

DECODING TAX MANAGEMENT: THE ROLE OF CORPORATE GOVERNANCE MECHANISMS

Nohaila Ait Hattani *, Siham Sahbani **

* Corresponding author, National School of Business and Management, Sidi Mohamed Ben Abdellah University, Fez, Morocco
Contact details: National School of Business and Management, Sidi Mohamed Ben Abdellah University, Route d'Immuouzer, B. P. A81,
30000 Fez, Morocco

** National School of Business and Management, Sidi Mohamed Ben Abdellah University, Fez, Morocco



Abstract

How to cite this paper: Ait Hattani, N., & Sahbani, S. (2024). Decoding tax management: The role of corporate governance mechanisms. *Corporate Governance and Organizational Behavior Review*, 8(1), 83–93. <https://doi.org/10.22495/cgobrv8i1p7>

Copyright © 2024 The Authors

This work is licensed under a Creative Commons Attribution 4.0 International License (CC BY 4.0). <https://creativecommons.org/licenses/by/4.0/>

ISSN Online: 2521-1889

ISSN Print: 2521-1870

Received: 18.05.2023

Accepted: 16.01.2024

JEL Classification: H26, G30, G32, M42

DOI: 10.22495/cgobrv8i1p7

While tax pressure remains a major concern in corporate management, it is legitimate to ask whether tax has always been among the core factors of corporate governance (Chytis et al., 2020). This study aims to examine the influence of corporate governance on tax management practices within Moroccan firms listed on the Casablanca Stock Exchange (CSE). Focusing on three dimensions of corporate governance — board composition, audit committee structure, and external audit quality — we employed multiple regression analysis on data spanning 2014–2019 from a sample of 48 listed firms, totaling 288 firm observations. Significantly, board size, chief executive officer (CEO) duality, and external audit quality are found to be pivotal factors shaping tax management practices. Other corporate governance variables, notably the independence of the board of directors and the structure of the audit committee, do not appear to exert a significant influence on the tax management of listed Moroccan companies. Our study is one of the few to have addressed the issue of tax management in the Moroccan context. Moreover, it may also serve as a fundamental resource for researchers exploring the complex dynamics of tax practices in the organizational context.

Keywords: Tax Management, Corporate Governance, Board of Directors, Audit Quality

Authors' individual contribution: Conceptualization — N.A.H.; Methodology — N.A.H.; Software — N.A.H. and S.S.; Validation — S.S.; Formal Analysis — N.A.H.; Investigation — N.A.H.; Resources — S.S.; Data Curation — N.A.H. and S.S.; Writing — Original Draft — N.A.H. and S.S.; Writing — Review & Editing — N.A.H.; Visualization — N.A.H.; Supervision — S.S.; Project Administration — S.S.; Funding Acquisition — N.A.H.

Declaration of conflicting interests: The Authors declare that there is no conflict of interest.

1. INTRODUCTION

In Morocco, taxes are the main source of financing and cover about 75% of the general state budget, mobilising about 238.2 billion dirhams (Doghmi, 2020). Tax revenues from the different categories of taxes are used to increase the welfare of the community by reducing the extent of poverty and inequality, supporting security, improving the quality of education, etc. In order to modernise

the tax system, avoid tax optimisation and significantly improve tax revenues, Morocco has undertaken various reforms since the 1980s. This is reflected in the Draft Finance Bill (Moroccan Financial Markets Authority [AMMC], 2017), which provides for changes in the corporate tax from a 38% tax rate in 1993 to a progressive rate of 31% in 2018.

In practice, there is a divergence of interests between the state as a tax authority and businesses as taxpayers with regard to tax. From a corporate

perspective, tax is perceived as a burden because it significantly reduces net income. This leads companies to make efforts to increase their performance and reduce expenses, including tax expenditures. Generally, the reduction of tax expenditures is always linked to the emotional tendency of companies to be dissatisfied with paying taxes to the state. This dissatisfaction is shaped by the character of the tax, which lacks a direct return to the taxpayer (Suandy, 2016).

Initiatives aimed at alleviating the tax load are known as tax management. We believe that improved business performance can be achieved through good tax management when taxpayers are able to use the opportunities and legal means provided by the law to reduce the tax burden. When implementing tax management practices, conflicts of interest may arise between management and shareholders in the sense that although both parties are working for the same goal, the managers do not always have the same interests as the owners, each of them trying to use the other for their own interests. To mitigate agency conflicts within a company, the academic literature proposes the implementation of good governance practices. Several studies have taken an in-depth look at corporate governance and how the adoption of this principle helps companies to improve their performance. Therefore, in order to find out the specific ways in which corporate governance enhances performance, this research attempts to examine whether Moroccan firms seek to improve their performance through the reduction of the tax burden and whether these efforts are influenced by the governance practices implemented by these firms.

Examining the link between tax management and corporate is discussed for two fundamental reasons. Firstly, tax management can be complex and opaque and can even give rise to managerial opportunism, in that managers may prioritize their own interests over those of the owners. It is, therefore, important to understand the function that governance bodies play in tax management. Secondly, tax management involves a great deal of uncertainty, as companies may not benefit in the short term, but it usually has a long-term impact. Therefore, knowing how governance contributes to the realisation of the benefits of tax management provides a better understanding of how governance practices achieve the objective of improving value and performance.

According to various guides to good corporate governance practices, including the *Code Marocain de Bonnes Pratiques de Gouvernance d'Entreprise* (AMMC, 2019), companies can strengthen their competitiveness, both nationally and internationally (Rohyati & Suropto, 2021), and bring considerable benefits to their society as a whole by adopting internal and external mechanisms. One of the primary mechanisms suggested by these guides is the board of directors, which, as indicated by multiple researchers, plays a key role in governance. It is well documented that the composition of the board of directors influences the effectiveness of control in companies. In addition to the board of directors, one way of mitigating agency problems is to set up specialist committees such as the audit committee, which aims to strengthen control over management performance by producing more objective financial statements and improving

the overall quality of governance. It is also considered that the use of high-quality external tax services can influence corporate tax decisions.

Based on this line of reasoning, this paper aims to explore the correlation between corporate governance and tax management. To do so, we will use the effective tax rate (ETR) as a measure of tax management. Thus, the size of the board of directors, the independence of its members, the separation of decision-making and control functions, the audit committee and the quality of the external audit are considered to be governance characteristics that can: a) influence the improvement of the firm's performance, reducing tax burdens; b) avoid agency conflicts in cases where tax management may give rise to managerial opportunism; c) overcome the uncertainty related to the benefits of tax management. In view of the above, our study answers the following question:

RQ: What effects can corporate governance have through its different characteristics on the tax management of Moroccan firms?

To answer our research question, the rest of the paper is organised as follows. In Section 2, we conduct a review of previous research and formulate the hypotheses tested in our study. In Section 3, we discuss the method of sample selection and model choice. Section 4 describes and analyses the results of the empirical research. Section 5 presents the conclusion of the study.

2. LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

2.1. Research context

Although the relationship between corporate governance and tax management has been the subject of limited research, the results of existing studies establish a strong theoretical link between these two areas. In the Moroccan context, where taxes represent a significant proportion of the state budget, tax management is becoming a crucial strategy for companies (Mrabet, 2019). However, studies examining this dynamic are virtually non-existent, reinforcing the relevance of this study to the local context. A comprehensive literature review provides a relevant basis for our empirical study.

Tax is one of the factors that influence business decisions, particularly concerning financing and investment policies. This leads companies to seek to reduce their tax burden through legal means in order to increase their value in the business market. Many studies have argued that tax management is a practice that increases the value of companies and that shareholders likewise believe. In the same vein, Desai and Dharmapala (2006), Armstrong et al. (2015), and Yuniawati (2022) report that tax management is a legal and ethical way of transferring resources from the state to firms to enhance their performance, by reducing the tax burden. Although tax management can improve business performance, it is important to recognise that the effectiveness of such a practice depends on all aspects of the business. The sense that, although tax is perceived as a heavy burden on the business structure and requires special attention, decision-making aimed at reducing the tax burden should not

be based solely on the legal-tax perspective (Gomes, 2015). It is important to take into account all stakeholders, all implicit or explicit taxes and all costs, regardless of their tax or non-tax nature, because what matters for companies is wealth maximisation. Therefore, tax management should aim to increase value in the long term (Çollaku et al., 2023; MacCarthy, 2021).

To date, studies dealing with tax management are still in an embryonic state. Existing studies generally seek to link the practice of tax management to certain attributes of the firm, such as profitability, research and development (R&D), and investment capacity. Given that corporate behavior is intrinsically linked to the context in which they operate, further research is imperative to gain a deeper understanding (Clemente-Almendros & González-Cruz, 2023). In the Moroccan context, research on tax management is almost absent, and as far as we know, our research is one of the few to have undertaken an empirical investigation of tax management. As mentioned earlier, the objective of this study is to examine whether the adoption of certain governance features such as the board of directors, the audit committee and the quality of the external audit influence the tax management of Moroccan firms. Several studies (Armstrong et al., 2015; Gomes, 2015; Kovermann, 2018) report that the measurement variable that is central to tax management research is the ETR. The use of this measure in empirical research raises an important question: "How is this measure different from others?" Hanlon and Heitzman (2010) have addressed this question by arguing that, in general, ETR provides information on the cumulative impacts of diverse tax incentives and tax rate changes that occur within firms. The ETR, which is the simplest and most widely used measure, is the ratio of the tax burden (income tax) to net income before tax. A low ETR "below the statutory tax rate" is assumed to be the result of tax management by reducing the tax burden. The ETR can easily be calculated from data quoted in the financial statements of companies, which probably explains the heavy use by countless studies comparing it to other measurement variables.

Basically, the issue of tax management has been approached from the angle of agency theory. According to this theory, managers prioritize their personal interests over those of shareholders, so-called managerial opportunism. This dynamic generates an asymmetry of information that forces shareholders (principals) to allocate resources (agency costs) to monitor managers. In this light, recent studies have questioned some of the prescriptions of neoclassical theory that corporate managers take advantage of the flexibility and dynamics of the tax system to make tax choices that allow them to engage in tax management practices and ensure the transfer of wealth in their favor at the expense of shareholders. In this light, and to mitigate these agency problems, the literature proposes various governance solutions, creating an effective set of mechanisms, both incentive and control, to ensure that the interest of managers is always aligned with that of shareholders. In this context, several authors have attempted to confirm the existence of a link between tax management and corporate governance using various measures such as institutional ownership (Chen et al., 2019),

executive compensation (Seidman & Stomberg, 2017) and board composition (Lanis et al., 2017; Flamini et al., 2021). In our research, we examine three facets of corporate governance, namely: the composition of the board of directors, which includes the size of the board, the number of independent directors on the board and the duality of the chief executive officer (CEO); the audit committee; and the quality of the external audit.

2.2. Research hypotheses

As the central body of corporate governance, the board of directors plays an important role in choosing a tax management strategy and is responsible for corporate performance and resource planning (Minnick & Noga, 2010; Clemente-Almendros & González-Cruz, 2023). The willingness of the board of directors to mitigate coercive tax control of managers depends largely on these characteristics. To study the tax management of Moroccan companies, three specific characteristics of the board of directors were chosen, namely: the size of the board of directors, the independence of its members and the duality of the CEO.

2.2.1. The effect of board size on tax management

It is well documented that the size of the board of directors influences the effectiveness of control. However, the link between board size and tax management yields divergent results. For example, Barnhart and Rosenstein (2005), Coles et al. (2008), and Rohyati and Surtpto (2021) found that larger boards offer different views that can enrich the debate and improve firm performance. Similarly, having large boards allows companies to have directors with a wide range of expertise and skills, which helps in tax management. Conversely, other studies show that large boards tend to encounter agency problems, while smaller boards focus more on the well-being of shareholders and the company. (Jensen & Meckling, 1976; Yermack, 1996). Minnick and Noga (2010) and Boussaidi and Hamed-Sidhom (2021) also conclude that a smaller board size creates a better monitoring function and helps convince management to conduct good tax management. These propositions follow from the theory of organisational behaviour, which states that productivity declines as the number of workers increases and that smaller boards offer better returns to firms. Hence, it is logical to infer that a smaller board strengthens tax management, thereby reducing the tax burden. In view of the above, we propose to test the following hypothesis:

H1: There is a negative relationship between the size of the board of directors and the level of tax management practices.

2.2.2. The effect of board independence on tax management

Previous studies have reported divergent results regarding the impact of board independence (Cuadrado-Ballesteros et al., 2015; Moore et al., 2017; Kovermann & Wendt, 2019). This paves the way for future research to examine the conditions that influence the direction of this effect on tax

management. Generally speaking, it is accepted that a board with a majority of independent directors ensures more efficient management and the continuity and objectivity necessary for a company's growth and prosperity (Gonzalez-Cruz et al., 2021). Hermalin and Weisbach (2003) and Lim (2011) find that distressed companies tend to integrate independent members into their boards to improve performance. Conversely, Hasiholan (2013) argues that the higher the number of independent directors, the better the control functions, allowing companies to shift from measuring turnover performance to overall performance, in which the ETR plays an important role. On the other hand, some studies validate the finding that the involvement of independent directors decreases tax management (Armstrong et al., 2015; Lanis & Richardson, 2015). In the Moroccan context, the good governance practices guide gives an important and special place to independent directors who, thanks to their diligence and professionalism, have an objective view of the company and contribute to improve reflection and decision-making. Furthermore, as of April 2019, Moroccan companies listed on the Casablanca Stock Exchange (CSE) are required to appoint independent directors to their board of directors, the number of which cannot exceed one-third of the total number of directors (AMMC, 2019). Linking the highlighted literature to our research question, we find that independent members can provide CEOs and managers with useful information from their experience to help them focus their efforts on tax management practices as a means to ensure good performance. This conclusion leads us to the second hypothesis:

H2: There is a positive relationship between the presence of independent board members and the level of tax management practices.

2.2.3. The effect of CEO duality on tax management

Duality manifests itself when a person simultaneously assumes two distinct roles, such as a CEO who also acts as chairman of the board. This merging of responsibilities can generate powerful leadership, likely to influence the effectiveness of the control exercised by the board of directors. This recommendation aims to avoid too great a concentration of power in the hands of a single person. However, duality also has many advantages, including the CEO's ability to control and make decisions due to his or her greater knowledge of the company. In this sense, Khaoula (2013) and Maali and Attar (2017) show that the combination of decision-making and control functions has a positive effect on tax optimisation and management. In contrast to these results, Duru et al. (2016) and Aderomou (2020) argue that firms will perform better without CEO duality, in the sense that the separation of functions allows firms to reduce agency problems and therefore will improve their overall performance. Minnick and Noga (2010), also find that companies that combine management and control functions practice less tax management and pay more taxes. As the above results are contradictory, we cannot make an unequivocal prediction about the link between CEO duality and tax management.

H3: There is a negative relationship between CEO duality and the level of tax management practices.

2.2.4. The effect of the audit committee on tax management

Given the importance of control mechanisms in ensuring the reliability of information, many scholars value the role of the audit committee in corporate governance. The audit committee is an independent professional body responsible for supporting the board of directors in fulfilling its responsibilities. With their accounting and tax expertise, are able to enhance the effectiveness of organizational control and management. Their in-depth understanding of accounting principles, tax standards and the global financial environment positions them strategically to exercise precise and informed control. Abduh et al. (2014) point out that the audit committee plays a crucial role in ensuring that the company complies with laws and regulations, conducts its business ethically and monitors potential conflicts and fraud. In this sense, the literature agrees that the audit committee is the "apex" of internal control (Lisic et al., 2019). However, although the audit committee can play an important role in monitoring organisational behaviour, few studies have been conducted to assess the relationship between audit committee structure and tax management. Hsu et al. (2018), Suak et al. (2021), and Utaminingsih et al. (2022) demonstrate that audit committee members actively monitor the company's tax planning process, adjusting it in line with its business strategy. From the point of view of agency theory, the audit committee is seen as a key element of corporate governance aimed at mitigating the opportunistic behavior of managers. From this point of view, the increased presence of an audit committee within a company is associated with a strengthening of its control and management, resulting in the presentation of more reliable and objective financial statements. By reducing informational asymmetry, the audit committee helps to establish a climate of trust and minimize tax management practices, thus aligning the interests of stakeholders with those of the company. Tandean and Winnie (2016) add that audit committees can help companies plan long-term strategies and periodically evaluate their implementation in order to reduce actions related to tax management. Based on the above analysis, we propose the following hypothesis:

H4: There is a negative relationship between the presence of an audit committee and the level of tax management practices.

2.2.5. The effect of external audit quality on tax management

External audit is a multifaceted concept that has been addressed in various empirical studies on corporate governance. It is one of the mechanisms for limiting managerial opportunism and reducing information asymmetry. The external auditor's task is to monitor and assess the fairness of companies' financial statements, ensuring their compliance with relevant regulations. However, the effectiveness of the audit of a company's strategic activities shows mixed results. This is because auditors do not present the same guarantees of competence and independence, which can result in variable quality control depending on the auditors (Hamdi et al., 2018).

In this sense, several researchers (Asthana et al., 2009; Harris & Zhou, 2013, Gaaya et al., 2019) have shown that the larger the size of an audit firm, the better its reputation and the quality of its evaluation. Therefore, we believe that the quality of external auditors can influence firms' tax decisions, especially those related to tax management practices. In a sample of Indonesian firms, Yuniawati (2022) found that the level of tax management of firms audited by the Big4 (Deloitte, Ernst & Young [EY], PricewaterhouseCoopers [PwC], KPMG) is significantly higher than that of other firms, which means that big audit firms not only deliver auditing services but also implicitly provide tax advice. The results of this study are consistent with those of Annisa and Kurniasih (2012), who indicate that the audit quality variable has a negative and significant effect on the ETR, meaning that the higher the audit quality, the higher the level of tax management. While the research cited above shows that there is a significant relationship between tax management and external audit quality, Jamei (2017), on the other hand, showed that the use of large firms does not influence the tax decisions of trading companies in the Tehran Stock Exchange (TSE) and therefore does not have an impact on minimizing the tax burden. Based on the above arguments, we assume that the quality of external audit, appearing as a governance mechanism could have direct and indirect effects on tax management practices. This leads us to formulate the following hypothesis:

H5: There is a positive relationship between the quality of external audits and the level of tax management practices.

3. METHODOLOGY

3.1. Sample and data collection

Our sample was collected from the CSE, the choice of listed companies is based on the availability of data and also on the fact that large companies are more efficient in terms of tax management. As regards the data collection technique, a desk search was carried out on the financial statements published on the website of the Moroccan Capital Market Authority (MCMA), to identify the net income, the income tax and the level of indebtedness of the companies. In addition, a detailed review of the annual reports published by each company collecting information on corporate governance (board size, independent members, dissociation of the CEO function, quality of the external audit, audit committee).

The initial sample of this study was composed of 81 listed Moroccan companies over six years (2014-2019), before being reduced to 48 companies by excluding those belonging to the following categories:

- finance and insurance companies are excluded from our final target as they are subject to different regulations and rates (37%), which may lead to contradictory results;
- companies with missing data on survey variables were also removed from our sample;
- firms with an ETR greater than 1 and less than 0 (loss) were rejected, as these observations may lead to misinterpretations (Richardson & Lanis, 2007; Dhahri & Jarbaoui, 2021).

Table 1. Sample selection process

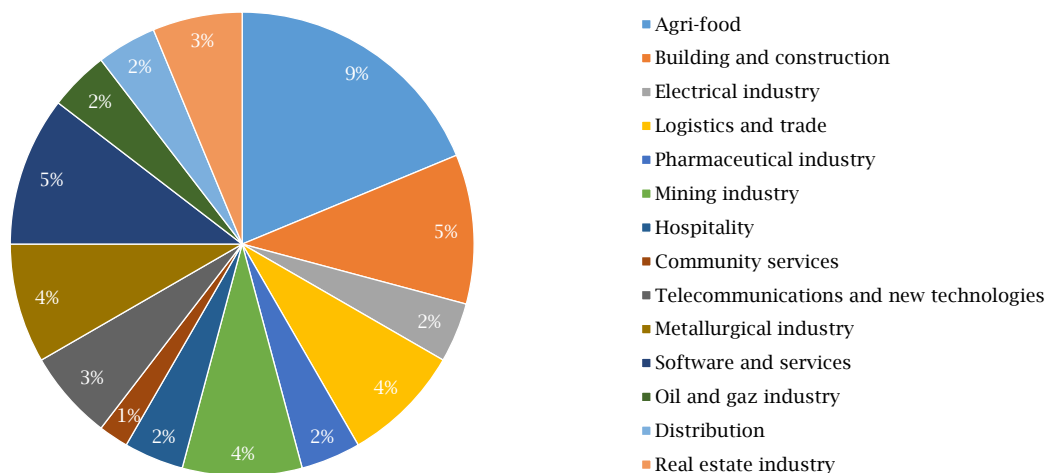
Sample selection	Number of companies
Initial sample	81
Exclusion of finance companies	17
Exclusion of companies with missing data	8
Exclusion of companies with a negative ETR	7
Exclusion of companies with an ETR > 1	1
Initial number of observations over 6 years	486
Final sample	48
Number of final observations over 6 years	288

Source: Authors' elaboration.

The graph below illustrates the sectoral classification of the companies studied. We note that

our sample is highly diverse, as it includes companies from various sectors and specific segments.

Figure 1. Classification of the surveyed companies by sector of activity



Source: Authors' elaboration.

3.2. Model specification and variable measurement

Our study is characterised as theoretical and empirical with an explanatory and exploratory character, which seeks to predict and explain the problem of tax management by identifying the characteristics that influence it. To this end, the five hypotheses chosen were formulated from the previous literature

$$ETR_{it} = \beta_{0it} + \beta_1 BOARD_{it} + \beta_2 INDEP_{it} + \beta_3 DUAL_{it} + \beta_4 COMITE_{it} + \beta_5 QUA_{it} + \beta_6 DIV_{it} + \beta_7 SIZE_{it} + \beta_8 LEV_{it} + \varepsilon_{it} \quad (1)$$

The empirical study conducted in this paper is based on a model that explains tax management in terms of corporate governance characteristics as well as a series of control variables.

3.2.1. Dependent variable

In line with the study by Gomes (2015), the dependent variable (tax management) we examine is measured by the *ETR* which is defined as the ratio between income tax and net profit before tax. There are two main reasons for choosing this variable. First, research on taxation has shown that this measure summarises the cumulative effects of different tax incentives and identifies the neutrality of the tax system with respect to firms with different tax burdens (Noor et al., 2010). Second, the *ETR* is the most frequently used measure in tax management research. It should be added that, in this study, a firm is considered tax-efficient when its *ETR* is lower than the statutory rate.

3.2.2. Independent variable

To test our model, we retain five explanatory variables:

- *BOARD* is measured by the number of directors sitting on the board. This indicator reflects the control exercised by members of the board of directors over management.
- *INDEP* is the percentage of independent directors on the board. To determine the number of independent directors, we referred to information provided by companies in their annual reports.

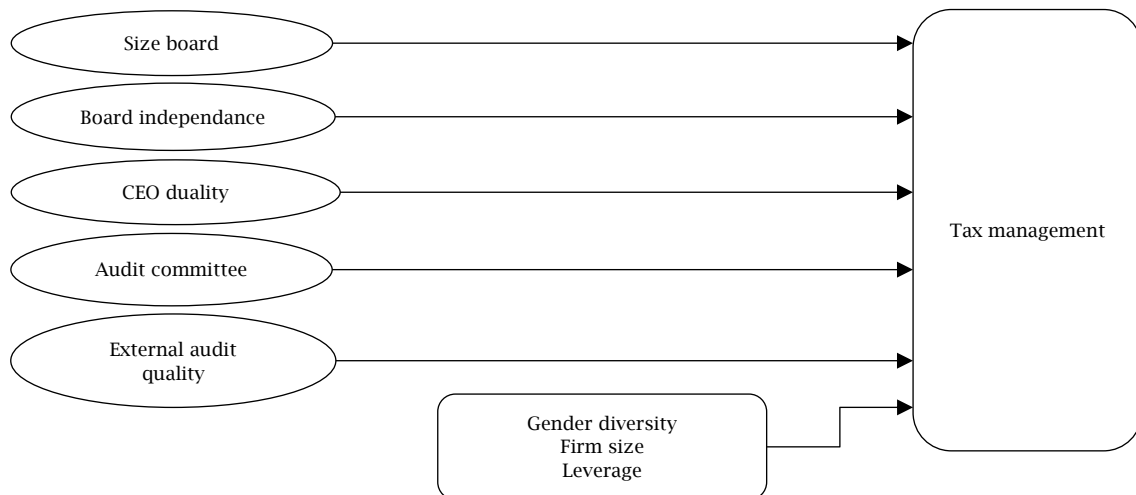
and were tested using the panel regression model and the least squares method. In addition, the research approach used is a quantitative one with descriptive analysis methods that aim to provide facts, data and all that is related to them. Drawing on some existing research, we use the following empirical model to test our hypotheses.

- *DUAL* measures the separation of the functions of the CEO and the chairman of the board. It is equal to 1 if the CEO has dual functions and 0 otherwise.
- The variable *COMITE* corresponds to the total number of audit committee members in a company.
- External audit (*QUA*) is measured using a binary variable called a dummy variable, which takes the value 1 if the company is audited by a Big4 firm, otherwise, the score 0 is given.

3.2.3. Control variable

To enhance the robustness of our study, we use some factors that also influence firms' tax management decisions. The selection of control variables is based on previous research and partly dictated by data availability. The first variable introduced is gender diversity on the board (*DIV*), measured by the number of women on the board. Several studies support the idea that diversity can improve board effectiveness and underline the central role of women in ensuring compliance with the law, especially in tax matters. The second control variable is the firm size (*SIZE*) measured by the logarithm of total net assets. Although results on the nature of the association between firm size and tax management are not unanimous and others are inconclusive, the majority of studies show positive variability (Chen et al., 2010; Lanis et al., 2017). Finally, *LEV* represents the firm's level of debt. This variable is measured by the interest-bearing debts on the total net assets. Based on previous research, we assume that the adjustment of the tax rate can be influenced by the level of indebtedness of firms. The figure below presents the conceptual model of our study.

Figure 2. Conceptual research model



Source: Authors' elaboration.

4. RESULTS AND DISCUSSION

In this section, we present the analysis of the results obtained, which includes descriptive statistics, and correlation tests (multicollinearity test, autocorrelation test, heteroscedasticity test). Once the hypotheses are tested a multiple linear regression analysis is performed using the ordinary least squares estimator.

4.1. Descriptive statistics

Table 2 indicates that during the six years of the study, the average *ETR* (28.9%) was below the statutory tax rate (31%) set by Moroccan law. This shows the existence of proven tax management so that the extent of this practice contributes to minimize tax expenses and increase the net result of Moroccan-listed companies. Furthermore, the results show that the minimum *ETR* is 0.006, which indicates that some companies are effectively taking advantage of the tax benefits and incentives granted by the Moroccan state, which allows them to optimize their financial situation through the realization of significant tax savings.

For the independent variables, the average board size score is around 7, ranging from a minimum of 3 to a maximum of 13 members. This is in line with Moroccan Law 17-95 on public limited companies, which stipulates that the board of directors must be composed of at least 3 members. Furthermore, the finding indicates that the Moroccan firms in our sample are dominated by inside directors and that only 8% of the members are independent. This result can be explained by the fact that companies are not obliged to appoint these directors to their boards of directors. We also find that the companies under investigation exhibit a combination of the CEO and chairman of the board roles (66%), which can be explained by the fact that most of the companies selected are family-owned and emphasise the role of leadership in decision-making. The average variable for the number of audit committee members is 2, while the maximum is 4 members. The results show that on average 59% of the listed Moroccan companies use Big4 firms.

Table 2 further provides the descriptive statistics pertaining to the control variables. The results reveal that the presence of women in the board of directors varies between 0 and 5

members with an average of 16%, which is practically low. In addition, 30% of the sample has no women on its board. Thus, the statistics show that the average size of the selected sample is 22.1 with a minimum of 17.8 and a maximum of 23.1. Finally, the analysis underlines that listed Moroccan companies do not have debt problems with a minimum of 0% and an average not exceeding 24%. The decision not to take on massive debt may be motivated by a combination of financial, economic and regulatory considerations specific to the Moroccan context.

Table 2. Descriptive statistics of all variables

Variable	Mean	Min	Max	Std. dev.
<i>ETR</i>	0.289	0.124	0.006	0.873
<i>BOARD</i>	6.495	2.195	3	13
<i>INDEP</i>	0.073	0.113	0	0.401
<i>DUAL</i>	0.663	0.475	0	1
<i>COMITE</i>	2.218	1.569	0	4
<i>QUA</i>	0.599	0.548	0	1
<i>DIV</i>	0.163	0.118	0	5
<i>SIZE</i>	22.103	1.481	17.897	23.910
<i>LEV</i>	0.243	0.383	0	1.853

Source: Authors' elaboration.

4.2. Hypotheses test

The application of a linear regression model requires certain conditions, namely the absence of multicollinearity, autocorrelation and heteroscedasticity problems.

4.2.1. Multicollinearity test

An efficient regression model is free from problems of multicollinearity between the introduced independent variables. There are different strategies to detect multicollinearity among the explanatory variables. In our case, we opted for the variance inflation factor (VIF) test and the Pearson correlation. The results of the multicollinearity test presented in Table 3 show that the value of the VIF is less than 10 and that the correlation between all variables is less than 0.8, which is the suggested limit beyond which a multicollinearity problem is likely to occur. Referring to the matrix below, we see that the average number of significant correlations is 1%. These correlation coefficients vary between 18% and 61%.

Table 3. Correlation matrix

Variable	<i>BOARD</i>	<i>INDEP</i>	<i>DUAL</i>	<i>COMITE</i>	<i>QUA</i>	<i>DIV</i>	<i>SIZE</i>	<i>LEV</i>	<i>VIF</i>
<i>BOARD</i>	1								1.371
<i>INDEP</i>	-0.087	1							1.063
<i>DUAL</i>	-0.278***	0.247***	1						1.170
<i>COMITE</i>	0.471**	0.218	-0.361**	1					1.024
<i>QUA</i>	0.194	-0.019	0.350*	-0.385***	1				1.313
<i>DIV</i>	0.368	0.018	0.008	0.129	0.005	1			1.002
<i>SIZE</i>	0.614***	-0.139**	-0.466***	0.517**	0.375*	0.031	1		1.227
<i>LEV</i>	0.116*	0.031	-0.153**	0.270	-0.228***	0.106*	0.487***	1	1.166

Note: ***, **, * are statistically significant at 1%, 5%, 10% levels respectively.

Source: Authors' elaboration.

The data illustrates a positive and statistically significant correlation between company size and board size, suggesting that board size tends to increase as the company grows. The analysis also reveals a negative and statistically significant association between duality and company and board size, meaning that large Moroccan companies with

larger boards prefer to separate the functions of chairman and CEO. On the other hand, board duality and independence are positively correlated. With regard to the audit committee, the matrix shows that there is a strong correlation between the audit committee and the size of the company, which means that the larger the company, the more

present the audit committee is in the company. As for the quality of the audit, it has a positive and significant relationship with *DUAL*, which explains why companies with a duality in the CEO position appeal to large companies. There also appears to be a negative and significant association between external audit quality and the presence of the audit committee. Finally, the size of the company is positively associated with its level of financial leverage. This finding confirms the results of Melesse et al. (2021).

4.2.2. Autocorrelation test

In addition to checking for multicollinearity, a linear regression requires a test for autocorrelation of errors which can be proven from the Durbin-Watson (DW) value. The analysis in Table 4 shows that the DW value is 1.969. The DW value for $K = 8$ (the number of independent variables in the regression model) and 288 observations (N) is 1.848. This means that the DW test value is between 1.848 (du) and 2.152 (4-du). We can therefore conclude that our regression model is free of autocorrelation problems.

Table 4. Result of the Durbin-Watson test

Statistical measure	Result
R	0.468
R-square	0.381
Adjusted R-square	0.325
Std. error of estimate	0.133
Durbin-Watson test	1.969

Source: Authors' elaboration.

4.2.3. Heteroscedasticity test

With regard to heteroscedasticity, this study used the Park-Glejser test as presented in the table below. The results show that all significant values are above 5%, except for *COMITE* which is only 0.033 and *DIV* which is 0.026. This indicates that the regression model used in this study shows no evidence of heteroscedasticity.

Table 5. Result of the heteroscedasticity test

Variable	t-statistic	Significant
<i>BOARD</i>	0.722	0.347
<i>INDEP</i>	1.181	0.096
<i>DUAL</i>	-0.750	0.217
<i>COMITE</i>	-1.498	0.033
<i>QUA</i>	0.035	0.890
<i>DIV</i>	-1.552	0.026
<i>SIZE</i>	0.894	0.181
<i>LEV</i>	-0.249	0.582

Source: Authors' elaboration.

4.3. Multivariate regression analysis

As the objective of our research is to study the influence of corporate governance on the tax management of listed Moroccan firms, we opted for a multiple regression analysis. This objective allowed us to test a model that attempts to measure the prediction of each independent variable (*BOARD*, *INDEP*, *DUAL*, *COMITE*, and *QUA*) on the dependent variable, namely the *ETR* (which presents the tax management). Our results highlight that the Fisher test is around the $0.01 < 0.05$ level, which shows

the statistical significance of our model. Regarding the value of the R-square obtained in this study, it is 0.381, which means that corporate governance characteristics explain 38.1% of the changes and variations in the *ETR*. A value that is still more or less acceptable in the field of management science. The remaining 61.9% are influenced by other variables outside this research.

The regression results presented in Table 6 show that board size positively affects the *ETR* with a regression coefficient of 0.113 and a significance value of 0.008. These results corroborate those highlighted by Minnick and Noga (2010) and Lanis and Richardson (2015) who note that small boards reinforce good tax management and that the larger the board the more difficult it is for the firm to make decisions on tax efficiency policies and end up with high *ETR*. This finding, confirms the *H1* hypothesis at a threshold of 1%.

Thus, the results of this study show that member independence is moderate with a positive coefficient of 0.029 and a p-value of 0.316. This indicates that the tax management of the studied companies is not significantly influenced by the independence of the board members. Therefore, our *H2* is rejected. This outcome aligns with Yuniawati's (2022) findings, indicating that no significant effect was observed from the composition of the proportion of independent directors on tax management. This result may be due to the powerlessness of independent members and their inability to convince and influence decisions on tax management. Another element is suspected to be at the origin of this finding, namely, the fact that independent directors have no real knowledge of tax management activities and that their presence is only to comply with regulatory requirements as is the case for Moroccan-listed companies.

The results of the regression show that the *DUAL* variable has a negative and significant effect on the *ETR*, so the *H3* is rejected. This means that the dual role of a CEO encourages tax management practices by reducing the *ETR*. This result contradicts the conclusion of agency theory that duality poses a greater threat to firm longevity and supports the conclusion of stewardship and organisational theory that leadership plays an important role in value creation and that duality increases overall firm performance, as CEOs have valuable information about the firm's business that can be disclosed to board members in order to make the right decisions for managing the tax outcome.

For the *COMITE* variable, a negative association is identified between the *ETR* and the existence of an audit committee, with a p-value of 0.562. This finding indicates that the function of the audit committee does not have a significant influence on presumed tax management, so *H4* is rejected. This result could be due to the lack of effectiveness of the audit committees studied. Certainly, the existence of an audit committee within a company is an important aspect of the implementation of corporate governance, but as already mentioned by Menon and Williams (1994), the mere existence of the committee is not equivalent to its effectiveness nor to the fact that the board of directors relies on its members to improve its control capacity. Several criteria need to be combined to have an effective committee, namely: the independence of the members, the competence, the power of the committee and

the relationship with other stakeholders. We can therefore expect an audit committee made up of independent, professional and experienced members will be more effective in overseeing and controlling tax results.

Furthermore, examination of the table indicates a negative and statistically significant relationship at the 5% level between external audit quality and the *ETR* with $\beta = -0.212$ and $p = 0.018$. This result supports *H5*, which states that the use of large firms such as Big4 increases the level of tax management of firms. Indeed, this result is corroborated by the study by Hakim and Omri (2019), which notes that firms audited by firms qualified as Big4s manage to optimise their financial situation better through the realisation of significant tax savings than firms audited by other non-Big4 firms. Thus, the results of this study are also consistent with those of Annisa and Kurniasih (2012) who argue that the big audit firms may provide not only audit services but also implicit tax advice.

Other findings emerge from this research. According to the regression results, *DIV* has a p-value of 0.209 and a negative coefficient of 0.014. This means that the representation of women on the board of directors has no significance in determining the variation of the *ETR* and thus on the tax management practice. This result may be due to the lack of involvement and neglect of the role of women on boards in Moroccan companies. In line with our expectations, there is a negative and significantly relevant relationship at the 1% level between firm size and *ETR*, which shows that large firms use tax instruments more to reduce their tax burden and have a lower *ETR* than small firms. This result supports the hypothesis of Dhahri and Jarboui (2021) and contradicts that of Zimmerman (1983) who finds that larger firms are more likely to have higher *ETR* than other firms. Finally, the adjustment of the *ETR* does not seem to be influenced by the level of debt of firms. This result contradicts research that indicates that firms with high tax liabilities seek to take out new loans to reduce the tax burden.

Table 6. Regression results

Variable	ETR coefficient	ETR p-value
BOARD	0.113***	0.008
INDEP	0.029	0.316
DUAL	-0.047*	0.074
COMITE	-0.003	0.562
QUA	-0.212**	0.018
DIV	-0.014	0.209
SIZE	-0.047***	0.002
LEV	0.032	0.156
Constant	0.508***	0.001
R-square	0.381	
Adjusted R-square	0.325	
Observation	288	

Note: ***, **, * are statistically significant at 1%, 5%, 10% levels respectively.

Source: Authors' elaboration.

REFERENCES

- Abduh, A., Andreas, & Ratnawati, V. (2014). Pengaruh kebutuhan koordinasi, ketidakpastian, dan risiko pajak terhadap tax avoidance [The effect of coordination needs, uncertainty and tax avoidance on tax risk]. *Jurnal Akuntansi Media Riset Akuntansi & Keuangan*, 3(1), 16–28. <https://ja.ejournal.unri.ac.id/index.php/JA/article/view/2532/0>
- Aderomou, B. R. (2020). L' Influence dynamique de la séparation des fonctions de Président du Conseil d'Administration et de Dirigeant sur la performance des entreprises [The dynamic influence of the separation of the functions of chairman of the board of directors and executive officer on the companies' performance]. *Journal of Academic Finance*, 11(1), 70–85. <https://doi.org/10.59051/joaf.v11i1.363>

5. CONCLUSION

The study of the impact of corporate governance characteristics on corporate tax management was based on a survey of 48 Moroccan companies listed on the CSE over the period 2014–2019.

In order to conduct our research, we used multivariate analysis by applying multiple linear regression. In addition, we used descriptive statistics to better understand some corporate governance practices of Moroccan-listed companies.

After the tests, this study concludes that board size has a negative impact on the level of tax management, so that the larger the board size, the lower the probability of tax management. This result is consistent with the hypothesis put forward by the authors. On the other hand, there is no evidence that the independence of the members and the audit committee influences the adjustment of the *ETR*. However, the results of the multivariate test show that CEO duality and external audit quality have a positive effect on the level of tax management.

In conclusion, this study is one of the few to have addressed the issue of tax management in the Moroccan context and opens perspectives for other researchers to continue their research. However, it is imperative to note that this study has limitations that must be taken into consideration. In particular, the relatively small sample size of 48 companies stems largely from the inaccessibility of information, which may restrict the generalizability of findings to the wider Moroccan business landscape. Researchers need to be aware of this constraint when applying the results to a wider context. In addition, the study period, covering the years 2014–2019, may not fully reflect current impacts, especially considering the disruptions induced by the COVID-19 pandemic. A recommendation for further research would be to explore the longer-term implications of governance mechanisms on tax management, taking into account the post-COVID-19 context. Another potential limitation is the incompleteness of the data, particularly for loss-making companies. Strategies to mitigate this impact, such as exploring alternative data sources or adjusting methodologies, could be considered in future research. Finally, although this study examined certain governance mechanisms, future research could be enriched by the inclusion of other factors such as executive compensation, family influence or institutional shareholding, for a more holistic understanding of the dynamics of governance and tax management.

Despite these limitations, this study provides a solid basis for future research, encouraging researchers to further explore the complex entanglements between corporate governance and tax management in the specific context of Moroccan companies.

3. Annisa, N. A., & Kurniasih, L. (2012). Pengaruh corporate governance terhadap tax avoidance [The effect of corporate governance on tax avoidance]. *Jurnal Akuntansi dan Auditing*, 8(2), 123-136. <https://doi.org/10.14710/jaa.8.2.123-136>
4. Armstrong, C. S., Blouin, J. L., Jagolinzer, A. D., & Larcker, D. F. (2015). Corporate governance, incentives, and tax avoidance. *Journal of Accounting and Economics*, 60(1), 1-17. <https://doi.org/10.1016/j.jacceco.2015.02.003>
5. Asthana, S. C., Sami, H., & Ye, Z. (2009). Auditor failure and market reactions: Evidence from China. *International Journal of Accounting, Auditing and Performance Evaluation*, 5(4), 408-441. <https://doi.org/10.1504/IJAAPE.2009.027880>
6. Moroccan Financial Markets Authority (AMMC). (2017). *Bulletin officiel du Royaume du Maroc N° 6633 du 6 rabii II 1439 (25 décembre 2017)* [Official Bulletin of the Kingdom of Morocco N° 6633 of 6 rabii II 1439 (December 25, 2017)]. https://www.finances.gov.ma/Publication/db/2017/BO_6633-bis_fr.pdf
7. Moroccan Financial Markets Authority (AMMC). (2019). *Bulletin officiel du Royaume du Maroc N° 6784* [Official Bulletin of the Kingdom of Morocco N° 6784]. https://www.ammc.ma/sites/default/files/Circulaire%2003_19%20relative%20aux%20op%C3%A9rations%20et%20informations%20financi%C3%A8res.pdf
8. Barnhart, S. W., & Rosenstein, S. (2005). Board composition, managerial ownership, and firm performance. *Financial Review*, 33(4), 1-16. <https://doi.org/10.1111/j.1540-6288.1998.tb01393.x>
9. Boussaidi, A., & Hamed-Sidhom, M. (2021). Board's characteristics, ownership's nature and corporate tax aggressiveness: New evidence from the Tunisian context. *EuroMed Journal of Business*, 16(4), 487-511. <https://doi.org/10.1108/EMJB-04-2020-0030>
10. Chen, S., Chen, X., Cheng, Q., & Shevlin, T. (2010). Are family firms more tax aggressive than non-family firms? *Journal of Financial Economics*, 95(1), 41-61. <https://doi.org/10.1016/j.jfineco.2009.02.003>
11. Chen, S., Huang, Y., Li, N., & Shevlin, T. (2019). How does quasi-indexer ownership affect corporate tax planning? *Journal of Accounting and Economics*, 67(2-3), 278-296. <https://doi.org/10.1016/j.jacceco.2018.01.001>
12. Chytis, E., Tasios, S., & Filos, I. (2020). The effect of corporate governance mechanisms on tax planning during financial crisis: An empirical study of companies listed on the Athens Stock Exchange. *International Journal of Disclosure and Governance*, 17, 30-38. <https://doi.org/10.1057/s41310-020-00072-3>
13. Clemente-Almendros, J. A., & González-Cruz, T. (2023). Family involvement and proactive tax management behaviour in private family SMEs. *International Journal of Entrepreneurial Behavior & Research*, 29(1), 218-244. <https://doi.org/10.1108/IJEBR-01-2022-0021>
14. Coles, J. L., Daniel, N. D., & Naveen, L. (2008). Boards: Does one size fit all? *Journal of Financial Economics*, 87(2), 329-356. <https://doi.org/10.1016/j.jfineco.2006.08.008>
15. Çollaku, L., Balaj, D., & Hajdini, A. (2023). Correlation between tax revenues and gross domestic product: Evidence from the developing economy. *Corporate & Business Strategy Review*, 4(1), 31-38. <https://doi.org/10.22495/cbsrv4i1art3>
16. Cuadrado-Ballesteros, B., Rodríguez-Ariza, L., & García-Sánchez, I.-M. (2015). The role of independent directors at family firms in relation to corporate social responsibility disclosures. *International Business Review*, 24(5), 890-901. <https://doi.org/10.1016/j.ibusrev.2015.04.002>
17. Dahir n 1-96-124 portant promulgation de la loi n 17-95 relative aux sociétés anonymes [Decree n 1-96-124 promulgating law n 17-95 relating to public limited companies]. <https://www.ammc.ma/sites/default/files/Loi%20n%C2%B0%2017-95.pdf>
18. Desai, M. A., & Dharmapala, D. (2006). Corporate tax avoidance and high-powered incentives. *Journal of Financial Economics*, 79(1), 145-179. <https://doi.org/10.1016/j.jfineco.2005.02.002>
19. Dhahri, T., & Jarboui, A. (2021). Boards of directors' characteristics and tax aggressiveness: A study of Tunisian contest. *Revue des Etudes Multidisciplinaires en Science Economiques et Sociales*, 6, 425-442. <https://doi.org/10.48375/IMIST.PRSM/remses-v6i2.27885>
20. Doghmi, H. (2020). *La capacité de mobilisation des recettes fiscales au Maroc* [The capacity for mobilizing tax revenues in Morocco]. Bank Al-Maghrib. <https://www.bkam.ma/content/download/722361/8287183/version/2/file/La+capacit%C3%A9+de+mobilisation+des+recettes+fiscales+au+Maroc.pdf>
21. Duru, A., Iyengar, R. J., & Zampelli, E. M. (2016). The dynamic relationship between CEO duality and firm performance: The moderating role of board independence. *Journal of Business Research*, 69(10), 4269-4277. <https://doi.org/10.1016/j.jbusres.2016.04.001>
22. Flamini, G., Vola, P., Songini, L., & Gnan, L. (2021). The determinants of tax aggressiveness in family firms: An investigation of Italian private family firms. *Sustainability*, 13, Article 7654. <https://doi.org/10.3390/su13147654>
23. Gaaya, S., Lakhali, N., & Lakhali, F. (2019). Does family ownership reduce corporate tax avoidance? The moderating effect of audit quality. *Managerial Auditing Journal*, 32(7), 731-744. <https://doi.org/10.1108/MAJ-02-2017-1530>
24. Gomes, A. P. M. (2015). Corporate governance characteristics as a stimulus to tax management. *Revista Contabilidade & Finanças*, 27(71). <https://doi.org/10.1590/1808-057x201500750>
25. González-Cruz, T., Clemente-Almendros, J. A., & Puig-Denia, A. (2021). Family governance systems: The complementary role of constitutions and councils. *Economic Research-Ekonomska Istrazivanja*, 34(1), 3139-3165. <https://doi.org/10.1080/1331677X.2020.1867603>
26. Hakim, I. H., & Omri, M. A. (2013). Does external auditor influence tax management? An examination of the effect on effective tax rates using a specialist or non-specialist auditor classification. *International Journal of Technology, Policy and Management*, 13(4), 409-421. <https://doi.org/10.1504/IJTPM.2013.056839>
27. Hamdi, B., Mejri, T., & Haloua, S. (2018). Gestion des résultats, seuils comptables et gouvernance d'entreprise: Le cas des sociétés françaises [Earnings management, accounting thresholds and corporate governance: The case of French firms]. *Revue Finance Contrôle Stratégie*, 21(3). <https://doi.org/10.4000/fcs.2838>
28. Hanlon, M., & Heitzman, S. (2010). A review of tax research. *Journal of Accounting and Economics*, 50(2-3), 127-178. <https://doi.org/10.1016/j.jacceco.2010.09.002>
29. Harris, D. G., & Zhou, J. (2013). *Auditor-provided tax consulting, knowledge spillovers, and reported weaknesses in internal control*. <http://doi.org/10.2139/ssrn.991328>
30. Hasiholan, B. (2013). The impact of corporate governance toward tax management. *Finance and Banking Journal*, 15(2). <https://journal.perbanas.id/index.php/jkp/article/view/190>

31. Hermalin, B. E., & Weisbach, M. S. (2003). Boards of directors as an endogenously determined institution: A survey of the economic literature. *FRBNY Economic Policy Review*, 9(1). <https://ssrn.com/abstract=794804>
32. Hsu, P.-H., Moore, J. A., & Neubaum, D. O. (2018). Tax avoidance, financial experts on the audit committee, and business strategy. *Journal of Business Finance & Accounting*, 45(9-10), 1293-1321. <https://doi.org/10.1111/jbfa.12352>
33. Jamei, R. (2017). Tax avoidance and corporate governance mechanisms: Evidence from Tehran Stock Exchange. *International Journal of Economics and Financial Issues*, 7(4), 638-644. <https://www.econjournals.com/index.php/ijefi/article/view/5267>
34. Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics*, 3(4), 305-360. [https://doi.org/10.1016/0304-405X\(76\)90026-X](https://doi.org/10.1016/0304-405X(76)90026-X)
35. Khaoula, A. (2013). Does corporate governance affect tax planning? Evidence from American companies. *International Journal of Advanced Research*, 1(10), 864-873. https://www.journalijar.com/uploads/2014-01-01_113753_520.pdf
36. Kovermann, J. H. (2018). Tax avoidance, tax risk and the cost of debt in a bank-dominated economy. *Managerial Auditing Journal*, 33(8-9), 683-699. <https://doi.org/10.1108/MAJ-12-2017-1734>
37. Kovermann, J., & Wendt, M. (2019). Tax avoidance in family firms: Evidence from large private firms. *Journal of Contemporary Accounting & Economics*, 15(2), 145-157. <https://doi.org/10.1016/j.jcae.2019.04.003>
38. Lanis, R., & Richardson, G. (2015). Is corporate social responsibility performance associated with tax avoidance? *Journal of Business Ethics*, 127(2), 439-457. <https://doi.org/10.1007/s10551-014-2052-8>
39. Lanis, R., Richardson, G., & Taylor, G. (2017). Board of director gender and corporate tax aggressiveness: An empirical analysis. *Journal of Business Ethics*, 144, 577-596. <https://doi.org/10.1007/s10551-015-2815-x>
40. Lim, Y. (2011). Tax avoidance, cost of debt and shareholder activism: Korean evidence. *Journal of Banking & Finance*, 35(2), 456-470. <https://doi.org/10.1016/j.jbankfin.2010.08.021>
41. Lisic, L. L., Myers, L. A., Seidel, T. A., & Zhou, J. (2019). Does audit committee accounting expertise help to promote audit quality? Evidence from auditor reporting of internal control weaknesses? *Contemporary Accounting Research*, 36(4), 2521-2553. <https://doi.org/10.1111/1911-3846.12517>
42. Maali, B. M., & Al-Attar, A. (2017). Corporate disclosure and cultural values: A test for multinational corporations. *The Journal of Developing Areas*, 51(3), 251-265. <https://doi.org/10.1353/jda.2017.0071>
43. MacCarthy, J. (2021). Effect of earnings management and deferred tax on tax avoidance: Evidence using modified Jones model algorithm [Special issue]. *Corporate Ownership & Control*, 19(1), 272-287. <https://doi.org/10.22495/cocv19i1siart5>
44. Melesse, W. E., Berihun, E., Baylie, F., & Kenubeh, D. (2021). The role of public policy in debt level choices among small-scale manufacturing enterprises in Ethiopia: Conditional mixed process approach. *Heliyon*, 7(12), Article E08548. <https://doi.org/10.1016/j.heliyon.2021.e08548>
45. Menon, K., & Williams, J. D. (1994). The use of audit committees for monitoring. *Journal of Accounting and Public Policy*, 13(2), 121-139. [https://doi.org/10.1016/0278-4254\(94\)90016-7](https://doi.org/10.1016/0278-4254(94)90016-7)
46. Minnick, K., & Noga, T. (2010). Do corporate governance characteristics influence tax management? *Journal of Corporate Finance*, 16(5), 703-718. <https://doi.org/10.1016/j.jcorpfin.2010.08.005>
47. Moore, J. A., Suh, S., & Werner, E. M. (2017). Dual entrenchment: Classified boards and family firms. *Journal of Business Research*, 79, 161-172. <https://doi.org/10.1016/j.jbusres.2017.06.007>
48. Mrabet, N. (2019). Intégration managériale, financière et fiscale dans les groupes de société: Cas du groupe LHM [Managerial, financial and tax integration in corporate groups: The case of the LHM group]. *Revue du Contrôle de la Comptabilité et de l'Audit*, 4(3), 895-915. <https://doi.org/10.5281/zenodo.3605681>
49. Noor, R. M., Fadzillah, N. S. M., & Mastuki, N. (2010). Tax planning and corporate effective tax rates. In *Proceedings of the 2010 International Conference on Science and Social Research (CSSR 2010)* (pp. 1238-1242). Institute of Electrical and Electronics Engineers (IEEE). <https://doi.org/10.1109/CSSR.2010.5773726>
50. Richardson, G., & Lanis, R. (2007). Determinants of the variability in corporate effective tax rates and tax reform: Evidence from Australia. *Journal of Accounting and Public Policy*, 26(6), 689-704. <https://doi.org/10.1016/j.jaccpubpol.2007.10.003>
51. Rohyati, Y., & Suripto, S. (2021). Corporate social responsibility, good corporate governance, and management compensation against tax avoidance. *Budapest International Research and Critics Institute Journal*, 4(2). <https://doi.org/10.33258/birci.v4i2.1968>
52. Seidman, J. K., & Stomberg, B. (2017). Equity compensation and tax avoidance: Disentangling managerial incentives from tax benefits and reexamining the effect of shareholder rights. *The Journal of the American Taxation Association*, 39(2), 21-41. <https://doi.org/10.2308/atax-51755>
53. Suak, M., Sondakh, J. J., & Gamaliel, H. (2021). Effect of tax planning, earnings growth, asset management, and sticky costs on firm value (Study on property and real estate companies listed on the Indonesia Stock Exchange in 2016-2019). *Jurnal Riset Akuntansi Dan Auditing "GOODWILL"*, 12(2), 142-152. <https://ejournal.unsrat.ac.id/index.php/goodwill/article/view/36253/33751>
54. Suandy, E. (2016). *Perencanaan pajak* [Tax planning]. Salemba Empat.
55. Tandean, V. A., & Winnie, W. (2016). The effect of good corporate governance on tax avoidance: An empirical study on manufacturing companies listed in IDX period 2010-2013. *Asian Journal of Accounting Research*, 1(1), 28-38. <https://doi.org/10.1108/AJAR-2016-01-01-B004>
56. Utaminingsih, N. S., Kurniasih, D., Sari, M. P., & Helmina, M. R. A. (2022). The role of internal control in the relationship of board gender diversity, audit committee, and independent commissioner on tax aggressiveness. *Cogent Business & Management*, 9(1), Article 2122333. <https://doi.org/10.1080/23311975.2022.2122333>
57. Yermack, D. (1996). Higher market valuation of companies with a small board of directors. *Journal of Financial Economics*, 40(2), 185-211. [https://doi.org/10.1016/0304-405X\(95\)00844-5](https://doi.org/10.1016/0304-405X(95)00844-5)
58. Yuniawati, R. A. (2022). Corporate governance and tax management. *Formosa Journal of Sustainable Research*, 1(6), 955-974. <https://doi.org/10.55927/fjsr.v1i6.1731>
59. Zimmerman, J. L. (1983). Taxes and firm size. *Journal of Accounting and Economics*, 5, 119-149. [https://doi.org/10.1016/0165-4101\(83\)90008-3](https://doi.org/10.1016/0165-4101(83)90008-3)