represented as a binary variable in this study, with values of "0" and "1". 0 indicates the absence of duality, whereas "1" indicates the presence of duality. Thus, the absence of dualism in the organization indicates a strong aspect of good corporate governance.

3.2.7. Estimation model

A panel data regression model is created for analysis. An analysis of the current study's focus indicates that the panel data are dynamic. The study created a dynamic panel data model. Panel data are dynamic when they incorporate unobserved individual-specific effects and/or lagged dependent variables. This work utilizes a model for dynamic panel data to prevent potential endogeneity effects, as was done by Minnick and Noga (2010). The model is expressed as:

$$CTA = \alpha + b_1IDit + b_2ACit + b_3BSit + b_4BDit + b_5CEODit + \epsilon_{it} \quad (3)$$

CTA=Corporate tax avoidance

α = Constant

β = Coefficient

ID= Independent director

AC= Audit Committee

BS=Board size

BD= Board Diversity

CEOD=CEO Duality

3.3. Analytical Strategy

The results section is divided into two parts: data analysis and results. In the first part of the data analysis, a two-step approach is used to evaluate the proposed model. In the first step, the nature of the dataset and normality are clear. The second step includes descriptive statistics and a correlation matrix. The second part discusses the hypothesized result.

4. Results and Discussion

4.1. Descriptive Statistics

The Breusch and Pagan Lagrange multiplier test is used to evaluate whether the study data are pooled or panel, followed by a normality test (Hasan et al., 2022; Hoseini et al., 2019). Table 2 displays the results of the normality test, which indicate that the data follow a normal distribution. The LM test's significance level is less than 0.05 for all the models, indicating the appropriateness of the panel estimation model. Table 3 shows the Hausman specification test conducted to ascertain whether the panel data type has random or fixed effects. The p value of the specification test is less than 0.05 for the proposed model, indicating that the model should be evaluated via the fixed effects method.

Table 2 Normality test.

Unstandardized Residual	
Kolmogorov–Smirnov Z	0.94
Asymp. Sig. (2-tailed)	0.47

Table 3 Hausman test.

Dependent Variables	Fixed effect	Random effect	Difference	S.E
ETR	0.27	0.32	0.05	0
chi2 (2) = 4.50				
Prob>chi2 = 0.1052				

Table 4 displays descriptive statistics for the variables in the study. The average CTR is 56.1%. The average value is 16.1% of independent directors. The average degree of board diversity is 8%, whereas the mean value for Board size is 6.

Table 4 Descriptive Statistics.

Variables	Mean	SD	Min	Max
IND	0.161	0.131	0	0.617
AC	--	--	0	1
BOS	6	2	3	24
BD	0.08	0.121	0	0.632
CEOD	--	--	0	1
CTA	0.561	0.11	0	1

4.2. Correlation matrixes

Table 5 shows the results of the Pearson and Spearman correlation analyses. The correlation matrix reveals strong statistical correlations between the CTA measurements and good corporate governance. The findings indicate that we should conduct additional regression analysis to test our hypothesis. In addition, the matrix shows that the correlation coefficients between the control and independent variables are less than 0.8, indicating that collinearity is unlikely to be an issue. A variance inflation factor (VIF) test was performed, which revealed the absence of multicollinearity (see Table 6).

Table 5 Correlation matrix.

	IND	AC	BOS	BD	CEOD	CTA
IND	1					
AC	-.782**	1				
BOS	-.563**	-.596**	1			
BD	-.612**	-.613**	-.499**	1		
CEOD	-.647**	-.727**	-.530**	-.751**	1	
CTA	-.541**	-.625**	-.506**	-.581**	-.686**	1

** . Correlation is significant at the 0.01 level (2-tailed).

Table 7 shows the fixed effects of good corporate governance on corporate tax avoidance. The audit committee significantly predicts corporate tax avoidance ($\beta=-0.356$, p value=0.000). Board diversity is the second most significant predictor of corporate tax avoidance, with a beta coefficient of -0.332 and a p value of 0.006. A significant board size ($\beta=0.235$, p value=0.020) is another indicator of good corporate governance. CEO duality and independent directors exhibited substantial and supported effects, with $\beta=-0.171$ and p value=0.03 and $\beta=-0.165$ and p value=0.001, respectively. The predictors explained 41.31% of the total variation.



Table 6 Multicollinearity.

Variable	VIF	Tolerance Value
IND	3.41	0.293
AC	1.76	0.568
BOS	1.65	0.606
BD	2.89	0.346
CEOD	1.97	0.508

Table 7 Fixed effects of good corporate governance on corporate tax avoidance.

Variables	Coefficient	P value	Results
IND	-0.165	0.001	Significant
AC	-0.356	0.000	Significant
BOS	-0.235	0.020	Significant
BD	-0.332	0.006	Significant
CEOD	0.171	0.030	Significant
R square		41.31	
Prob.			0.000

Board size has a negative effect on tax avoidance, as indicated by the avoidance tax rate (ATR) of -0.235. The sig value of 0.02 is less than 5%, indicating that larger boards result in fewer tax avoidance techniques. These results were compared with the findings of previous studies in the literature. According to Vieira et al. (2024), tax avoidance can lead managers to prioritize short-term goals above long-term rewards, notwithstanding the principal's expectations. Corporate governance aims to prevent firms from engaging in tax avoidance. According to Abdelfattah and Aboud (2020), companies with good governance are more likely to comply with taxes. This study validates the results of Armstrong et al. (2015) and Kovermann and Velte (2019), indicating that corporate governance has an adverse effect on tax avoidance. A larger board can oversee and support management, leading to more realistic financial statements (Seifzadeh et al., 2021). Board size reflects shareholders' interests in maximizing profits, but it prioritizes long-term risk minimization over short-term returns, which may have negative consequences for a company's survival. Board size can prevent opportunistic management activities to avoid taxes. Management can control and monitor policies to ensure that transactions and financial reports adhere to tax rules (Kabwe et al., 2021).

The optimal board size depends on the specific attributes of the organization (Pucheta-Martínez & Gallego-Álvarez, 2020). Complex organizations with intricate structures see improved board performance as a result of having a greater quantity of boards. The quantity of board members has a negligible effect on overseeing and regulating tax avoidance operations (Wen et al., 2020). The board's negative association with tax avoidance is linked to elements including the professionalism of its members, which impacts the level of oversight and feedback provided to the Board of Directors.

Independent directors have a significant negative effect on tax avoidance, with a coefficient of -0.165. This is supported by a statistically significant p value of 0.001, indicating that the hypothesis is accepted. There is an inverse relationship between the proportion of independent directors and the level of tax avoidance. The study shows that, on average, independent directors in manufacturing companies make up 30% of the board. This percentage meets the minimum requirement for publicly traded companies (Nel et al., 2022). Independent directors play a crucial role in overseeing good governance practices to ensure transparency and accuracy in reports and information. Independent directors have a significant negative effect on tax avoidance, with a value of -0.165. A statistically significant p value of 0.001 confirms that the hypothesis is accepted. The proportion of independent directors has an inverse association with the extent of tax avoidance. According to the survey, independent directors fulfill the minimum required for publicly traded corporations. Independent directors play an important role in reviewing sound governance procedures and ensuring transparency and accuracy in reports and information.

Board diversity was discovered to have a significant negative relationship with corporate tax avoidance. The study revealed that having women on boards reduces corporate tax avoidance. This finding supports the findings of Riguen et al. (2020) that having more women on corporate boards reduces corporate tax fraud. There are several possible explanations for this outcome. Shareholders prefer greater corporate tax avoidance than less corporate tax avoidance. Their preferences should be aligned with those of management. Enhanced surveillance and the resources provided by female directors may help address agency difficulties (Ain et al., 2020). Women have gradually taken on more important responsibilities on boards and in managerial positions. According to Issa et al. (2022), women tend to demonstrate superior community attributes such as compassion, helpfulness, and sensitivity. Men tend to have more pronounced characteristics. In contrast to current findings, previous research has indicated that having women on corporate boards can help reduce opportunistic management tendencies and inhibit fake benevolence aimed at avoiding taxes to prioritize shareholders' interests (Rahman et al., 2024).

A negative and statistically significant relationship exists between audit committee size and the effective tax rate, whereas a positive and significant relationship is observed with board diversity. Strong evidence supports the hypothesis that a larger audit committee is associated with greater tax avoidance, as suggested by the data. Our findings are consistent with

those of prior investigations. The effectiveness of an audit committee in preventing tax avoidance may be compromised due to its magnitude (Amri et al., 2023; Lisic, 2014). The decision-making efficacy of the audit committee is diminished as a consequence of the heightened intricacy stemming from its enormous scale.

When a corporation has a CEO holding two positions in its management structure, the likelihood of manufacturing companies engaging in tax avoidance is greater. Dual positions (CEO duality) can have an unclear effect on power concentration, potentially allowing the board of directors to overpower commissioners and diminish the board's ability to monitor and control management (Fama & Jensen, 1983). This study corroborates earlier research findings that demonstrate the beneficial effect of a board of commissioners serving a dual duty on aggressive tax avoidance (Gunawan et al., 2021). This study further supports the findings of Hassan et al. (2023) that during the COVID-19 outbreak, S&P 1500 companies with CEO duality experienced a lower increase in default risk than companies without CEO duality did, especially in the presence of high information costs. The presence of CEO duality in management influences firm policy-making by frequently disregarding policy risk (Yakubu et al., 2023). Besides worrying about fair profit distribution, family-shareholder owned firms embrace tax avoidance as a way to generate cash flow by saving on taxes. In some cases, family-shareholder owners also perceive tax avoidance as a risky way to damage relationships with minority shareholders (Boussaidi & Hamed-Sidhom, 2021).

5. Conclusions

This research considered 112 manufacturing companies in China from 2019--2023, concentrating on board diversity, board size, independent directors, CEO duality, audit committees as good corporate governance, and the avoidance tax rate as a form of tax avoidance. According to the analysis, good corporate governance has a negative influence on tax avoidance, as measured by board diversity, board size, independent directors, and the audit committee. This shows that corporate governance measures have a negative effect on firm tax compliance, resulting in a decrease in tax aggressiveness. The audit committee, as an informed and experienced investor, is especially careful about risks that will have long-term ramifications for the company. The study shows that independent directors can create an unbiased environment, promote justice, and prevent tax avoidance while remaining within legal limitations. While this reflects shareholders' desire to maximize profits, the long-term risk implications prioritize ongoing concerns over short-term advantages.

Agency conflicts can lead the agent to choose a level of tax avoidance that is not in line with the preferences of the principals. Principals may either desire a high level of tax avoidance to increase after-tax cash flow or a lower level to reduce business risk. Corporate governance can mitigate the agency problem of tax avoidance by preventing managers from pursuing short-term gains at the expense of the company's long-term interests, which could result in financial losses.

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Ethical considerations

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Conflict of Interest

The authors declare that there are no conflicts of interest.

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