

Article

Changes in Tax Strategies Due to Corporate Sustainability: Focusing on the Disclosure of Investment Alert Issues

Yoojin Shin  and Boram Choi *

Division of Business, Chosun University, Gwangju 61452, Republic of Korea; yoojinshin@chosun.ac.kr

* Correspondence: brchoi@chosun.ac.kr; Tel.: +82-62-230-6822

Abstract: Delisting events in the stock market significantly impact capital market participants. In South Korea's KOSDAQ, an investment alert system signals a firm's delisting in advance. The system provides warnings to investors in the pre-delisting stage. This paper analyzes whether a firm's tax avoidance strategy changes depending on investment alert issues, which serves as a measure to identify risks related to corporate sustainability in advance. This study conducted an empirical analysis using an OLS model, with tax avoidance as the dependent variable and the variable related to the investment alert issue as the variable of interest. Analysis of 4964 firm-year data from 2011 to 2020 revealed that firms with investor alert issues exhibited significant increases in tax avoidance behaviors. Additionally, tax avoidance significantly increased when firms were designated as investment alert issues in the designated year. These results provide empirical evidence that such designations may pose a risk to corporate sustainability and intensify a firm's tax avoidance behavior.

Keywords: corporate sustainability; tax strategy; investment alert issue



Citation: Shin, Y.; Choi, B. Changes in Tax Strategies Due to Corporate Sustainability: Focusing on the Disclosure of Investment Alert Issues. *Sustainability* **2024**, *16*, 8064. <https://doi.org/10.3390/su16188064>

Academic Editor: Wen-Hsien Tsai

Received: 12 August 2024

Revised: 7 September 2024

Accepted: 8 September 2024

Published: 14 September 2024



Copyright: © 2024 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<https://creativecommons.org/licenses/by/4.0/>).

1. Introduction

The South Korean stock market comprises the KOSPI (Korea Composite Stock Price Index), KOSDAQ (Korea Securities Dealers Automated Quotation), and KONEX (Korea New Exchange) indices. Of these, the KOSDAQ introduced a system in 2011 that designates investment alert issues. This regulation identifies KOSDAQ-listed firms that are likely to be insolvent and provides the market with information on negative signals regarding these firms. The system for designating firms as investment alert issues serves as a measure to identify risks related to corporate sustainability.

This study analyzes whether a firm's tax avoidance strategy changes in response to being flagged for investment alert issues. The aforementioned system also acts as a delisting moratorium, warning investors regarding potential risks and providing listed firms with time to resolve issues that could result in delisting. Therefore, a firm flagged for investment alert issues is likely to face significant risks. If the risk is high, managers are more likely to be myopic in making short-term rather than long-term decisions, which may increase tax avoidance.

Among the various types of investors in the capital market in South Korea, individual investors account for a significant proportion. Most investors have limited access to both internal and external firm information. However, retail investors are exposed to significant investment risk because they have access to less information compared to institutional investors. Therefore, regulators operate various disclosure systems to protect investors, especially retail investors. Disclosure items related to a firm's delisting are most important for investors because they constitute the highest investment risk for shareholders. Therefore, investors have a high demand for ex ante information related to delisting, and regulators have implemented various systems to provide relevant signals. In South Korea, investors are provided with pre-delisting warnings through the designation of firms as investment alert issues and administrative issues. In other words, if delisting signifies a red card, an investment alert or administrative issue can be considered a yellow card.

Delisting occurs when a company's sustainability is extremely low. It is not a sudden phenomenon; firms generally show signs of potential delisting, such as over-investment or financial distress owing to deteriorating profitability. Choi et al. [1] analyzed the relationship between delisting and over-investment and reported that the higher the over-investment, the higher the probability of delisting. Shin and Park [2] analyzed whether tax avoidance increases among delisted firms. Specifically, they expected that an increase in the likelihood of delisting would not only reduce the firm's sustainability but also increase its financial risk, possibly deteriorating its financial position, which, in turn, would increase the incentive for tax avoidance. The results show that the cash effective tax rate and effective tax rate were significantly lower, and the tax risk was significantly higher for delisted firms. Therefore, they interpreted tax strategies as related to corporate sustainability.

In South Korea, the investment alert and administrative issue systems warn investors regarding delisting risks. The system for administrative issues acts as a delisting moratorium that warns investors regarding their investments and provides listed firms with time to resolve the causes of delisting. Therefore, a firm flagged for administrative issues is likely to have significant risks. In other words, the disclosure of investment alert issues serves to inform the possibility of delisting before it is decided. Therefore, when a firm's publicly traded stocks are designated as investment alert issues, it provides an advantage for investors to recognize signs of distress in advance.

This study identified the tax strategies of companies with such designations by focusing on investment alerts. In 2023, 26 firms in South Korea were designated as investment alert issues, primarily because of the inadequacy of internal accounting control systems. Thus, investment alert issues could be interpreted as a warning to investors that risks may arise because of problems related to a firm's internal accounting control system and that regulators are observing these signals.

Internal accounting controls are part of an internal control system designed and operated to provide reasonable assurance regarding whether a firm's financial statements are prepared or disclosed in accordance with generally accepted accounting principles. Additionally, it refers to the process whereby internal controls are implemented on an ongoing basis by all members of the organization, including the firm's board of directors and management. Firms report this information via an operational report on the internal accounting control system in their business reports; however, the effectiveness of these internal controls remains unclear. Accordingly, previous studies have examined the operational adequacy of internal accounting control systems based on the presence of internal accounting control regulations, status of management and operation personnel [3,4], and appointment of an auditor (committee). However, the quality of the employee in charge of internal accounting management system and the appointment of an auditor (committee) are not direct assessment measures of the internal accounting control system, whereas the investment alert issue is a direct assessment measure.

As corporate sustainability is negatively correlated with the likelihood of delisting, an investment alert issuance system provides investors with crucial capital market information. However, limited research exists on investment alert issues. Thus, this study aimed to analyze the relationship between corporate sustainability and tax avoidance by considering the investment alert issue as a measure that links the internal accounting control system to delisting risk (for the firm) and investment risk (for investors).

A firm flagged for investment alert issues is likely to have existing financial constraints that can act as an incentive for tax avoidance. Managers of firms with financial risk and poor internal controls are more likely to engage in tax avoidance to demonstrate visible business performance. This increase in tax avoidance elevates a firm's risk.

Tax avoidance does not have a generally accepted definition, and its interpretation varies depending on one's research purpose. Within the realm of reducing tax burden, legal methods—known as tax planning and tax evasion—exist. Specifically, tax planning refers to acts of minimizing taxes within the legal boundaries defined by tax laws, including deductions and exemptions. Conceptually, tax avoidance is defined as the act of reducing

taxes in a manner inconsistent with the intentions of tax laws but still within legal provisions. However, even if it is an act of mediation within the scope of compliance with the provisions of the law, adjustment can create discretionary tax risks by itself. In contrast to tax evasion, which involves violations of regulations, tax avoidance focuses on minimizing taxes within the specified legal boundaries.

The legal literature makes a distinction between tax evasion and tax planning. However, in the context of tax accounting research, the term “tax avoidance” is specifically employed to denote the economic practice of reducing the amount of taxes paid. In this study, we adopt the definition of tax avoidance used by Dyreng et al. [5], which refers to “explicit tax reduction”. Tax avoidance reduces the transparency of financial reporting and increases information asymmetry. Dhawan et al. [6] directly tested the impact of tax avoidance on a firm’s bankruptcy risk and reported that the higher the level of tax avoidance, the higher the bankruptcy risk. Information asymmetry and increased risk of tax avoidance could adversely impact corporate sustainability [2,6]. Thus, if an investment alert issue owing to a problem with an internal accounting control system leads to tax avoidance, it can precipitate bad impacts on a firm’s financial position.

Tax avoidance can also exacerbate uncertainty regarding future tax expenditures [7], which can impact future cash flows. Managers may use the cash reserves generated through tax avoidance to avert short-term crises [8]. In other words, managers are more likely to make short-term rather than long-term decisions to lift investment alert issue designations, which may increase the risk of delisting. Therefore, this study analyzes whether a firm’s tax avoidance strategy changes in response to being flagged for investment alert issues.

Studies on the designation of investment alert issues mainly focus on market reactions [9,10] but have not examined the relationship between firms with sustainability risks and their tax strategies. This study differs from the previous research by directly verifying the relationship between the designation of investment alert issues and corporate tax strategy.

The remainder of the paper is organized as follows: Section 2 reviews previous research and examines the research hypotheses. Section 3 describes the research model. Section 4 presents the results of the empirical analysis. Section 5 presents this study’s conclusions and limitations. Section 6 presents discussion about this study.

2. Prior Research Review and Hypotheses

2.1. Prior Research

The Korea Exchange (KRX) introduced the investment alert system in 2011. It ensures the designation and announcement of firms on the KOSDAQ market whose continuity and management transparency require investors’ attention.

The South Korean stock market comprises the KOSPI, KOSDAQ, and KONEX indices. The KOSDAQ, which has served as a direct funding window for small- and medium-sized enterprises (SMEs) and venture companies, designates investment alert issues by identifying listed firms likely to become insolvent, thereby drawing investor attention and releasing negative firm-specific signals to the market.

A firm flagged for investment alert issues is subject to a substantive review for delisting if a significant change in management occurs. Examples of such changes include a change in the largest shareholder, the signing of a management transfer agreement, or re-payment to investors with new shares within six months after a capital increase through a third-party allotment. Furthermore, those firms are excluded from the selection targets of the KOSDAQ Companies’ Division. Then, these companies are managed separately by the Korea Stock Exchange. Additionally, designation information is announced electronically and through stock market news.

Kim et al. [9] analyzed the information effect of investment alert issues on the KOSDAQ index, showing a significant information effect with a strong negative impact on a firm’s stock price. Furthermore, institutional and foreign investors avoided losses caused by designations through net selling before the designation. By contrast, retail investors

continued to buy nets, resulting in unfavorable investment outcomes. Moreover, retail investors' net buying continued even after the investment alert was issued, and the intensity of net buying was particularly high for delisted firms, yielding significant losses.

Jung and Lee [10] studied stock price reactions to investment alert issues, targeting the first 33 firms designated as investment alert issues in 2011. Some of these firms were selected for administrative issues or reviewed for delisting, which subsequently led to delisting. In these cases, corporate sustainability can decrease.

In South Korea, firms are designated as investment alert issues based on KOSDAQ index listing regulations. In this process, the corporate default risk is measured using seven financial and seven qualitative variables. The seven financial variables include dependence on short-term borrowing, operating cash flow to total assets, earnings from continuing operations before income taxes, interest coverage ratio, capital impairment, sales volume, and total asset turnover. The seven qualitative variables include the frequency of changes in the largest shareholder, frequency of changes in the CEO, frequency of capital increases through third-party allotment, frequency of convertible/warrant/exchangeable bond issuance through third-party allotment, frequency of unfaithful disclosures, shareholding by the largest shareholder, and reasons for ongoing uncertainty concerns.

Examination of the 26 firms designated as investment alert issues in 2023 revealed that the designation was largely attributable to the inadequacy of the internal accounting control system. An internal accounting management system was designed and operated to ensure the reliability of financial information [11]. It was first introduced in South Korea in 2001. Managers of listed firms with a certain minimum asset size have been required to operate an internal accounting control system, which is reviewed by an auditor, since 2005. In 2019, the certification level of the internal accounting control systems of listed firms was raised from reviews to audits in accordance with Korean audit standards.

The internal accounting management system is a framework designed to manage and control a company's operational activities effectively. It contributes to the efficient utilization of the company's resources and prevents the pursuit of personal interests. This is intimately related to corporate governance. Corporate governance refers to the system and structure that aims to prevent agency problems and protect the interests of all stakeholders [12].

Several studies have reported that the quality of reported earnings has improved because of a significant decrease in discretionary accruals after the establishment of internal accounting control systems [13,14]. Firms that report material weaknesses and adverse review opinions on their internal accounting control systems have lower reported earnings than firms that do not [15,16] and greater risk of plummeting stock prices [17].

Choi and Ryu [18] found that firms with internal accounting and disclosure professionals are more conservative in their accounting, suggesting that they show higher value relevance. They indicated that the presence of these professionals enhances the reliability of accounting information, contributing to its accurate reflection of firm value. Choi and Lee [19] report that firms having in-house specialists (auditor) in division of accounting and disclosures showed more accurate management forecasts than those not.

Firms are flagged for investment alerts based on the status of the KOSDAQ index in South Korea. However, KOSDAQ-listed firms continue to have relatively low market capitalization, a small number of outstanding shares, and high corporate business risk compared to KOSPI-listed firms, which is the main index in South Korea [20]. Therefore, an investment alert issue on the KOSDAQ index is a primary indicator of a firm's solvency concerns. Several KOSDAQ-listed firms are newly listed and small and face issues such as concentrated governance and a lack of internal control systems, thus exhibiting relatively high information asymmetry and relatively low corporate sustainability. In this context, financial constraints are more likely, which may reduce appropriate investments, resulting in poorer long-term performance. Financially constrained firms are more likely to engage in tax avoidance for internal financing purposes [21]. Managers have the incentive to engage in tax avoidance when financial constraints are high [22] and increase liquidity.

2.2. Hypotheses

Tax avoidance is an activity that transfers wealth from the state to corporate shareholders. However, when ownership and management are separated within a company, additional considerations arise regarding the company's tax avoidance practices [23]. In cases where ownership and management are separated, it is necessary to examine tax avoidance considering agency costs. Desai and Dharmapala [24] suggested a positive relationship between tax avoidance and managerial pursuit of personal interests, indicating that tax avoidance facilitates the pursuit of personal gains.

Prior research on tax strategies has been conducted in various ways. Ma and Park [25] analyzed the relationship between sustainable management and tax strategies, and in these studies, the ESG level was used as an indicator of corporate sustainability. As a result of the analysis, it was reported that the higher the ESG rating, the lower the volatility of the effective cash tax rate. In addition, in Shin and Park [2], since the decrease in corporate sustainability of listed companies eventually leads to delisting, the relationship with tax strategies was analyzed using delisting as an indicator of sustainability. They reported that the lower the company's sustainability, the more tax avoidance was performed. Supriyati and Anggraini [26] analyzed the impact of sustainability reporting on tax strategies for Indonesian public companies and reported that sustainability reporting had a significant effect on tax aggressiveness. This means that the effective tax rate was significantly lowered when performing sustainability reporting. Finally, Chen and Meng [27] analyzed the effect of corporate sustainable development on corporate tax risk for China, and the result of the analysis was that the higher the sustainability, the lower the tax risk. They reported that this phenomenon was more pronounced as the global economic policy uncertainty increased.

A company's tax strategy is mainly measured by the level or volatility of tax avoidance. Tax avoidance increases cash flow and after-tax profits by reducing taxes paid in cash and lowering income tax expenses on the income statement. However, tax avoidance can also increase future tax risks. If an audit determines that the tax avoidance is illegitimate, the firm incurs direct costs, such as taxes for underpayment, additional taxes, and penalties, which negatively impact cash flow. Non-tax costs may also be incurred, including damage to corporate image and a decrease in stock prices [28]. On the contrary, in the case of tax avoidance, the tax burden is minimized, which not only increases the company's cash holdings but also facilitates internal financing. In other words, working capital can be raised without the need for external capital. Companies designated as investment alert issues are likely to face difficulty raising external capital. In such cases, when financial constraints exist, tax avoidance is highly likely to be actively pursued.

Therefore, regarding an investment alert issue that draws market attention, an empirical question arises regarding whether a firm chooses tax avoidance to enhance cash flow or prevent non-tax costs. As investment alerts are frequently triggered by inadequate internal accounting control systems, which can reduce the transparency of accounting earnings [11,13–16], we expect that firms flagged for investment alert issues more actively engage in tax avoidance to generate cash flow. Therefore, we formulate the following hypotheses:

Hypothesis 1. *The level of tax avoidance is higher in companies flagged for investment alert issues than in those that are not.*

Hypothesis 2. *The level of tax avoidance is higher in fiscal years flagged for investment alert issues than in those that are not.*

3. Data and Methods

3.1. Data

We included a sample of all listed firms on the KOSDAQ over a 10-year period (2011–2020) and analyzed whether the level of tax avoidance was higher if the firm (or firm year) was flagged for investment alert issues within the examination period. Samples were

collected from the Kis-value and Listed Disclosure System, a financial database in Korea, and IFRS (International Financial Reporting Standards) was applied during this period. There were 4964 firm-year samples, among which 419 firm-year samples had investment alert issues during the period. The sample was small because the investment alert issues indicate the stage before delisting, and there were few firm-year samples with investment alert issues. The annual distribution of the samples is presented in Table 1.

Table 1. Distribution of the samples.

Year	Total Samples	Composition Ratio by Year	Designated Samples	Non-Designated Samples
2011	320	6.45%	22	298
2012	398	8.02%	31	367
2013	447	9.00%	36	411
2014	485	9.77%	48	437
2015	499	10.05%	45	454
2016	528	10.64%	48	480
2017	547	11.02%	51	496
2018	584	11.76%	53	531
2019	629	12.67%	47	582
2020	527	10.62%	38	489
Total	4964	100.00%	419	4545

3.2. Variables and Methods

This study analyzed the impact of one corporate risk factor, namely investment alerts, on tax avoidance. Specifically, to test Hypotheses 1 and 2, we established the following model:

$$\begin{aligned}
 \text{Cash_ETR}_{it} \text{ or } \text{GAAP_ETR}_{it} = & \beta_0 + \beta_1 \text{DesigDummy}_i + \beta_2 \text{Size}_{it} + \beta_3 \text{Leverage}_{it} \\
 & + \beta_4 \text{CurrRatio}_{it} + \beta_5 \text{MTB}_{it} + \beta_6 \ln \text{AGE}_{it} \\
 & + \beta_7 \text{ROA}_{it} + \beta_8 \text{LastROA}_{it} + \beta_9 \text{EPS}_{it} \\
 & + \text{YearDummy}_t + \text{IndDummy}_i + \varepsilon_{it}
 \end{aligned} \quad (1)$$

$$\begin{aligned}
 \text{Cash_ETR}_{it} \text{ or } \text{GAAP_ETR}_{it} = & \beta_0 + \beta_1 \text{DesigYearDummy}_i + \beta_2 \text{Size}_{it} + \beta_3 \text{Leverage}_{it} \\
 & + \beta_4 \text{CurrRatio}_{it} + \beta_5 \text{MTB}_{it} + \beta_6 \ln \text{AGE}_{it} \\
 & + \beta_7 \text{ROA}_{it} + \beta_8 \text{LastROA}_{it} + \beta_9 \text{EPS}_{it} \\
 & + \text{YearDummy}_t + \text{IndDummy}_i + \varepsilon_{it}
 \end{aligned} \quad (2)$$

Cash_ETR: tax paid cash divided by before-tax book income and multiplied by -1 .

GAAP_ETR: total tax expense divided by before-tax book income and multiplied by -1 .

DesigDummy: dummy variable that is 1 if firms were designated as investment alert issues, and 0.

DesigYearDummy: dummy variable that is 1 if firm year was designated as investment alert issues, and 0.

Size: size, $\ln(\text{total assets})$.

Leverage: total liabilities divided by total assets.

CurrRatio: current assets divided by total assets.

MTB: market value of common equity divided by book equity.

lnAGE: firm age, $\ln(\text{current year} - \text{the year of establishment})$.

ROA: net income after tax/total assets.

LastROA: net income after tax of last year/total assets of last year.

EPS: earnings per share, net income after tax/number of stock.

YearDummy: year dummy.

IndDummy: industry dummy.

The dependent variables in the model are cash_ETR (*Cash_ETR*) and GAAP ETR (*GAAP_ETR*)—measures of tax avoidance. Among the tax avoidance measures, the ETR is a direct measure that best reflects the firm's actual tax burden relative to its accounting earnings. Therefore, we used the ETR to measure tax avoidance in this study. For ease of interpretation, the variable is set by multiplying the ETR by (−1). In Model (1), the main variable of interest is the designation as investment alert issues (*DesigDummy*), which takes the value of 1 if the firm was flagged for as investment alert issues at least once during the period and 0 otherwise. The variable for the year in which the firm's securities were designated as investment alert issues (*DesigYearDummy*) takes the value of 1 if the firm-year was flagged for investment alert issues and 0 otherwise. We set two variables of interest: a designation variable during the study period and a designation variable in a specific year. If firms with investment alert issues are more likely to engage in tax avoidance than firms without such issues, the coefficient of the tax avoidance variable is expected to have a significant positive value. Furthermore, if tax avoidance is more prevalent in the firm years flagged for investment alert issues, the coefficient of *Cash_ETR* and *GAAP_ETR* variable is expected to have a significantly positive value.

According to Dyreng et al. [5], financial state variables, such as firm size, leverage, and current ratio, are key factors that influence a company's tax avoidance. Therefore, these variables were included as controls in the model analyzing tax avoidance. Additionally, because a company's growth potential can affect its tax avoidance strategy, variables such as the company's total asset return and book value-to-market value ratio were included as control variables. Furthermore, as loss-generating companies may have tax avoidance incentives, a loss dummy variable was included as a control [2].

The definitions of the control variables are as follows [2,5,7]: Firm size (*Size*) is the natural logarithm of total assets, and the debt ratio (*Leverage*) is total liabilities divided by total assets. The current ratio (*CurrRatio*) is current assets divided by total assets, and the firm's age (*lnAGE*) is the natural logarithm of the firm's age. Return On Asset (ROA) is net income divided by total assets. The market-to-book ratio (*MTB*) is the market value of common stock at the end of the period divided by total equity. Because the extent of loss in the previous year may affect tax avoidance in the following year, last year profitability (*LastROA*) was included in the model. Also, we include earnings per share (*EPS*) as well because firms running into corporate trouble will tend to give lower cash layouts to investors. Finally, we included industry and year dummies in the model.

4. Results

4.1. Descriptive Statistics

Table 2 presents the descriptive statistics for the variables used in this study. Examination of the descriptive statistics for the full sample reveals that the mean (median) *Cash_ETR* is −0.137 (−0.189) and the mean (median) *GAAP_ETR* is −0.140 (−0.192). For both tax avoidance measures, the median is larger than the mean. This is likely because of the significant variation in the degree of tax avoidance among firms. For the control variables, the mean (median) *Size* is 25.544 (25.471) and the mean (median) of *Leverage* is 0.335 (0.313). The means (medians) of *CurrRatio*, *lnAGE*, *ROA*, *MTB*, *LastROA* and *EPS* are 0.498 (0.497), 3.138 (3.091), 0.031 (0.040), 1.809 (1.214), 0.035 (0.041), and 693.08 (322.90), respectively. Overall, the difference between the mean and median of the control variables is insignificant; thus, the standard deviation of the control variables is relatively small. Table 2 presents the descriptive statistics of the subsamples, which comprise samples with and without investment alert issues.

Table 2. Descriptive statistics.

Variable	Full Samples			(1) <i>DesigDummy</i> = 1			(2) <i>DesigDummy</i> = 0		
	Mean (Median)	Min (Max)	Skew (Kurt)	Mean (Median)	Min (Max)	Skew (Kurt)	Mean (Median)	Min (Max)	Skew (Kurt)
<i>Cash_ETR</i>	−0.137 (−0.189)	−0.679 (1.375)	3.193 (15.688)	−0.014 (−0.072)	−0.679 (1.375)	2.068 (5.713)	−0.148 (−0.193)	−0.679 (1.375)	3.382 (18.135)
<i>GAAP_ETR</i>	−0.140 (−0.192)	−0.679 (1.349)	3.253 (15.809)	−0.014 (−0.072)	−0.679 (1.349)	2.081 (5.483)	−0.152 (−0.196)	−0.679 (1.349)	3.447 (18.386)
<i>DesigDummy</i>	0.084 (0.000)	0.000 (1.000)	2.990 (6.947)	1.000 (1.000)	1.000 (1.000)		0.000 (0.000)	0.000 (0.000)	
<i>DesigYearDummy</i>	0.005 (0.000)	0.000 (1.000)	12.972 (166.347)	0.069 (0.000)	0.000 (1.000)		0.000 (0.000)	0.000 (0.000)	
<i>Size</i>	25.544 (25.471)	22.860 (29.220)	0.453 (0.699)	25.284 (25.118)	22.967 (27.849)	0.496 (0.044)	25.567 (25.490)	22.860 (29.220)	0.490 (0.803)
<i>Leverage</i>	0.335 (0.313)	0.001 (1.379)	0.527 (−0.143)	0.442 (0.453)	0.029 (1.332)	0.167 (−0.599)	0.326 (0.304)	0.001 (1.379)	0.501 (−0.209)
<i>CurrRatio</i>	0.498 (0.497)	0.001 (0.991)	−0.008 (−0.521)	0.506 (0.505)	0.110 (0.933)	0.073 (−0.760)	0.498 (0.496)	0.001 (0.991)	−0.014 (−0.505)
<i>lnAGE</i>	3.138 (3.091)	2.079 (4.343)	0.120 (−0.482)	3.091 (2.995)	2.079 (4.143)	0.397 (−0.310)	3.142 (3.135)	2.079 (4.343)	0.096 (−0.486)
<i>ROA</i>	0.031 (0.040)	−3.804 (1.519)	−7.728 (182.574)	−0.059 (0.011)	−3.804 (0.419)	−7.233 (86.863)	0.039 (0.042)	−1.763 (1.519)	−3.299 (72.611)
<i>MTB</i>	1.809 (1.214)	−3.807 (513.670)	63.722 (4328.880)	3.627 (1.569)	−0.558 (513.670)	20.038 (406.966)	1.641 (1.196)	−3.807 (46.528)	8.893 (153.841)
<i>LastROA</i>	0.035 (0.041)	−1.763 (1.658)	−2.601 (54.521)	−0.030 (0.011)	−1.206 (0.419)	−2.375 (10.584)	0.042 (0.043)	−1.763 (1.658)	−2.361 (73.818)
<i>EPS</i>	693.08 (322.90)	−28,317.56 (98,673.96)	18.56 (627.35)	−29.89 (52.61)	−28,317.56 (6821.60)	−9.52 (147.72)	759.73 (355.09)	−8089.78 (98,673.96)	19.53 (633.50)
<i>N</i>		4964			419			4545	

Detailed variable definitions are as follows: *Cash_ETR* = tax paid cash divided by before-tax book income; *GAAP_ETR* = total tax expense divided by before-tax book income; *DesigDummy* = Dummy variable that is 1 if firms were designated as investment precaution and 0 otherwise; *DesigYearDummy* = dummy variable that is 1 if firm year was designated as investment precaution and 0 otherwise; *Size* = ln(total assets); *Leverage* = total liabilities divided by total assets; *CurrRatio* = current assets divided by underlying assets; *MTB* = common stock divided by book equity; *lnAGE* = ln(current year − the year of establishment); *ROA* = net income divided by total assets; *LastROA* = net income after tax of last year/total assets of last year; *EPS* = net income/number of stock.

Table 3 presents the results of the difference test of the mean and median of the variables, dividing the samples based on whether the *DesigDummy* variable is 1 or 0. The mean (median) of *Cash_ETR* is -0.014 (-0.072) for samples with investment alert issues during the study period and -0.148 (-0.193) for those without. As *Cash_ETR* is statistically significantly low, it can be interpreted that tax avoidance is practiced more often. For *GAAP_ETR*, the mean (median) is -0.014 (-0.072) for samples with investment alert issues and -0.152 (-0.196) for those without. The difference in the means (medians) is statistically significant. Therefore, based on the results of the difference analysis of *Cash_ETR* and *GAAP_ETR*, we can conclude that firms with investment alert issues practice greater tax avoidance.

Table 3. Results of difference analysis.

Variable	(1) <i>DesigDummy</i> = 1 Mean (Median)	(2) <i>DesigDummy</i> = 0 Mean (Median)	t-stat [z-stat] (1)–(2)
<i>Cash_ETR</i>	-0.014 (-0.072)	-0.148 (-0.193)	7.95 *** [11.21 ***]
<i>GAAP_ETR</i>	-0.014 (-0.072)	-0.152 (-0.196)	8.02 *** [11.24 ***]
<i>DesigDummy</i>	1.000 (1.000)	0.000 (0.000)	
<i>DesigYearDummy</i>	0.069 (0.000)	0.000 (0.000)	
<i>Size</i>	25.284 (25.118)	25.567 (25.490)	-5.94 *** [-7.25 ***]
<i>Leverage</i>	0.442 (0.453)	0.326 (0.304)	10.00 *** [9.96 ***]
<i>CurrRatio</i>	0.506 (0.505)	0.498 (0.496)	0.87 [0.67]
<i>lnAGE</i>	3.091 (2.995)	3.142 (3.135)	-2.31 ** [-2.72 ***]
<i>ROA</i>	-0.059 (0.011)	0.039 (0.042)	-7.43 *** [-12.26 ***]
<i>MTB</i>	3.627 (1.569)	1.641 (1.196)	1.62 [6.28 ***]
<i>LastROA</i>	-0.030 (0.011)	0.042 (0.043)	-9.48 *** [-12.26 ***]
<i>EPS</i>	-29.89 (52.61)	759.73 (355.09)	-6.26 *** [-13.91 ***]
<i>N</i>	419	4545	

t-stat is a test statistic of difference analysis for the mean between the two groups, and [z-stat] is a test statistic for Wilcoxon's signed ranks test. **, and *** denote significance at the 5%, and 1% levels, respectively. Detailed variable definitions are presented in Table 2.

The difference analysis of the control variables reveals that the variables showing significant mean (median) differences include firm size (*Size*), debt ratio (*Leverage*), firm age (*lnAGE*), ROA (*ROA*), ROA of last year (*LastROA*) and earnings per share (*EPS*). In the case of firms with investment alert issues, the firm size is small, the debt ratio is large, the firm age is low, the ROA is low, the previous year's profitability is lower, and the earnings per share is lower. These conditions are expected to act as incentives for avoiding taxes.

Table 4 presents the Pearson correlation coefficients for the variables employed in this study. The analysis of correlation coefficients shows that the correlation coefficients of *Cash_ETR* and *GAAP_ETR* are high. However, as these variables are used as substitutes

in each model, they are not expected to bias the empirical analysis results. Furthermore, although most of the control variables are not highly correlated, we estimated the variance inflation factor (VIF) during multivariate analysis to consider the possibility of multicollinearity. The overall variance inflation factor is low, indicating a low probability of multicollinearity.

Table 4. Correlation matrix.

Variable	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
(1) <i>Cash_ETR</i>	1.00										
(2) <i>GAAP_ETR</i>	0.93	1.00									
(3) <i>DesigDummy</i>	0.14	0.15	1.00								
(4) <i>DesigYearDummy</i>	0.05	0.05	0.25	1.00							
(5) <i>Size</i>	−0.16	−0.16	−0.09	−0.02	1.00						
(6) <i>Leverage</i>	0.12	0.13	0.17	0.04	0.15	1.00					
(7) <i>CurrRatio</i>	−0.06	−0.06	0.01	−0.02	−0.15	−0.09	1.00				
(8) <i>lnAGE</i>	−0.07	−0.07	−0.03	−0.01	0.17	0.02	−0.11	1.00			
(9) <i>ROA</i>	−0.19	−0.21	−0.21	−0.01	0.18	−0.32	0.08	0.01	1.00		
(10) <i>MTB</i>	0.03	0.03	0.07	0.01	−0.06	0.06	0.03	−0.03	−0.17	1.00	
(11) <i>LastROA</i>	−0.19	−0.21	−0.19	−0.12	0.17	−0.31	0.14	−0.01	0.41	−0.04	1.00
(12) <i>EPS</i>	−0.10	−0.11	−0.08	−0.01	0.26	−0.11	0.04	0.04	0.43	−0.01	0.20

Boldness denotes significance at the 1% level. Detailed variable definitions are presented in Table 2.

4.2. Regression Results

In this section, we present the results of our analysis on whether the level of tax avoidance is higher for firms with investment alert issues, as shown in Table 5.

Table 5 presents the results of the empirical analysis of Model (1), with *Cash_ETR* and *GAAP_ETR* as dependent variables. When the dependent variable is *Cash_ETR*, the coefficient of *DesigDummy*—the variable indicating whether the firm is flagged for investment alert issues—is 0.0759 (t-value = 5.89), which is a significantly positive value at the 1% level. This indicates that tax avoidance increases (i.e., cash ETR significantly decreases) for firms with investment alert issues. Moreover, in the model wherein the dependent variable is *GAAP_ETR*, the coefficient of the *DesigDummy* variable is 0.0776 (t-value = 6.08), which is significant at the 1% level. This indicates that even in the case of GAAP ETR, tax avoidance increases (cash ETR decreases) for firms with investment alert issues.

DesigDummy is a dummy variable that takes a value of 1 if the firm has been flagged for investment alert issues even once, whereas *DesigYearDummy* takes a value of 1 if it is the year with an actual investment alert issue. Therefore, it can be interpreted that Hypothesis 1, which states that the level of tax avoidance is higher for firms designated as investment alert issues than for those not, should not be rejected according to Table 5.

Table 6 presents the results of Model (1) using the *DesigYearDummy* variable as the variable of interest. When the dependent variable is *Cash_ETR*, the coefficient of *DesigYearDummy* is 0.1064 (t-value = 2.35), which is significantly positive at the 5% level. This result can be interpreted as indicating that tax avoidance significantly increases (cash ETR significantly decreases) in firm years with investment alert issues. When the dependent variable is *GAAP_ETR*, the coefficient of the *DesigYearDummy* variable is 0.1052 (t-value = 2.35), which is significant at the 5% level. This indicates that GAAP ETR is also lower in firm years with investment alert issues. Therefore, it can be interpreted that Hypothesis 2, which states that the level of tax avoidance is higher for firm years designated as investment alert issues than those that are not, is weakly supported according to Table 6.

Table 5. Results of the regression analysis of Model (1).

Variable	Dependent Variable	
	Cash_ETR	GAAP_ETR
<i>intercept</i>	1.0641 (8.36 ***)	1.0249 (8.13 ***)
<i>DesigDummy</i>	0.0759 (5.89 ***)	0.0776 (6.08 ***)
<i>Size</i>	−0.0440 (−9.02 ***)	−0.0423 (−8.75 ***)
<i>Leverage</i>	0.1285 (5.98 ***)	0.1179 (5.54 ***)
<i>CurrRatio</i>	−0.0951 (−4.90 ***)	−0.0914 (−4.75 ***)
<i>lnAGE</i>	−0.0227 (−2.49 **)	−0.0225 (−2.48 **)
<i>ROA</i>	−0.1434 (−4.37 ***)	−0.1736 (−5.33 ***)
<i>MTB</i>	−0.0002 (−0.63)	−0.0003 (−0.65)
<i>LastROA</i>	−0.1827 (−4.71 ***)	−0.2107 (−5.48 ***)
<i>EPS</i>	0.0001 (0.62)	0.0001 (0.84)
<i>Year</i>	included	included
<i>Industry</i>	included	included
F-value	10.80	11.58
Adj. R ²	0.1027	0.1100
Obs.	4964	

, and * denote significance at the 5%, and 1% levels, respectively. Detailed variable definitions are presented in Table 2.

Table 6. Results of the regression analysis of Model (2).

Variable	Dependent Variable	
	Cash_ETR	GAAP_ETR
<i>intercept</i>	1.1084 (8.70 ***)	1.0706 (8.48 ***)
<i>DesigYearDummy</i>	0.1064 (2.35 **)	0.1052 (2.35 **)
<i>Size</i>	−0.0457 (−9.34 ***)	−0.0440 (−9.08 ***)
<i>Leverage</i>	0.1414 (6.60 ***)	0.1312 (6.18 ***)
<i>CurrRatio</i>	−0.0922 (−4.74 ***)	−0.0884 (−4.59 ***)
<i>lnAGE</i>	−0.0238 (−2.60 **)	−0.0236 (−2.60 **)
<i>ROA</i>	−0.1656 (−5.05 ***)	−0.1962 (−6.03 ***)
<i>MTB</i>	−0.0002 (−0.45)	−0.0002 (−0.48)

Table 6. Cont.

Variable	Dependent Variable	
	Cash_ETR	GAAP_ETR
<i>LastROA</i>	−0.1946 (−4.99 ***)	−0.2233 (−5.78 ***)
<i>EPS</i>	0.0001 (0.68)	0.0001 (0.91)
<i>Year</i>	included	included
<i>Industry</i>	included	included
F-value	10.24	10.97
Adj. R ²	0.0974	0.1043
Obs.	4964	

, and * denote significance at the 5%, and 1% levels, respectively. Detailed definition of variables is provided in Table 2.

Overall, in Table 5, the results of Model (1) for Hypothesis 1 show that tax avoidance significantly increases for firms with investment alert issues. Moreover, Table 6 demonstrates that tax avoidance significantly increases in the designated year. These results provide empirical evidence that the designation of an investment alert issue can act as a corporate sustainability risk factor and that tax avoidance can increase when this risk is high.

4.3. Robustness Tests

In this section, we perform a robustness analysis to validate this study's main analysis results, that is, the ordinary least squares (OLS) analysis results. However, tax avoidance—a dependent variable—can have endogenous problems. Therefore, we additionally present the results of the analysis with the panel fixed-effects model to further confirm the robustness of the results.

General and widely used methods for overcoming endogenousness include propensity score matching (PSM) or 2-stage analysis using instrumental variables, and panel analysis. In the case of propensity score matching analysis, a method of calculating a propensity score in the first-stage model to form a matching sample and analyzing it is conducted, but this method has a significant sample loss. In addition, in the case of a two-stage analysis using instrumental variables, if an appropriate instrumental variable is not set, the results may be distorted, and it is difficult to find an appropriate instrumental variable to control endogenousness in this study. Therefore, in this study, endogenous generation was controlled using panel analysis. This may be particularly suitable if the sample includes the same company for many years to exclude estimation problems arising from time-varying corporate characteristics.

Table 7 presents the results of the panel analysis considering the fixed effects of Model (1). Consistent with the results of the OLS analysis, when the dependent variable is *Cash_ETR*, the coefficient of *DesigDummy*—the variable indicating whether the firm is flagged for investment alert issues—is 0.0765 (t-value = 5.98), which is a significant positive value at the 1% level. Additionally, in the model wherein the dependent variable is *GAAP_ETR*, the coefficient of the *DesigDummy* variable is 0.0783 (t-value = 6.17), which is significant at the 1% level. This indicates that tax avoidance increases for firms with investment alert issues.

Table 8 presents the panel analysis results of Model (1) using the *DesigYearDummy* variable as the variable of interest. When the dependent variable is *Cash_ETR*, the coefficient of *DesigYearDummy* is 0.1083 (t-value = 2.38), which is significantly positive at the 5% level. Additionally, when the dependent variable is *GAAP_ETR*, the coefficient of the *DesigYearDummy* variable is 0.1098 (t-value = 2.44), which is significantly positive at the 5% level. Consistent with the results of the OLS analysis, these results indicate that tax

avoidance significantly increases (Cash ETR and GAAP ETR significantly decrease) in firm years with investment alert issues.

Table 7. Results of the panel analysis of model (1) considering fixed effects.

Variable	Dependent Variable	
	Cash_ETR	GAAP_ETR
<i>intercept</i>	1.0294 (8.66 ***)	0.9727 (8.25 ***)
<i>DesigDummy</i>	0.0765 (5.98 ***)	0.0783 (6.17 ***)
<i>Size</i>	−0.0406 (−8.65 ***)	−0.0386 (−8.31 ***)
<i>Leverage</i>	0.0982 (4.84 ***)	0.0872 (4.34 ***)
<i>CurrRatio</i>	−0.0828 (−4.49 ***)	−0.0765 (−4.19 ***)
<i>lnAGE</i>	−0.0358 (−4.43 ***)	−0.0343 (−4.28 ***)
<i>ROA</i>	−0.1725 (−5.26 ***)	−0.2019 (−6.21 ***)
<i>MTB</i>	−0.0001 (−0.36)	−0.0001 (−0.40)
<i>LastROA</i>	−0.2275 (−5.92 ***)	−0.2548 (−6.69 ***)
<i>EPS</i>	0.0001 (0.46)	0.0001 (0.63)
Fixed effects	included	included
F-value	52.46	56.86
Adj. R ²	0.0870	0.0936
Obs.	4964	

*** denote significance at the 1% levels. Detailed variable definitions are presented in Table 2.

Table 8. Results of the panel analysis of model (2) considering fixed effects.

Variable	Dependent Variable	
	Cash_ETR	GAAP_ETR
<i>intercept</i>	1.0741 (9.02 ***)	1.0185 (8.63 ***)
<i>DesigYearDummy</i>	0.1083 (2.38 **)	0.1098 (2.44 **)
<i>Size</i>	−0.0422 (−8.99 ***)	−0.0403 (−8.65 ***)
<i>Leverage</i>	0.1101 (5.44 ***)	0.0993 (4.95 ***)
<i>CurrRatio</i>	−0.0786 (−4.25 ***)	−0.0722 (−3.94 ***)
<i>lnAGE</i>	−0.0366 (−4.52 ***)	−0.0352 (−4.38 ***)

Table 8. Cont.

Variable	Dependent Variable	
	Cash_ETR	GAAP_ETR
ROA	−0.1956 (−5.97 **)	−0.2255 (−6.95 **)
MTB	−0.0001 (−0.20)	−0.0001 (−0.23)
LastROA	−0.2387 (−6.18 **)	−0.2663 (−6.96 **)
EPS	0.0001 (0.55)	0.0001 (0.72)
Fixed effects	included	included
F-value	48.83	52.95
Adj. R ²	0.0814	0.0877
Obs.	4964	

, and * denote significance at the 5%, and 1% levels, respectively. Detailed variable definitions are presented in Table 2.

5. Conclusions

5.1. Empirical Findings

This study analyzed whether firms' tax avoidance strategies vary according to investment alert issue, which is a corporate sustainability-related risk in the South Korean stock market. Stock market delisting events significantly impact firm stakeholders and constitute the worst crises faced by investors. In South Korea, the KOSDAQ operates a system that designates firms as investment alert issues to provide such a signal in advance. As the most common reason for an investment alert issue designation is a problem with a firm's internal accounting control system, such a designation acts as a direct measure of a firm's poor internal accounting control system. This can lead to a financial risk for the firm, which can also be a risk factor for corporate sustainability.

This study determined whether tax avoidance is practiced by firms facing internal accounting control system problems that encompass the risk of eventual delisting. Tax avoidance is a management strategy to increase cash flow; however, it can create additional corporate risks. If a firm's sustainability risk increases, it is expected to actively engage in tax avoidance. Therefore, we analyzed whether tax avoidance increases because of investment alert issue designations.

Comparison of the tax avoidance measures of cash and GAAP ETR for firms with and without investment alerts revealed that both measures are significantly lower for firms with investment alerts. This finding suggests that such firms have greater incentives to avoid taxes. An analysis of the years with investment alert issues also shows that firms are more actively engaged in tax avoidance in firm years with investment alert issues than in those without.

5.2. Contributions and Implications

By focusing on firms designated as investment alert issues, this study examined the relationship between the performance of internal accounting control systems and tax avoidance, which has hitherto remained vague. This is significant because another corporate characteristics threatening corporate sustainability have been identified. Most previous studies have focused on market reactions to investment alert issues but have not addressed firm-related characteristics and the fact that these firms are designated as investment alert issues because of their inadequate internal accounting control systems. Moreover, few studies have examined the relationship between firms with sustainability risk and their tax strategies.

This study's results provide overarching implications for accounting practices and policies. They reaffirm the importance of market investor protection functions and the significance of risk disclosures in the market. Additionally, this study contributes to the literature by identifying financial risk metrics that influence tax avoidance in companies. Furthermore, it contributes to our understanding of corporate tax strategies by providing evidence that tax strategies and corporate sustainability are significantly related. The results are expected to contribute to corporate sustainability assessments.

5.3. Limitation

This study had a few limitations. The assessment of tax avoidance measures in the absence of disclosed tax payments necessitated reliance on forecast values derived from financial data. Notably, the inability to extract taxable income directly from disclosure data, a constraint of Korean tax law, resulted in the use of predictions. This involved the problem of not being able to accurately measure tax avoidance.

The regression analysis conducted in this study may have limitations because of the relatively small sample size of the companies designated as investment alert issues. Also, since the system designating investment alert issues is only valid in Korea, there are restrictions on its application to other countries. This could potentially restrict the findings' generalizability.

In addition, there may be a one-year lag between tax avoidance and the designation of investment alert issue, but this was not considered. Nevertheless, studying the relationship between risk signals in the market and tax avoidance is significant.

6. Discussion and Future Works

6.1. Discussion

Previous studies have only examined how designation as an investment alert issue affects corporate value. However, this study provides empirical evidence that firms designated as investment alert issues may face difficulties in external financing, resulting in an increase in tax avoidance as an internal means of financing.

Although this study did not directly analyze the difficulty of raising funds from external sources for firms designated as investment alert issues, Kim et al. [9] found that investors avoided financing because of such designation, and Jung and Lee [10] reported that designation as an investment alert issue can result in delisting. Therefore, the difficulty of external financing can be reasonably expected.

Companies facing difficulties in external financing resort to internal financing as the next best option to increase sustainability, with tax avoidance being one of these measures [20]. While tax avoidance can be considered a strategic choice to enhance sustainability, interpreting this study's results as directly connected to sustainability is challenging owing to the potential for increased tax risk in the future. Therefore, analyzing the relationship between investment warning issues and sustainability requires a more sophisticated approach.

However, rather than analyzing the relationship between investment warning issues and sustainability, this study focused on examining changes in corporate tax strategies resulting from investment warning issues.

6.2. Future Research

Based on this study's results, future researchers may be able to capture sustainability issues arising from various capital market regulations. The investment alert issue belongs to one of them. This study measured sustainability risk using investment alert issues as a proxy. In addition, it is very important to know that events related to the capital market (designation of investment alert issues, trading curb or delisting of stocks, etc.) that raise questions about sustainability and corporate characteristics not related to the capital market (such as business risk or competitive position) can also affect sustainability. Therefore, we hope that a future study will be conducted in this regard.

Author Contributions: Conceptualization, Y.S. and B.C.; formal analysis, Y.S.; methodology, Y.S.; visualization, B.C.; writing—original draft, Y.S. and B.C.; writing—review and editing, Y.S. and B.C. All authors have read and agreed to the published version of the manuscript.

Funding: This study was supported by a research fund from Chosun University, 2024.

Institutional Review Board Statement: Not applicable.

Informed Consent Statement: Not applicable.

Data Availability Statement: All data reproduced in the results of this study can be requested from the corresponding author.

Conflicts of Interest: The authors declare no conflicts of interest.

References

- Choi, S.Y.; Goh, J.M.; Cho, E.J. The relationship between over-investment of IPO firms in KOSDAQ market and the delisting risk. *Account. Inf. Res.* **2018**, *36*, 279–303.
- Shin, Y.; Park, J. Differences in Tax Avoidance According to Corporate Sustainability with a Focus on Delisted Firms. *Sustainability* **2022**, *14*, 6648. [[CrossRef](#)]
- Lee, E.C.; Kim, W.Y.; Hue, K.B. The Characteristics of Human Resources in Internal Accounting Control System and the Transparency of Accounting. *Account. Inf. Rev.* **2012**, *30*, 57–81.
- Moon, D.C.; Park, W.J.; Lee, S.I. The Effect of Characteristics of Human Resources in Corporate Governance on Reliability of Accounting Information -Emphasis on FSS Enforcement Action-. *J. Tax. Account.* **2012**, *13*, 279–308.
- Dyregang, S.; Hanlon, M.; Maydew, E. Long-run corporate tax avoidance. *Account. Rev.* **2008**, *83*, 61–82. [[CrossRef](#)]
- Dhawan, A.; Ma, L.; Kim, M.H. Effect of corporate tax avoidance activities on firm bankruptcy risk. *J. Contemp. Account. Econ.* **2020**, *16*, 100187. [[CrossRef](#)]
- Guenther, D.A.; Matsunaga, S.R.; Williams, B.M. Is tax avoidance related to firm risk? *Account. Rev.* **2017**, *92*, 115–136. [[CrossRef](#)]
- Choi, H.; Kweon, S. Free Cash Flow and Tax Avoidance. *J. Ind. Econ. Bus.* **2015**, *28*, 2615–2637.
- Kim, H.K.; Park, J.; Lee, J.H. Investment Alert Issues and Investor Protection. *Korean J. Financ. Stud.* **2014**, *43*, 183–211.
- Jung, D.J.; Lee, H.J. The Effect of Stock Price on the Disclosure of KOSDAQ Investment Precaution Issue. *Korean Bus. Educ. Rev.* **2013**, *28*, 531–548.
- Choi, S.H. The impact of reasons for internal accounting management system qualified review opinion on cost of debt. *Korean Manag. Rev.* **2014**, *43*, 1145–1168.
- Dănescu, T.; Prozan, M.; Prozan, R.D. Perspectives regarding accounting–corporate governance–internal control. *Procedia Econ. Financ.* **2015**, *32*, 588–594. [[CrossRef](#)]
- Boulhaga, M.; Bouri, A.; Elbardan, H.; Krishnan, J.; Krishnan, J.; Liang, S. The effect of internal control quality on real and accrual-based earnings management: Evidence from France. *J. Manag. Control* **2022**, *33*, 545–567. [[CrossRef](#)]
- Krishnan, J.; Krishnan, J.; Liang, S. Internal control and financial reporting quality of small firms: A comparative analysis of regulatory regimes. *Rev. Account. Financ.* **2020**, *19*, 221–246. [[CrossRef](#)]
- Kim, J.-B.; Lee, J.J.; Park, J.C. Internal Control Weakness and the Asymmetrical Behavior of Selling, General, and Administrative Costs. *J. Account. Audit. Financ.* **2022**, *37*, 259–292. [[CrossRef](#)]
- Ashbaugh-Skaife, H.; Collins, D.W.; Kinney, W.R.; LaFond, R. The Effect of Sox Internal Control Deficiencies and Their Remediation on Accrual Quality. *Account. Rev.* **2008**, *83*, 217–250. [[CrossRef](#)]
- Lobo, G.; Wang, C.; Yu, X.; Zhao, Y. Material Weakness in Internal Controls and Stock Price Crash Risk. *J. Account. Audit. Financ.* **2020**, *35*, 106–138. [[CrossRef](#)]
- Choi, J.W.; Ryu, H.Y. The Effects of Hiring Specialists in Accounting and Disclosures on the Quality of Accounting Information and Value Relevance. *Study Account. Tax. Audit.* **2010**, *52*, 93–120.
- Choi, J.W.; Lee, Y.J. In-house Specialists in Accounting and Disclosures and the Accuracy and Reliability of Management Forecast. *Korean Account. J.* **2011**, *20*, 157–184.
- Kim, Y.H.; Lee, J.H.; Shawn, H. An Empirical Study on the Earning Management Behavior of the Delisted Companies from the KOSDAQ. *J. Bus. Res.* **2015**, *30*, 371–403.
- Fazzari, S.; Hubbard, R.G.; Petersen, B. Investment, financing decisions, and tax policy. *Am. Econ. Rev.* **1988**, *78*, 200–205.
- Edwards, A.; Schwab, C.; Shevlin, T. Financial Constraints and Cash Tax Savings. *Account. Rev.* **2016**, *91*, 859–881. [[CrossRef](#)]
- Slemrod, J. The economics of corporate tax selfishness. *Natl. Tax J.* **2004**, *57*, 877–899. [[CrossRef](#)]
- Desai, M.; Dharmapala, D. Corporate tax avoidance and high powered incentives. *J. Financ. Econ.* **2006**, *79*, 145–179. [[CrossRef](#)]
- Ma, H.Y.; Park, S.J. Relationship between Corporate Sustainability Management and Sustainable Tax Strategies. *Sustainability* **2021**, *13*, 7429. [[CrossRef](#)]
- Supriyati, S.; Anggraini, D.D. Sustainability Reporting and Tax Aggressiveness: Evidence from a Public Company in Indonesia. *Indones. J. Sustain. Account. Manag.* **2021**, *5*, 71–80. [[CrossRef](#)]

27. Chen, W.; Meng, F. Sustainable development, economic policy uncertainty and tax risk. *Sustain. Account. Manag. Policy J.* 2024; *ahead-of-print*. [[CrossRef](#)]
28. Bryant-Kutcher, L.A.; Guenther, D.A.; Jackson, M. How do cross-country differences in corporate tax rates affect firm value? *J. Am. Tax. Assoc.* **2012**, *34*, 1–17. [[CrossRef](#)]

Disclaimer/Publisher’s Note: The statements, opinions and data contained in all publications are solely those of the individual author(s) and contributor(s) and not of MDPI and/or the editor(s). MDPI and/or the editor(s) disclaim responsibility for any injury to people or property resulting from any ideas, methods, instructions or products referred to in the content.