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Corporate tax avoidance and firm value: The moderating role of environmental, social, and governance (ESG) ratings

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Abstract

In this study, we examine how managers in firms that have practiced tax avoidance strategically use sustainability activities together with their tax avoidance practices. More specifically, we investigate the moderating impact of ESG on the association between tax avoidance and firm value. Using a sample of French-listed companies during the years 2012–2021, we hypothesized and found that ESG rating negatively and significantly moderates the relationship between corporate tax avoidance and firm market valuation. Overall, our results suggest that investors reward firms for good ESG performance, perceiving such companies as more valuable. However, when these firms engage in higher tax liabilities, the positive effect of ESG on firm value is slightly reduced. This nuanced insight highlights the importance of considering how tax strategies interact with ESG initiatives in shaping overall firm value. This study, thus, provides theoretical and practical consequences that will encourage businesses and politicians to promote sustainable development. Our findings remain robust to an array of tests, including a number of different tax avoidance measures and potential endogeneity problems.

KEYWORDS
ESG ratings, firm value, France, sustainable development, tax avoidance

1 | INTRODUCTION

Sustainability performance and tax avoidance have received growing attention from society, market participants, policymakers, and academics recently, and the debate on why firms strategically engage in sustainability activities or/and tax avoidance is ongoing (Adomako & Nguyen, 2020; Adu et al., 2022; Al-Shaer, 2020; Ayayi & Wijesiri, 2022; Bassetti et al., 2021; Elmagrhi et al., 2019). The question of whether (and to what level) managers engage to aggressively reduce their firms' tax liabilities and, simultaneously, improve firm sustainability is specifically ambiguous and offers managers with complementary shareholder interests with other stakeholders (Inger & Vansant, 2019). A strand of literature examined the association between sustainability and corporate irresponsible activities such as

Abbreviations: BTD, book-to-tax differences; CSR, corporate social responsibility; ESG, environmental, social and governance; GETRGAAP, effective tax rate; GMM, generalized method of moments; OLS, ordinary least squares; 2SLS, two-stage least square.

tax avoidance and earnings management, but has produced inconclusive evidence (Baudot et al., 2020; Gallemore et al., 2014; Kim et al., 2011). Some researches contend that sustainability activities denote a managerial obligation to ethical activities, and find that sustainable firms are less likely to engage in irresponsible activities (Kim et al., 2011). Other scholars argue that sustainability strategies are employed as a managerial incentive to enhance firm reputation and misrepresent stakeholders with the intention of masking their manipulations of taxes and earnings, and have shown a positive association between sustainability and corporate irresponsible activities (Prior et al., 2008). Yet, how shareholders view tax avoidance activities of firms with high sustainability performance is an open question to date. This study, therefore, examines the joint consequences of environmental, social, and governance (ESG) ratings and tax avoidance on firm market valuation.

In this essence, tax avoidance entails the probability of future negative tax results in the shape of tax liabilities, interest, and fines when tax situations are questioned by the authorities (Inger & Vansant, 2019). Extant literature documents that investors are susceptible to these prospective future costs. For instance, Graham et al. (2014) believe that tax avoidance is one of the choices that demonstrate poor corporate ethics whereas Dyreng et al. (2008), Hanlon and Heitzman (2010), and Hardeck and Hertl (2014) argued that tax avoidance is the reduction of explicit taxes as a result of either a prudent tax management (sound corporate ethics) or a negligible tax management and irresponsible tax management (bad business ethics). Moreover, tax avoidance reduces tax revenue that is used to improve social welfare, which poorly reflects the company's ethics and image. Also, Kim et al. (2011) and Gallemore et al. (2014) assumed that since the stakeholders, who are company's members, have their tax avoidance reduced, they negatively react to such activities. However, other researchers, such as Inger (2014), Inger and Vansant (2019), Drake et al. (2019), Kim et al. (2011), and Gallemore et al. (2014) demonstrated that some parties may view tax avoidance as beneficial as it reduces the company's tax burden while it simultaneously increases its profitability and consequently, the stakeholders' earnings and more particularly the shareholders'. Therefore, in light of these mixed findings, Brooks et al. (2016) proposed that stakeholders may favorably respond to tax avoidance provided that shareholders view it as a managerial commitment to safeguarding resources without jeopardizing the stakeholders' requirements. We, thus, assume that tax avoidance may be valued more by investors when the level to which firms look to have participated in sustainability is greater.

It is generally known that sustainability reporting is voluntary and often difficult to compile, and businesses that produce sustainability reports have strong CSR operations (Alshbili et al., 2021; Alshbili & Elamer, 2019; Amin et al., 2022; Boulhaga et al., 2022; Elamer et al., 2022; Hassan et al., 2021; Hazaea et al., 2022; Kazemi et al., 2023). In fact, firms provide sustainability reports to fulfill their stakeholders' demands (Gatimbu et al., 2018; Gunarathne et al., 2021; Ioannidis et al., 2021; Khan et al., 2022; Kim et al., 2021; Lu et al., 2022; Lys et al., 2015). Thus, the question of what are the benefits of firms engagement in sustainability activities that have no instant influence on increasing shareholder wealth has been debated (Friedman, 1970; Inger & Vansant, 2019; Makhloufi et al., 2022; Rajesh & Rajendran, 2020). In this vein, stakeholders may regard tax avoidance as a result of strong business ethics rather than as damaging to the stakeholders' welfare if firms publish sustainability reports. Therefore, the generated tax avoidance might be utilized for sustainability efforts (Davis et al., 2016). Also, a stream of research has shown that information openness can reduce the unfavorable relationship between tax avoidance and corporate value (Alexander, 2013; Chen et al., 2014). For example, Clacher and Hagendorff (2012) and Kuzey and Uyar (2017) show that CSR information suggests that corporations engage in tax avoidance to earn tax savings, which they utilize to participate in CSR activities. In this vein, Khurana and Moser (2013) suggest that sustainability reporting can be a signal that tax savings are being used to carry out CSR initiatives, which reduces the negative consequences of tax avoidance on firm value. Thus, our expectation is that investors may be less skeptical of the possible reputational value of a firm's sustainability activities when a firm is also engaging in tax avoidance behaviors.

In the current literature, there is an evident lacuna in understanding the intricate interplay between tax avoidance strategies and sustainability initiatives, especially in shaping firm value (Alexander, 2013; Chen et al., 2014; Desai & Dharmapala, 2009). This interrelation becomes even more intricate when juxtaposed against the backdrop of governance structures (Allam et al., 2024; Elmagrhi et al., 2019; Giannopoulos et al., 2022; Karim et al., 2021). The role and influence of governance mechanisms, such as board composition and sustainability committees, on this relationship remain ambiguous and merit further scrutiny (Brooks et al., 2016; Desai & Dharmapala, 2009). Moreover, the majority of existing studies adopt a rather universal approach, neglecting the unique nuances of different economic contexts. The French market, characterized by its distinct regulatory landscape and cultural dynamics, has been largely overlooked in this discourse, presenting a crucial contextual gap. This paper endeavors to bridge these gaps by delving deep into the dynamic relationship of tax avoidance, sustainability, and firm value within the French corporate milieu, offering invaluable insights for both academia and industry.

Using OLS and GMM regressions, we examine the moderating impact of ESG rating on the relation between firm value and tax avoidance. We assess our regressions using ESG and financial accounting data from the Datastream annual dataset of environmental, social, and governance (ESG) ratings. We measure tax avoidance using three widely accepted measures from previous research. In line with previous research, we largely find that ceteris paribus, ESG ratings (tax avoidance) are positively (negatively) associated with firm value. Though, constant with our theory and hypothesis, we show that the interaction of ESG ratings and tax avoidance is negatively associated with firm value. This could be interpreted as the market potentially viewing the firm's tax optimization strategies as less favorable when they are pursued alongside high ESG scores. It indicates that while ESG efforts are generally seen positively, their value might be compromised by certain tax practices perceived as aggressive or misaligned with the sustainable ethos represented by high ESG scores.

To the best of our knowledge, this paper is the first to show the dynamic forms of sustainability activities and tax avoidance in improving firm value in order to show how self-interested managers use sustainability performance in coordination with and to mask their tax avoidance practices. This research contributes to the literature in various ways. First, earlier research, such as that of Rudyanto and Pirzada (2020), has demonstrated that tax avoidance has a weak association with firm value. This study contributes to this stream of literature, by demonstrating that ESG moderates the link between tax avoidance and firm value where our conclusion holds after adjusting for the firm-level factors and unobserved time-invariant heterogeneity. Second, our study contributes to the literature on the view of investors on tax avoidance. The existing research provides equivocal results on the relationship between tax avoidance and firm value. For example, Desai and Dharmapala (2009) demonstrated that tax avoidance enhances the firm's value only for well-governed enterprises, whereas Brooks et al. (2016) discovered no relation between tax avoidance and the firm's value. Our findings extend this strand of literature by offering evidence that equity market valuation of firms' tax avoidance behavior is situation-specific, and may differ based on firm behaviors that may clearly benefit non-owner stakeholders. A misalignment between a firm's tax practices and its ESG commitments can potentially erode value, indicating the importance of cohesive strategy formulation that considers both financial optimization and sustainability goals. Our results contribute practically on several levels. First, it will enable individual and institutional investors to improve their investment decisions by taking into account tax avoidance and ESG when making these decisions. Second, It will help the management of publicly traded companies to manage their tax avoidance and ESG activities in ways that maximize their value and satisfy shareholders. Third, our findings have significant consequences for regulators, standard-setters, and managerial labor markets. Finally, our study's empirical results have important consequences for the tax authorities and policymakers.

The remainder of this paper is organized as follows: the second section presents a literature review and hypothesis formulation, the third section explains the adopted methodology, the fourth section discusses the results of the regression model relating to the determinants of the firm's performance and finally, the last section concludes the paper conclusion and suggests future research avenues.

2 | LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

2.1 | The impact of tax avoidance on the firm's value

Informed by stakeholder theory, firms grapple with multi-faceted responsibilities spanning a gamut of stakeholders - from shareholders to governmental bodies (Donaldson & Preston, 1995; Freeman & McVea, 2005). One of the paramount duties nested within this spectrum is tax remittance, a mechanism consistently hailed for its role in amplifying social welfare (Donaldson & Preston, 1995; Zheng et al., 2015). Yet, the linear perception of this duty begins to waver when juxtaposed with the intricacies of governmental efficiency in disbursing these tax resources. The gravitas of tax contributions is queried when governments seemingly misallocate them, favoring narrow interests over broad societal enrichment. Such fiscal maneuvers catalyze firms to introspect the efficacy of their tax remittances. They may subsequently discern that their financial contributions might yield higher societal dividends if channeled into self-directed corporate social responsibility (CSR) undertakings (Alm & Torgler, 2011). This recalibration is intensified when firms discern governmental tax expenditures as disproportionately catering to specific constituencies, sidelining the broader societal matrix. This disillusionment with governmental fiscal stewardship might embolden firms towards tax avoidance - not merely as a fiscal strategy, but as an avenue to autonomously steer their ESG initiatives. Such a strategic pivot, when perceived through the prism of shareholder value, might inadvertently paint tax avoidance in more benevolent hues.

Existing studies offer nuanced insights into corporate tax behavior and its implications for firm value. Zhu et al. (2023) delve into the intersection of tax avoidance, financialization, and managerial myopia, suggesting that short-term managerial perspectives may exacerbate financial strategies. Concurrently, Seifzadeh (2022) underscores the central role of managerial competence in influencing both tax avoidance practices and firm valuation. Offering a broader viewpoint, Salehi and Zimon (2021) emphasize the interplay between intellectual capital, board dynamics, and value creation. Regional studies further enrich our understanding. Guedrib and Marouani (2023) offer a Tunisian perspective on the interplay between tax risk and firm value. In the Iranian context, a number of studies delve into the dynamics of tax aggression, debt, and managerial abilities, often employing both classical and Bayesian econometrics (Akbari, Salehi, & Bagherpour Vlashani, 2018; Akbari, Salehi, & Vlashani, 2018). Lastly, Sarhan (2023) underscores the UK scenario, linking corporate social responsibility with tax practices and shareholding structures. Collectively, this literature offers diverse perspectives on the determinants and implications of corporate tax behaviors. Our study builds upon this foundation, aiming to examine the association between tax avoidance and the firm's value.

The empirical landscape on the intersection of tax avoidance and firm value is marked by polarized views. Indeed, some research has found that tax avoidance is positively connected with the firm's value since the reduced tax burden enhances the shareholders' wealth (Inger & Vansant, 2019), particularly in organizations with effective corporate social governance (Desai & Dharmapala, 2009). However, if shareholders perceive that tax avoidance jeopardizes the firm's long-term viability, tax avoidance is inversely connected to the firm's worth (Inger, 2014). Furthermore, some researchers (Hanlon & Slemrod, 2009) have found that tax evasion is negatively correlated with the firm's value because, as stated by Hope et al. (2013), Donohoe and Robert Knechel (2014) and Balakrishnan et al. (2019), it reduces the reporting transparency, which increases the risk of the company's market price collapse (Kim et al., 2011). Considering the theoretical bedrock, juxtaposed against empirical

findings and nuanced by the unique fiscal dynamics in varying contexts, we propose the following hypothesis: Tax avoidance, with its intricate implications on transparency, stakeholder trust, and perceived commitment to societal welfare, is likely to be negatively correlated with the firm's value, leading to the following hypothesis:

H1. Tax avoidance *has a negative impact* on the firm's value.

2.2 | The moderating impact of ESG on the connection between tax avoidance and the firm's value

Theoretically, sustainability reporting can reduce the negative correlation between tax avoidance and the firm's value in two different manners. First, sustainability reporting indicates that since firms have a high degree of ethics and deliberate sustainability reporting, firms require a great amount of resources to generate sustainability reports (Shahab et al., 2020, 2022; Tascón et al., 2021; Wedari et al., 2022). Therefore, firms will not produce sustainability reports if they are not sure that their sustainability initiatives are remarkable (Abdelkader et al., 2024; Al Frijat et al., 2023; Liu et al., 2023; Mahran & Elamer, 2023; Noureldeen et al., 2024; Srouji et al., 2023). Moreover, the signaling theory suggests that the cost imposed by society on firms that do not report their sustainability activities in a honest way is a sufficient deterrent (Roberts, Hassan, et al., 2021; Roberts, Nandy, et al., 2021; Ullah et al., 2022). Therefore, firms that do not have high sustainability performance will be less likely to produce deliberate sustainability reports by engaging in a high level of sustainability activities. Second, sustainability reporting shows that since the firm's sustainability operations are excellent, they must be documented in the voluntary reports. Moreover, superior sustainability performance is a measure of the company's ethics (Albitar et al., 2021; Alkaraan et al., 2023; Bilal et al., 2023; Elamer & Boulhaga, 2024; Elamer & Kato, 2024; Hui et al., 2024; Moussa et al., 2022; Salem et al., 2021; Ullah et al., 2024). On the other hand, tax avoidance is an ethical concern since it affects tax income applied by governments to promote welfare. Therefore, firms get engaged in tax avoidance when voluntarily generating sustainability reports are expected to reduce the unfavorable view of their tax avoidance behaviors. In fact, as stated by Rudyanto and Pirzada (2020), this could be further explained by the fact that private enterprises are more efficient than governments in boosting welfare.

Second, studies on sustainability demonstrate that responsible actions are what reduce tax payments. Both responsible and reckless actions might lead to tax avoidance. Moreover, shareholders view tax avoidance resulting from reckless behavior as having poor company ethics (Desai & Dharmapala, 2009; Hanlon & Slemrod, 2009; Aparicio & Kim, 2022). Due to the reputational cost and tax risk that shareholders will ultimately incur, tax avoidance is by default seen adversely by shareholders (Baudot et al., 2020; Gallemore et al., 2014). However, businesses have other tools at their disposal, such as sustainability initiatives, to improve societal welfare. In fact, the shareholders will have a favorable opinion about the company's tax avoidance if they are aware that funds obtained via tax savings are utilized for sustainability initiatives. On the other hand, according to Rudyanto and Siregar (2018), sustainability reports are the most thorough type of CSR reporting. Sustainability reports, in accordance with the agency theory, reduce the information asymmetry between companies and stakeholders. In fact, companies can apply sustainability reports to let investors know that funds from tax avoidance are used for sustainability initiatives. Moreover, the shareholders' perceptions of a firm's tax avoidance may be changed by disclosing more details regarding the source of the avoidance. According to Chen et al. (2014), information openness minimizes the bad perception of tax avoidance among the shareholders. The economic theory argues that managers should employ all legal ways to avoid paying taxes (Friedman, 1970), and sustainability initiatives are worthwhile to the extent that they increase the shareholders' wealth, as stated by Hales et al. (2016). Therefore, based on the provided information, we propose the following hypothesis.

H2. ESG moderates the connection between tax avoidance and firm value.

3 | RESEARCH METHODOLOGY

3.1 | Sample selection

This study is carried out on a sample of French-listed companies belonging to the Thomson Reuters Datastream ASSET4 ESG Database over a period of 10 years, from 2012 to 2021. This database offers comprehensive ESG metrics which will further enhance the robustness of our results. The study period begins from the date of the adoption of the Grenelle II law, which entered into force in 2012. Considering the initial population, we remove financial and real estate companies; this is because of sector specificities and the accounting regime of credit institutions. Thus, the final sample is made up of 155 companies over a period of 10 years, i.e., a total of 1,550 observations. The data were extracted from the Thomson Reuter database (Datastream). Our choice to focus on French firms stems from the unique business landscape in France, which has been at the forefront of integrating ESG metrics into financial reporting. Moreover, France provides a distinctive corporate governance environment that is different from Anglo-Saxon systems, offering a unique context for our study. This can provide valuable insights for the broader European market, given the country's pioneering role in ESG integration.

3.2 | Variables measurements

3.2.1 | The dependent variable: firm value

Based on earlier research by Rudyanto and Pirzada (2020); Long et al. (2022), we use Tobin's Q as a proxy for the firm's value (Boulhaga

et al., 2022). Actually, the formula for Tobin's Q is (Market value + Preferred stock + Long-term debt)/Total assets.

3.2.2 | Measurement of the independent and control variables

Based on previous studies of Huang et al. (2016), Gavious et al. (2022), Zhou et al. (2022), we apply three metrics of the total amount of tax avoidance in accordance with earlier studies. According to Dyreng et al. (2008), Hope et al. (2013), Laguir et al. (2015), Abdelfattah and Aboud (2020), Rudyanto and Pirzada (2020), and Hasan et al. (2021), the efficient tax rate (ETR) is the first metric used to assess tax avoidance. In fact, ETR is frequently employed as a reliable substitute to detect tax avoidance in academic studies (Hoi et al., 2013; Hope et al., 2013; Laguir et al., 2015; Lanis & Richardson, 2013).

Therefore, based on earlier studies, such as those of Huseynov and Klamm (2012) and Dyreng et al. (2008), we define tax avoidance as the actions that reduce a company's taxes in relation to its pre-tax accounting income. For this reason, in order to calculate the ETR, we divided tax costs by the pre-tax income. On the other hand, as introduced by Huseynov and Klamm (2012), McGuire et al. (2012), Dyreng et al. (2008), Drake et al. (2019), and Jiang et al. (2022), to measure the second indicator, the ETR cash, we divided the cash by the pre-tax income. The third indicator examined is the book-to-tax differences (BTD), as delineated by Manzon and Plesko (2001) and Özbay et al. (2023). This metric is calculated by dividing the difference between the book value of income and taxable income by lagged total assets. It serves to highlight the discrepancy between financial income and taxable income not accounted for by structural determinants, suggesting the presence of tax shelter activities (Özbay et al., 2023).

This research uses the firm's size, profitability, leverage, liquidity, firm's age, board structure, and sustainability committee as control variables. This study used the firm's size (FSIZE) and profitability (ROA) because companies that are large in size and profitable tend to be more valued by the shareholders (Bebchuk et al., 2009). In fact, the firm's size is measured by a natural logarithm of total assets (Jiang et al., 2022), while profitability is measured by dividing the net income by the total assets (Jiang et al., 2022). Moreover, the leverage, which is measured using the total debt divided by the total assets, is used to control the tax shield because debt provides a tax shield (Hasan et al., 2021). We also included the company's age measured by the logarithm years of company establishment (Jiang et al., 2022). Liquidity (LIQDT) is measured by the ratio of current assets to current liabilities.

To control for board structure, we include a variable board size (BOA_SIZE), board independence (BOA_IND), and CEO Duality (CEO_DUAL). The sustainability committee indicates whether the CSR sustainability committee or team exists in the firm. All the data was gathered from Thomson Reuters DataStream and Eikon. A detailed explanation of all the variables is explained in Appendix 1.

3.3 | Model specification

Based on the above assumptions, this paper tests the impact of the interaction of TAX and SR on firm value as follows:

$$\begin{aligned}\text{Tobin Q}_{it} = {} & \beta_0 + \beta_1 \text{TAX}_{it} + \beta_2 \text{ESG}_{it} + \beta_3 \text{TAX}_{it} * \text{ESG}_{it} + \beta_4 \text{FSIZE}_{it} \\ & + \beta_5 \text{ROA}_{it} + \beta_6 \text{LEV}_{it} + \beta_7 \text{LIQDT}_{it} + \beta_8 \text{AGE}_{it} \\ & + \beta_9 \text{BOA\_SIZE}_{it} + \beta_{10} \text{BOA\_IND}_{it} + \beta_{11} \text{CEO\_DUAL}_{it} \\ & + \beta_{12} \text{Sust\_Com}_{it} + \beta_{13} \sum \text{Industry}_{it} + \beta_{14} \sum \text{YEAR}_{it} \\ & + \beta_{15} \sum \text{FIRM}_{it} + \varepsilon_{it} \end{aligned} \quad (1)$$

Instead, Tobin's Q measures firm value then, ETR is used to measure tax avoidance, ESG ratings are measured by ESG score. FSIZE, which corresponds to the logarithm of total assets (TA) for year t, ROA: Return on assets, where LEV is measured through the total debt/total assets ratio, whereas LIQDT is measured using the ratio of the current assets to current liabilities. Then, AGE is computed based on the number of years the firm has been in business; BOA_SIZE: the total number of directors, BOA_IND: board independence, CEO_DUAL: CEO Duality, Sust_Com: sustainability committee, $\beta 0 \rightarrow \beta 14$: constitute the parameters to be estimated; ε: Error term.

4 | RESULTS AND DISCUSSION

4.1 | Descriptive statistics

Descriptive statistics are displayed in Table 1. We winsorize all continuous variables at 1% and 99% to remove outliers. The mean value and standard deviation of Tobin's Q are nearly identical to the corresponding values; as they are 0.208 and 0.15. Its minimum and maximum values are "0.000" and "0.768", respectively. Regarding the independent variables of our sample, the average corporation tax avoidance measured by GAAP ETR is around 0.235. The findings also revealed that, on average, 53.247% of ESG information is disclosed by the firms in our sample.

4.2 | Correlation matrix

The correlation matrix between the model's tested variables is presented in Table 2 and Figure 1. It shows that Tobin's Q has a significant correlation with every other variable in the model. For example, there is a significant negative correlation between Tobin's Q and GAAP ETR, Cash ETR, BTD, ROA, LIQDT, and AGE. Nevertheless, because the correlation coefficients are less than 0.8 among independent and control variables,[1] the strength of these relationships is not considered excessive. On the other hand, the Variation

[1]Given the relatively substantial correlation observed among Lev and TobinQ, ESG and FSize, as well as BOA_SIZE and FSIZE, we introduce a new suite of orthogonal variables through the application of a modified Gram-Schmidt process (Golub & Van Loan, 2013).

TABLE 1 Descriptive statistics

Variables	N	Average	Standard deviation	Minimum	Maximum
Tobin Q	1,550	0.208	0.150	0.000	0.768
GAAP ETR	1,550	0.235	0.539	−3.962	8.220
Cash ETR	1,550	0.193	0.819	−7.540	8.623
BTD	1,550	0.754	0.494	0.028	3.790
ESG	1,550	53.247	22.997	3.540	91.660
FSIZE	1,550	14.985	2.036	8.542	19.351
ROA	1,550	0.030	0.092	−0.498	0.498
LEV	1,550	0.275	0.170	0	0.835
LIQDT	1,550	1.492	0.894	0	9.224
AGE	1,550	3.810	0.894	0	5.631
BOA_SIZE	1,550	11.154	3.885	3	23
BOA_IND	1,550	46.868	20.026	0	100
CEO_DUAL	1,550	0.454	0.498	0	1
Sust_Com	1,550	0.562	0.496	0	1

Inflation Factor (VIF), which is the measure of the percentage of the variance of each independent variable and which is explained by all the other variables, was used to perform a multi-co-linearity diagnostic using STATA to further prove the absence of multicollinearity. Consequently, we infer from Table 2 that the VIF is not more than 10.

4.3 | Multivariate analyses

The outcomes of the OLS regression are displayed in Model 1 of Table 3. The estimate results demonstrate that the model has a considerable and explanatory power ($R^2 = 0.82$) and adjusted $R^2 = 0.80$. Table 3 shows the OLS regression's findings that examine the relationships among tax avoidance, ESG, and firm value. Upon analyzing the data, our findings are summarized as follows.

The analysis, as presented in Model 1 of Table 3, suggests that there is a significant negative relationship between tax avoidance and firm value. Specifically, our regression results did provide substantial evidence to support the hypothesis that tax avoidance plays a decisive role in influencing the firm's value. Thus, we do accept Hypothesis 1. This is in line with what Hope et al. (2013), Donohoe and Robert Knechel (2014), and Balakrishnan et al. (2019), as they demonstrate that shareholders do react negatively to a company's tax avoidance while the sustainability report from prior years favorably responds to it when tax is actually paid. Corporate income tax is one mechanism used to reconcile firms' private interest with the public good (welfare) (Wegener & Labelle, 2017). By paying income tax, firms are contributing to welfare by reallocating part of their wealth to be managed by the government to increase social welfare. Avoiding income tax payments will reduce a firms' contribution to social welfare. Thus, tax avoidance is considered to be a violation of business ethics. Our analysis indicates a positive and significant relationship between ESG and firm value. This suggests that firms with higher ESG scores or better sustainability practices are associated with higher firm valuations. This finding aligns with the current emphasis on sustainable business practices and the increasing demand from stakeholders for businesses to adopt environmentally friendly and socially responsible practices.

According to the second hypothesis, ESG affects the link between TAX and the firm's value. In fact, the regression results in Model 2 of Table 3 show that the interaction between TAX and ESG appears to have a negative effect on firm value, which is consistent with our hypothesis H2, according to which the coefficient of the TAX * ESG variable is negative (−0.001) and significant at less than the 0.1% significance level. This suggests that the positive impact of ESG on firm value is lessened when considered in conjunction with the firm's tax strategies. The negative coefficient for the interaction term implies that while ESG initiatives generally enhance firm value, this benefit is somewhat mitigated when the firm also engages in practices leading to higher tax avoidance. The interaction term's significance underscores the complexity of the relationship between tax strategies, ESG, and their combined effect on firm value. Furthermore, the findings revealed that the shareholders are more concerned with paid cash tax and their impact on profitability than with tax costs. Environmentally, conscious businesses have strong sustainability activities and are close to the stakeholders hence, tax avoidance is thought to arise from sustainability expenses. They also do not require sustainability reports to improve the public awareness. Moreover, the results show that the shareholders pay more attention to paid cash tax and their impact on the earnings rather than on the tax expenses. Conversely, non-sensitive firms have not been able to demonstrate their sustainability activities without making a sustainability report as the latter mitigates the negative relationship between tax avoidance and the firm's value.[2]

[2]We conducted additional robustness checks excluding observations with negative ETRs to determine the potential impact on our main results. Our results remain qualitatively similar.

TABLE 2 Pearson's correlation.

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
(1) TobinsQ	1.00													
(2) GAAP ETR	−0.076***	1.00												
(3) cash ETR	−0.048*	0.197***	1.00											
(4) BTD	−0.321***	0.101***	0.096***	1.00										
(5) ESG	0.183***	0.01	0.061**	−0.212***	1.00									
(6) FSIZE	0.071***	0.114***	−0.00	−0.057**	0.00	1.00								
(7) ROA	−0.083***	0.090***	0.063**	0.127***	0.147***	0.176***	1.00							
(8) LEV	0.00	−0.04	−0.04	0.01	−0.01	0.093***	−0.143***	1.00						
(9) LIQDT	−0.193***	−0.03	−0.063**	−0.094***	−0.300***	−0.254***	−0.158***	−0.342***	1.00					
(10) AGE	−0.125***	0.088***	−0.00	0.082***	0.251***	0.189***	0.240***	−0.058**	−0.02	1.00				
(11) BOA_SIZE	0.098***	0.056**	0.03	−0.178***	0.502***	0.383***	0.050**	0.103***	−0.221***	0.131***	1.00			
(12) BOA_IND	0.203***	−0.04	−0.01	−0.062**	0.426***	0.00	0.01	−0.051**	−0.068***	0.090***	0.147***	1.00		
(13) CEO_DUAL	0.095***	0.054**	0.04	−0.108***	0.347***	0.302***	0.126***	−0.063**	−0.140***	0.128***	0.351***	0.130***	1.00	
(14) Sust_Com	0.177***	0.04	0.03	−0.215***	0.617***	0.218***	0.131***	−0.02	−0.216***	0.144***	0.473***	0.280***	0.564***	1.00

Note: *, **, *** significant relationship at 10%, 5%, and 1% threshold.

As a result, corporations that engage in tax avoidance prefer to enhance sustainability disclosure in order to foster a favorable perception of ethical behavior and improve their public and media reputation. On the other hand, the signaling hypothesis maintains that a signal can be delivered by only enterprises that are better at separating themselves from other firms (Spence, 2002). Furthermore, because companies must forfeit resources to submit voluntary filings, voluntary reporting is limited to a subset of enterprises (Arniati et al., 2019). As a result, signals may be provided only through voluntary reporting (Francis et al., 2008). In fact, companies that practice appropriate tax management are concerned with societal welfare (Hardeck & Hertl, 2014). As a result, stockholders refrain from acting irresponsibly in ways that might reduce social welfare. Therefore, companies must provide a sustainability report to communicate to shareholders that corporate tax avoidance results from ethical behavior. Moreover, the sustainability actions of a company are detailed in sustainability reporting then, the sustainability initiatives show how much business cares about societal wellbeing. In fact, sustainability initiatives are actions taken by businesses to demonstrate their accountability for the effects of their choices and actions on society and the environment, which can improve social welfare (ISO, 2010). As opposed to that, even while sustainability initiatives may improve societal welfare, not all of them are viewed favorably by investors. According to Hendarto and Purwanto (2012), businesses still do not comprehend sustainability as they see it as a waste of money-making resources. Companies report sustainability activities more specifically as a small portion of their philanthropic activities because they are required to make sustainability activities and report them. Therefore, companies that understand sustainability and go above and beyond philanthropic sustainability activities will be viewed more favorably by the shareholders.

In conclusion, our findings suggest that investors reward firms for good ESG performance, perceiving such companies as more valuable. However, when these firms engage in higher tax liabilities, the positive effect of ESG on firm value is slightly reduced. This nuanced insight highlights the importance of considering how tax strategies interact with ESG initiatives in shaping overall firm value. For managers, this underscores the need to carefully balance tax planning with ESG commitments to optimize firm value. For scholars, the results call for further exploration into how ESG and tax strategies intersect and their joint implications for firm valuation. Companies that focus on improving their ESG practices might not only enhance their direct valuation but may also be better positioned to navigate the complexities and perceptions surrounding tax practices.

4.4 | Additional analyses

4.4.1 | Two-stage dynamic panel data estimator (GMM)

In this study, we investigate how the firm value is influenced by varying levels of ESG practices and tax avoidance strategies. Due to

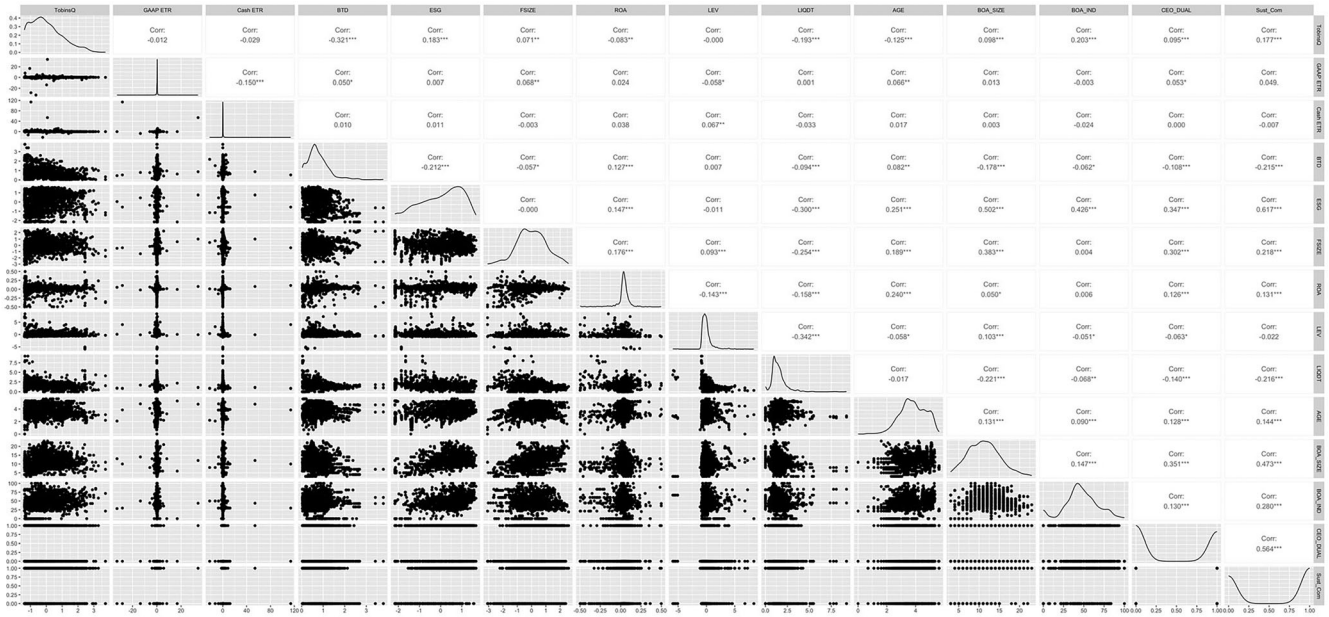

FIGURE 1 Plotting and Pearson correlation matrix for the variables tested by the study model. Note: *, **, *** significant relationship at 10%, 5%, and 1% threshold

concerns regarding endogeneity, we examine if firms with robust ESG scores and tax avoidance practices maintain higher firm value. In fact, we apply the GMM technique, which provides answers to the issues of reverse causality, simultaneity bias, and the omitted potential variables to ensure the robustness of our empirical conclusions. Moreover, it makes it possible to eliminate endogeneity biases and regulate some temporal and individual impacts. The system GMM regression results are presented in Table 4 below following the approach of Arellano and Bover (1995) and Blundell and Bond (1998). Our methodological approach relies on leveraging the first lag difference of firm characteristics as instruments in the levels equation and the second lag of firm characteristics as instruments in the difference equation. This strategy entails treating all firm-specific variables as endogenous predictors. This ensures a robust analytical framework that accounts for potential endogeneity and offers a more accurate representation of the relationships under study.

Model 2 of Table 4 displays that the coefficient on TAX*ESG is negative and statistically significant at the 1% level ($\beta = -0.001$, $t = -1.69$). This outcome suggests that our findings hold even when accounting for potential endogeneity concerns. Moreover, the Hansen J test for over-identified restrictions is implemented to evaluate the validity of our instruments. The subsequent outcomes affirm the reliability and appropriateness of the instruments, as evidenced by the p-values of AR(2) and a reduced number of instruments relative to the number of groups, in line with Roodman (2009). The consolidated GMM findings reinforce our preliminary conclusions, underscoring the robust negative impact of ESG practices on tax avoidance-firm value relationship. Overall, our results remain the same after addressing the omitted variable and reverse causality issues.

4.4.2 | Two-stage least-squares regression (2SLS)

To ascertain the stability of our findings, we undertook an additional analysis using the two-stage least squares (2SLS) regression, aligning with the methodologies previously applied to existing research (Abdelfattah & Aboud, 2020; Shahab et al., 2020, 2022; Roberts, Hassan, et al., 2021; Roberts, Nandy, et al., 2021; Ullah et al., 2022). This approach involved the careful selection of instrumental variables that hold a significant relationship with our independent variable, ESG, yet remain unassociated with the outcome variable. Specifically, we opted for the industry average of ESG scores and the lagged values of control variables as our instruments. The outcomes of this 2SLS analysis, presented comprehensively in Table 5, corroborate our main results, reinforcing the robustness of our conclusions. Furthermore, the efficacy of our chosen instrumental variable is underscored by a Wald F statistic of 17.68, surpassing the commonly accepted benchmark of 10. This indicates not only the instrumental variable's relevance but also its potent influence on ESG, thereby affirming the validity of our analytical approach and the credibility of the supporting evidence for our hypotheses.

4.4.3 | Alternative measures of tax avoidance

To ensure the robustness of our baseline results, we measure the GAAP effective tax rate (GETR) as an alternative measure of tax avoidance. Models 3 and 4 of Tables 3 and 4 report the test results. For example, Model 2 of Table 3 displays that the coefficient on TAX*ESG is negative and statistically significant at the 1% level ($\beta = -0.001$, $t = -3.98$), demonstrating that our results are robust

TABLE 3 Results of the OLS regression

	Cash effective tax rate (*CETR*)		GAAP effective tax rate (*GETR*)		Book-to-tax differences (BTD)	
Variables	**(1)**	**(2)**	**(3)**	**(4)**	**(5)**	**(6)**
TAX	−0.036**	−0.032*	−0.028	0.003	−0.527***	−0.273**
	(−2.26)	(−1.65)	(−1.58)	(0.11)	(−5.23)	(−1.97)
ESG		0.021***		0.022***		0.021***
		(5.51)		(5.67)		(4.86)
ESG*TAX		−0.001***		−0.002***		−0.005*
		(−3.98)		(−2.68)		(−1.70)
FSIZE	0.169***	0.457***	0.174***	0.464***	0.139***	0.375***
	(3.96)	(6.48)	(4.10)	(6.58)	(3.31)	(5.36)
ROA	−1.200***	−1.193***	−1.225***	−1.203***	−1.141***	−1.131***
	(−3.98)	(−4.07)	(−4.04)	(−4.11)	(−3.80)	(−3.84)
LEV	−0.145***	−0.154***	−0.145***	−0.154***	−0.148***	−0.157***
	(−3.93)	(−4.25)	(−3.93)	(−4.22)	(−3.85)	(−4.17)
LIQDT	−0.048	−0.066	−0.048	−0.067	−0.070	−0.080
	(−0.87)	(−1.23)	(−0.89)	(−1.24)	(−1.27)	(−1.47)
ln_Age	0.251	0.101	0.250	0.094	0.310*	0.174
	(1.51)	(0.59)	(1.50)	(0.54)	(1.84)	(1.00)
BOA_SIZE	0.023**	0.010	0.023**	0.010	0.019**	0.008
	(2.31)	(0.98)	(2.33)	(1.02)	(1.98)	(0.87)
BOA_IND	−0.006***	−0.007***	−0.006***	−0.007***	−0.006***	−0.006***
	(−3.35)	(−3.89)	(−3.23)	(−3.82)	(−3.33)	(−3.66)
CEO_DUAL	0.010	0.034	0.008	0.036	0.031	0.059
	(0.22)	(0.79)	(0.18)	(0.84)	(0.72)	(1.36)
Sust_Com	0.003	−0.023	0.004	−0.025	−0.020	−0.036
	(0.06)	(−0.47)	(0.08)	(−0.50)	(−0.41)	(−0.75)
_cons	−0.826	−0.393***	−0.835	−1.184*	−0.591	−1.040
	(−1.28)	(−2.71)	(−1.29)	(−1.80)	(−0.90)	(−1.58)
Firm	Controlled	Controlled	Controlled	Controlled	Controlled	Controlled
Industry	Controlled	Controlled	Controlled	Controlled	Controlled	Controlled
Year	Controlled	Controlled	Controlled	Controlled	Controlled	Controlled
N	1,550	1,550	1,550	1,550	1,550	1,550
R-sq	0.82	0.82	0.82	0.83	0.82	0.83
Adj. R-sq	0.80	0.80	0.80	0.80	0.80	0.81

Note: *, **, *** significant relationship at 10%, 5%, and 1% threshold.

using alternative tax avoidance measures. Also, we employ a third indicator for tax avoidance, which is the book-to-tax differences (BTD). Models 5 and 6 of Tables 3 and 4 report the test results. In general, both models qualitatively support our main results and hypotheses.

When sustainability reporting becomes a mandatory requirement, there are a few potential outcomes: (i) as all firms will be mandated to disclose their sustainability efforts, shareholders and analysts may be able to more easily discern between genuine sustainability efforts and those used as greenwashing for tax avoidance. This could lead to increased scrutiny of companies that previously benefited from voluntary disclosures, (ii) mandatory sustainability reporting can lead to enhanced transparency, making it harder for firms to engage in both tax avoidance and superficial sustainability activities simultaneously. Genuine efforts will be rewarded, while mere compliance without substantive action may be penalized by the market, (iii) shareholders may begin to draw clearer lines between sustainability efforts and financial activities like tax planning. If a company's sustainability initiatives are robust and create tangible societal value, shareholders might be more accepting of certain tax strategies, viewing them as necessary for financing those initiatives. Conversely, superficial efforts may be seen more skeptically, with tax avoidance

TABLE 4 The impact of TAX and ESG on firm value using GMM

	Cash effective tax rate (*CETR*) regression		GAAP effective tax rate (*GETR*) regression		Book-to-tax differences (BTD)	
Variables	**(1)**	**(2)**	**(3)**	**(4)**	**(5)**	**(6)**
L.TBQ	0.742***	0.742***	0.742***	0.751***	0.733***	0.728***
	(132.32)	(126.53)	(132.86)	(158.74)	(148.68)	(118.12)
TAX	−0.142***	−0.132***	−0.121***	−0.012	−0.109***	−0.401***
	(−25.63)	(−8.22)	(−13.68)	(−0.91)	(−9.20)	(−6.21)
ESG		0.003***		0.001***		0.002*
		(5.48)		(2.78)		(1.73)
TAX*ESG		−0.001*		−0.002***		−0.011***
		(−1.69)		(−10.00)		(−9.55)
FSIZE	−0.038***	−0.067***	−0.040***	−0.045***	−0.060***	−0.100***
	(−4.26)	(−8.23)	(−6.48)	(−5.95)	(−7.29)	(−11.40)
ROA	−1.493***	−1.446***	−1.419***	−1.385***	−1.424***	−1.656***
	(−28.50)	(−27.00)	(−37.25)	(−32.51)	(−26.80)	(−24.45)
LEV	−0.149***	−0.161***	−0.145***	−0.137***	−0.145***	−0.215***
	(−26.15)	(−27.88)	(−20.10)	(−19.61)	(−25.05)	(−29.48)
LIQDT	−0.195***	−0.228***	−0.192***	−0.200***	−0.187***	−0.243***
	(−36.22)	(−24.14)	(−17.77)	(−22.16)	(−16.15)	(−13.84)
ln_Age	0.026***	0.054***	0.020***	0.025***	0.039***	0.005
	(4.54)	(4.42)	(3.99)	(2.76)	(5.90)	(0.24)
BOA_SIZE	0.008***	0.013***	0.008***	0.009***	0.007***	0.013***
	(7.74)	(7.45)	(3.98)	(4.81)	(4.21)	(6.77)
BOA_IND	0.003***	0.004***	0.004***	0.004***	0.004***	0.005***
	(9.94)	(10.79)	(18.90)	(15.89)	(11.64)	(15.38)
CEO_DUAL	0.049***	0.015*	0.056***	0.045***	0.072***	−0.004
	(5.52)	(1.67)	(3.98)	(4.31)	(5.28)	(−0.64)
Sust_Com	0.048***	0.088***	0.036***	0.060***	0.011	0.141***
	(6.12)	(7.75)	(2.69)	(5.33)	(1.32)	(11.76)
Industry	Controlled	Controlled	Controlled	Controlled	Controlled	Controlled
Year	Controlled	Controlled	Controlled	Controlled	Controlled	Controlled
N	1,395	1,395	1,395	1,395	1,395	1,395

Note: This table reports the GMM results. We include the one-year lagged values of Tobin's Q as independent variable (L.TBQ), and lagged values of control variables as instruments. All the other variables are described in Appendix 1. *, **, *** significant relationship at 10%, 5%, and 1% threshold, respectively.

becoming a major concern, (iv) with the standardization of sustainability reporting, firms might find it less beneficial to use ESG activities as a strategic tool to mask tax avoidance. Instead, they might redirect their efforts towards genuine sustainability activities or adopt less aggressive tax strategies. To summarize, the soon-to-be-required sustainability reporting will bring about a paradigm shift in how corporate strategies, particularly around tax avoidance and sustainability initiatives, are perceived by shareholders. This will likely lead to an evolution in corporate behaviors and shareholder expectations. We recommend firms to be proactive in aligning their tax and sustainability strategies to meet the changing landscape and to anticipate increased scrutiny.

Our findings have substantial policy implications for policymakers and users because they relate sustainability transparency, to tax and the firm's value. Therefore, we present empirical evidence for the relevance of sustainability indices, such as the environmental, social, and governance Index (ESG Index), in persuading corporations to increase openness and disclosure, hence, increasing the company's value. As a result, it is clear how government initiatives to promote ESG publicly benefit traded corporations. Furthermore, our findings indicate that corporate taxation and sustainability policies are connected in the sense that corporations seek to cover up their tax avoidance tactics by boosting sustainability disclosure. Being socially conscious, investors should take care as sustainability disclosure may have a detrimental impact on a company's ability to pay taxes. Therefore, in order to safeguard stakeholders and satisfy public expectations, the global reporting initiative (GRI) and the Sustainability reporting guidelines should be expanded to include corporate tax responsibilities.

TABLE 5 The impact of TAX and ESG on firm value using 2SLS

Variables	Cash effective tax rate (*CETR*) regression (1)	GAAP effective tax rate (*GETR*) regression (2)	Book-to-tax differences (BTD) regression (3)
TAX	−0.010***	−0.009	−1.708***
	(−5.25)	(−0.23)	(−2.90)
ESG	0.022***	0.124***	0.155***
	(5.58)	(4.52)	(4.36)
TAX*ESG	−0.001*	−0.002**	−0.044***
	(−1.68)	(−2.15)	(−3.81)
FSIZE	0.459***	1.828***	1.808***
	(6.53)	(4.84)	(4.59)
ROA	−1.172***	−1.144***	−1.034***
	(−4.00)	(−3.28)	(−2.74)
LEV	−0.147***	−0.198***	−0.218***
	(−3.98)	(−4.94)	(−4.99)
LIQDT	−0.064	−0.156**	−0.140**
	(−1.19)	(−2.41)	(−2.15)
ln_Age	0.105	−0.608**	−0.669**
	(0.60)	(−2.10)	(−2.07)
BOA_SIZE	0.010	−0.053**	−0.057**
	(0.97)	(−2.40)	(−2.43)
BOA_IND	−0.007***	−0.011***	−0.009***
	(−3.84)	(−4.10)	(−3.32)
CEO_DUAL	0.034	0.153**	0.261***
	(0.78)	(2.26)	(3.11)
Sust_Com	−0.023	−0.150*	−0.130*
	(−0.45)	(−1.96)	(−1.74)
Industry	Controlled	Controlled	Controlled
Year	Controlled	Controlled	Controlled
N	1,550	1,550	1,550

Note: This table reports the 2SLS results. We include average ESG per year and industry and lagged values of control variables as instruments. All the other variables are described in Appendix 1. *, **, *** significant relationship at 10%, 5%, and 1% threshold, respectively.

5 | CONCLUSION

This study aims to demonstrate the moderating role of ESG in the relation between tax avoidance and the firm's value. Therefore, using a sample of French firms during the 2012–2021 period, we found that tax avoidance has a negative association with the firm's value. Also, the results show that the ESG rating negatively and significantly moderates the relationship between corporate tax avoidance and firm market valuation. Overall, our results suggest that the positive effect of ESG on firm value diminishes when combined with tax avoidance, implying that tax avoidance firms tend to use ESG activities as an orchestrating instrument to mask their tax avoidance practices. In fact, these results support both the agency and the signaling theories. Voluntary sustainability reporting can reduce information asymmetry about sustainability information and signal to shareholders that tax saving is used to finance sustainability-related activities.

This research contributes to the literature in various ways. First, to the best of our knowledge, this paper is the first to show the dynamic forms of sustainability activities and tax avoidance in improving firm value in order to show how self-interested managers use sustainability performance in coordination with and to mask their tax avoidance practices. Previous research Hanlon and Slemrod (2009), Rudyanto and Pirzada (2020) has demonstrated that tax avoidance has a weak association with firm value. This study, secondly, contributes to this stream of literature, by demonstrating that ESG moderates the link between tax avoidance and firm value where our conclusion holds after adjusting for the firm-level factors and unobserved time-invariant heterogeneity. Third, our study contributes to the literature on the view of investors to tax avoidance. The existing research provides equivocal results on the relationship between tax avoidance and firm value. For example, Desai and Dharmapala (2009) demonstrated that tax avoidance enhances the firm's value only for well-governed

enterprises, whereas Brooks et al. (2016) discovered no relation between tax avoidance and the firm's value. Our findings extend this strand of literature by offering evidence that equity market valuation of firms' tax avoidance behavior is situation-specific, and may differ based on firm behaviors that may clearly benefit non-owner stakeholders. Our research lastly navigates the nexus between tax avoidance, ESG, and firm value—a confluence under-represented in extant literature—while grounding its findings within established theoretical paradigms such as signaling theory and stakeholder theory. By doing so, we proffer a nuanced understanding of how tax strategies, under the aegis of broader ESG metrics, influence firm value. This intersectional analysis contributes to management literature by offering a multi-faceted view of corporate financial strategies in the backdrop of evolving stakeholder demands and ethical considerations. Our findings challenge some prevalent narratives while corroborating others, thereby enriching the tapestry of discourse on the subject. Furthermore, by emphasizing the modulating role of ESG practices in the tax avoidance-firm value relationship, we spotlight the growing importance of ethical governance in shaping the financial trajectories of firms. This research, therefore, does not just shed light on an understudied domain but also sets the stage for further inquiries into the ethical dimensions of corporate financial strategies in a stakeholder-centric business environment.

Our findings have useful implications. Companies must limit aggressive tax planning as shareholders pay more attention to GAAP tax avoidance, which reduces tax costs. In fact, businesses in non-sensitive industries are required to prepare sustainability reports to advise shareholders that lower tax expenditures are a consequence of the sustainability efforts if tax expenses fall as a result of sustainability operations. Actually, sustainability reports help reduce the bad image of tax avoidance among the shareholders. Although it is true that sustainability reporting will soon be required, it is unclear how this would affect the shareholders' concerns about tax avoidance. As a result, companies that are not environmentally conscious should find other ways to demonstrate their care for sustainability concerns (Kolk & Perego, 2010; Alon & Vidovic, 2015). Businesses may improve the quality of their sustainability reporting, particularly by releasing additional details about their sustainability initiatives or, as suggested by Ching et al. (2017) and Rudyanto and Siregar (2018), by getting assurance for their sustainability. Consequently, future research studies are required to examine the impact of the sustainability report quality on the inverse relationship between tax avoidance and the company's value. Also, future studies might examine whether governance structure such as board structure and the presence of a sustainability committee is significant. Our findings show that regulatory bodies should take into consideration incorporating the disclosure of ESG in the financial statements particularly because of their implications for firm-level outcomes.

While our findings contribute significantly to the understanding of the interplay between ESG performance, tax avoidance strategies, and firm value, particularly within the unique context of French corporations, they are not without limitations. Notably, our study's focus on a single national context may limit the generalizability of our results to firms operating under different regulatory, cultural, and economic conditions. Additionally, our reliance on publicly available ESG and tax avoidance measures may not fully capture the nuanced strategies firms employ or the evolving standards of sustainability reporting. Moreover, while we have employed robust statistical methods to mitigate potential endogeneity, the complexity of the relationships examined suggests caution in interpreting causality. Future research might explore these dynamics in broader geographical settings, employing longitudinal designs to capture the evolving nature of these relationships and considering alternative measures that may offer deeper insights into the strategic interplay between ESG and tax planning strategies.

CONFLICT OF INTEREST STATEMENT

The authors declared no potential conflicts of interest.

DATA AVAILABILITY STATEMENT

Data available on request from the authors.

ETHICS STATEMENT

This article does not contain any studies with human participants or animals performed by any of the authors.

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APPENDIX 1: VARIABLE DEFINITIONS, MEASUREMENT, AND DATA SOURCE A

Variables	Measurement	Sources
Dependent variables:		
Tobin's Q	(market value + preferred stock + Long-term debt)/Total assets	Thomson Reuters database (Datastream)
Independent variables:		
Cash effective tax rate (CETR)	Cash income taxes paid divided by pre-tax book income	Thomson Reuters database (Datastream)
GAAP effective tax rate (GETR)	Income tax divided by pre-tax income.	Thomson Reuters database (Datastream)
Book-to-tax differences (BTD)	The difference between the book value of income and taxable income divided by lagged total assets	Thomson Reuters database (Datastream)
Moderating variable:		
Environmental, social and governance score (ESG)	ESG score retrieved from Thomson Reuters ASSET4 ESG.	Thomson Reuters ASSET4 ESG database.
Control variables:		
Firm size (FSIZE)	Natural logarithm of total assets	Thomson Reuters database (Datastream)
Return on assets (ROA)	Net income deflated by the total assets	Thomson Reuters database (Datastream)
Leverage (LEV)	Total debt divided by the total assets	Thomson Reuters database (Datastream)
Growth (GROWTH)	Change in the total revenue deflated by the total revenue	Thomson Reuters database (Datastream)
Liquidity (LIQDT)	Current assets to current liabilities	Thomson Reuters database (Datastream)
Age (AGE)	Natural logarithm years of company establishment	Company's website
Board Size (BOA_SIZE)	Total number of directors on the board.	Thomson Reuters database (Datastream)
Board independence (BOA_IND)	Percentage of independent directors on the Board of Directors.	Thomson Reuters database (Datastream)
CEO duality (CEO_DUAL)	An indicator variable coded as one if the chair and CEO are the same person, and zero otherwise.	Thomson Reuters database (Datastream)
Sustainability committee (Sust_Com)	Indicating whether the CSR or sustainability committee or team exist in the company.	Thomson Reuters ASSET4 ESG database.