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Investigating the impact of audit committee characteristics on aggressive tax policy considering the role of financial constraints in the stock market

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ABSTRACT

The present study aims to examine the impact of audit committee characteristics on aggressive tax policy, considering the role of financial constraints in the Tehran Stock Exchange. The statistical population of the research includes all companies listed on the Tehran Stock Exchange during the years 2015-2019. To select the statistical sample, a purposeful elimination method was used, and after applying the relevant criteria, 172 companies were selected as the statistical sample. In the present research, the testing of hypotheses was conducted using regression analysis. The results of testing the first, second, and third research hypotheses showed that the independence of the audit committee has a negative and significant impact on the company's aggressive tax policy. The financial expertise of audit committee members has a negative and significant impact on the company's aggressive tax policy. The size of the audit committee has a negative and significant impact on the company's aggressive tax policy. Furthermore, the findings of the fourth, fifth, and sixth research hypotheses indicated that the impact of audit committee independence on aggressive tax policy is weaker in companies with fewer financial constraints. The impact of the financial expertise of audit committee members on aggressive tax policy is weaker in companies with fewer financial constraints. The impact of audit committee size on aggressive tax policy is weaker in companies with fewer financial constraints.

Introduction

The accounting information environment in Iran is such that taxes are considered one of the pillars impacting financial reporting. Additionally, the main source of tax revenue in Iran is dedicated to income tax (specifically the performance of companies). In this regard, tax payment is also of significant importance. Most governments seek to create the grounds for this by enacting laws (Safari Geraily and Poudineh, 2016). On the other hand, the tax due on company profits imposes a significant cost on the company and its shareholders. Under existing laws, commercial companies must pay a substantial portion of their profits to the government, reducing owners' returns and decreasing investment interest. To reduce the transfer of owners' resources to the government and adjust tax costs, management undertakes the implementation of aggressive tax planning strategies. This leads to increased wealth and owner returns (Desai and Dharmapala, 2009). In other words, given that one of the main goals of managers and shareholders in the company is maximizemise shareholder wealth, and shareholders seek this through various mechanisms and oversight of managers, it can be expected that one of the main motivations for aggressive tax planning by managers is achieving the goal of maximizing shareholder wealth. Therefore, aggressive tax planning is a process through which companies reduce payments related to income tax to the tax organization (Hajihah et al., 2017). Aggressive tax planning is defined as the legal use of the tax system for personal benefits to reduce the amount of payable taxes through legal instruments (Posternak and Rieck, 2008). Tax avoidance is a legal behaviour; that is, taxpayers use loopholes in tax laws and revisions in their economic decisions to reduce their tax liabilities. Tax payment causes cash flows to exit the company; therefore, investment in tax programs has always been a focus for company managers. These programs can range from conservative tax policies, such as income smoothing, to aggressive tax policies, such as tax avoidance strategies. Aggressive tax policies often involve costs and benefits. One of these benefits is an increase in the company's value after tax payment, a subject that has always attracted the attention of investors and shareholders. One of the potential risks for companies in adopting aggressive tax policies is unintentionally entering the realm of tax avoidance, which is a red line for tax officials and may lead to reduced credibility for managers and even decrease the company's stock value (Chen and Zolotov).

As a result, aggressive tax strategies have become a primary concern for governments. Esteghami Pour and Amini Nia (1392) In this context, a wave of scandals and the collapse of major global companies and institutions such as Enron, WorldCom, and Arthur Andersen have led to the creation of new regulations in corporate governance structures, one of the most important being the necessity of an audit committee within the corporate governance structure. Fakhari and colleagues (1394) The audit committee is responsible for overseeing corporate governance, the financial reporting process, and the performance of internal and independent auditors, and it is considered a vital component of effective internal controls. Through the assurance process, it supports investor accountability. Soleimani Amiri and Fassihi (1394); Babajani and Khanka (1391) The audit committee operates to guarantee and increase shareholder and investor benefits and is also formed as a control mechanism aimed at reducing information asymmetry between shareholders and other stakeholders. Takhtaei and colleagues, 1390; Mohammadi, 1390) Audit committees should be organized and utilized in such a way that they can provide significant benefits for all interested groups. Audit committees can reinforce the stewardship of the board's reporting duties and improve the relationship between the independent auditor and management, enhancing auditor independence by serving as a buffer between the auditor and management. Audit committees also assist taxpayers and creditors in ensuring that their interests are maximized as a result of auditing. Additionally,

various features of the audit committee, including financial expertise, independence, size, etc., can affect the effectiveness of the audit committee.

2. Theoretical Foundations and Research Background

Taxes represent a part of individuals' wealth or income collected by the government to cover public expenses and promote economic, social, and political benefits according to regulations. The disparity between the principles governing financial accounting and tax accounting results in a difference between accounting profits and profits used as the basis for tax calculation. In accounting theories and tax laws, the existence of differences between accounting standards used as the basis for calculating accounting profits and the tax laws governing the determination of taxable profit is natural, and with the acceptance of this difference, a solution is sought (Alimi 1383). Also, taxes have become an integral part of the economic environment and are considered one of the undeniable and influential variables in the commercial activities of various companies. There is a conflict of interest between companies and the government concerning the taxes paid by companies. For the government, the tax paid by the company is considered a significant source of revenue, while companies aim to reduce their payable taxes due to the reduction in profits that tax payments cause. Therefore, sometimes companies engage in earnings management aimed at reducing and controlling tax payments (Muliady and Anwar, 2015).

On the other hand, one of the main factors for improving efficiency is the economic corporate governance system, which is a strategy that encompasses a set of relationships between company management, the board of directors, shareholders, and other stakeholders. Corporate governance provides a structure through which the company's objectives are set, the means of achieving those objectives are determined, and the performance is monitored. It also creates the necessary incentive for management to realize the company's goals and provides a framework for effective oversight, thus enabling companies to use resources more efficiently. An appropriate corporate governance system can help companies gain the trust of investors and encourage them to invest. Implementing these principles at the company level, according to empirical research, leads to improved financial performance and increased company efficiency. The existence of an agency problem and the tendency of managers to practice earnings management and misuse it, resulting in providing incorrect information to shareholders, improper disclosure, and other users of financial statements, such as tax authorities, will lead to a decrease in stakeholders' trust in the company's presented financial statements. This issue, in the end, will have severe economic consequences for countries. Corporate governance mechanisms, such as the audit committee, institutional ownership, board independence, etc., can moderate the level of earnings manipulation for various purposes, including tax motivations. Studies by Shan (2013) focusing on regulatory bodies that might reduce accounting earnings manipulation found evidence that a high-quality audit committee plays a significant role in enhancing the efficiency of corporate governance mechanisms (Balsam and colleagues (2003)). Additionally, according to Section 2 of the Audit Charter, the purpose of forming the audit committee is to help fulfill the board's supervisory responsibilities and improve it to ensure the following:

1. The effectiveness of governance, risk management processes, and internal controls.
2. The integrity of financial reporting.
3. The effectiveness of internal auditing.
4. The independence of external auditors and the effectiveness of external audits.
5. Compliance with laws, regulations, and requirements.

Considering this, it can be concluded that the proper achievement of a company's objectives by the

audit committee will have a significant impact on improving the quality and efficiency of corporate governance and protecting the company's interests. In the past two decades, corporate governance principles have become one of the essential aspects of business, and attention to it is increasing day by day. Based on findings from researchers such as Gampers and colleagues (2003), corporate governance principles play a significant role in improving a company's performance, and there is a direct correlation between corporate governance principles and company performance in developed and developing financial markets. Many empirical studies conducted in other countries also show that good corporate governance principles lead to better company performance. One of the elements related to company performance is the subject of taxation. If management can reduce the effective tax rate in the long term and pay less tax, it will manage the taxes.

The better this is done, the better performance it will have for company management, as it leads to an increase in net profit after tax and also reduces cash outflows due to tax. Gupta and Newberry (1997).

Barzegar and colleagues (2020) conducted a study on the impact of audit committee characteristics on tax avoidance in companies listed on the Tehran Stock Exchange. For this purpose, 114 companies listed on the Tehran Stock Exchange were selected as a sample during the period from 2012 to 2016, and their data were analyzed using a composite analysis method. The research findings show that the characteristics of the audit committee, including independence, size, and financial expertise of the audit committee members, have a significant inverse effect on companies' tax avoidance.

Ramazani (2019) conducted a study titled "Examining the Relationship Between Audit Committee Characteristics, Tax Avoidance, and Company Strategy in Companies Listed on the Tehran Stock Exchange." The statistical sample of the study consisted of 135 companies during the period from 2013 to 2017. The overall results of the research showed that there is a significant negative relationship between the characteristics of the audit committee, i.e., the financial expertise of the audit committee, audit committee independence, the size of the audit committee, and the variable of tax avoidance.

Additionally, there is a significant positive relationship between these characteristics and the variable of company strategy.

Alizadeh and colleagues (2019) conducted a study titled "The Impact of Motivation and Board Characteristics on Tax Avoidance in Manufacturing Companies." The statistical population consists of companies listed on the Tehran Stock Exchange during the years 2012 to 2017. In this study, two metrics were used to measure tax avoidance: the effective cash tax rate and the difference between accounting profit and taxable profit. To achieve the research objectives, two hypotheses were formulated, and multivariable linear regression methods were used to test them. The results of testing the research hypotheses show the effect of capability and motivation.

Multiple linear regression has been used. The results from the research hypotheses test show that management ability and motivation have a significant positive impact on tax avoidance in companies listed on the Tehran Stock Exchange. Furthermore, the findings indicate an indirect impact of company size and financial leverage on tax avoidance.

Agha-Alikhani et al. (2019) conducted research titled "The Impact of Board Independence on the Relationship Between Cash Dividend Policy and Corporate Tax Avoidance." The statistical population of the research consists of all active companies listed on the Tehran Stock Exchange, and through the systematic elimination sampling method, 92 companies were included in the research sample. The research timeframe is from 2009 to 2016. Regression analysis was used to test

the hypotheses. The research results show that board independence does not have a significant impact on the relationship between cash dividend policy and corporate tax avoidance.

Bousaidi and Sidhom (2020) conducted research titled "Board Characteristics, Ownership Nature, and Corporate Bold Tax: Evidence from Tunisia." The research period is between the years 2011 and 2017. The findings show that the presence of women on the board, CEO duality, and managerial and institutional ownership significantly regulate the level and behaviour of corporate management in aggressive tax practices and reduce the overall corporate risk from the consequences in terms of stabilizing tax positions.

Ting Ting Zheng and colleagues (2019) conducted research titled "Do Audit Committee Characteristics Affect Aggressive Tax?" with a statistical population consisting of all companies listed on the Chinese Stock Exchange. The findings of this research indicate that the characteristics of the audit committee, including size, independence, and financial expertise of committee members, have a significant negative impact on aggressive tax.

Valiu (2017), by examining the impact of corporate governance on tax avoidance, states that the proportion of independent board members has a significant negative impact on corporate tax avoidance. Moreover, the audit committee, audit quality, and company size have a significant positive impact on corporate tax avoidance.

Kiesoter and Mandi (2017) investigated the relationship between corporate governance and tax avoidance. Their research results indicate that improving corporate governance mechanisms leads to a reduction in the effective tax rate. The research results are analyzed in such a way that increasing the effectiveness of corporate governance mechanisms reduces the company's policies in terms of tax avoidance.

3. Research Methods

Research Hypotheses

1. The independence of the audit committee has a negative and significant impact on the company’s aggressive tax behaviour.
2. The financial expertise of audit committee members has a negative and significant impact on the company’s aggressive tax behaviour.
3. The size of the audit committee has a negative and significant impact on the company’s aggressive tax behaviour.
4. The impact of the independence of the audit committee on aggressive tax behaviour is weaker in companies with fewer financial constraints.
5. The impact of the financial expertise of audit committee members on aggressive tax behaviour is weaker in companies with fewer financial constraints.
6. The impact of the size of the audit committee on aggressive tax behaviour in companies with fewer financial constraints.

Population and sample of the research

The statistical population in this study includes companies listed on the Tehran Stock Exchange during the years 2015 to 2019. Since collecting and studying a comprehensive set of data related to the research topic is practically very difficult and sometimes impossible, due to time limitations, resources, and facilities, and sometimes due to the lack of access to complete information, a portion of the said data, which is collected in a set called the sample, will be used. In this research, the study sample has been selected from the statistical population through a systematic exclusion method. In this method, conditions are first defined for selecting the sample, and those instances that do not meet the mentioned conditions are removed from the sample. These conditions are

determined considering the test model hypotheses and the research variables. The reason for using this method and defining such conditions is to homogenize the statistical sample with the entire population and to enable the generalization of the test results to the statistical population. Companies that meet the following criteria will be included in the sample of the present research. Considering these criteria, 172 companies have been selected as the sample.

Data collection and processing method

In general, the information and data of this research have been collected using two methods: library research and organizational documents. One of the most essential stages in information collection is the research of collecting materials through library studies. This tool is used to understand the theoretical foundations and achieve past research results, and research literature. In this regard, accessible resources related to research variables are referred to through books, journals, and internet sites. Additionally, the data needed to test the research hypotheses have been collected from the financial documents of companies, the Codal website, and the Rahavard information software and have been classified in Excel software. For data processing, the R statistical software is used.

Measuring Research Variables Aggressive Tax Measurement

According to the research by Hajijah and colleagues (2017), in the present research, the effective tax rate criterion will be used to measure aggressive tax behaviour. According to Dyreng and colleagues (2008), lower values of the effective cash tax rate indicate a higher level of future tax avoidance. This criterion is obtained by dividing the tax payable by earnings before interest and taxes.

$$ATS = \frac{Tax\ cost}{earnings\ before\ interest\ and\ taxes}$$

Lower values in the above relation indicate a more aggressive tax.

Measurement of Audit Committee Characteristics

The characteristics of the audit committee in the present study include the independence of the audit committee, the financial expertise of the audit committee members, and the size of the audit committee. To measure the independence of the audit committee, the ratio of independent (non-executive) members of the audit committee to the total members of the committee is used. If this ratio is greater than the median independence of the audit committee, the relevant company has audit committee independence and will be assigned a value of one; otherwise, it will be zero. The financial expertise of the audit committee members is a dummy variable. If there are more than two members with financial expertise at the end of the fiscal year, it will have a value of one; otherwise, zero. The size of the audit committee is also a dummy variable, which will have a value of one if the audit committee has at least three members at the end of the fiscal year; otherwise, it will be zero.

Financial Constraint Measurement

In this study, to measure financial constraints, the Z-score index, as detailed below, will be used following Trin and colleagues (2019) and Altman (1968).

In the above relation

0.012X1 + 0.014X2 + 0.033X3 + 0.006X4 + 0.10X5^2 =

X1, X2, X3, X4, and X5 respectively denote the ratio of working capital to total assets, retained earnings to total assets, earnings before tax to total assets, market value of equity to book value of liabilities, and sales to total assets. The determination of companies with high and low financial constraints will be as follows: First, the Z-score for all companies is calculated. Then, the median of this index for all companies is determined; those companies whose Z-score is greater than the

median of all companies have less financial constraint and will receive a value of one, and those whose Z-score is less than the median of all companies will have more financial constraint and will accept a value of zero.

Hypothesis Testing Model

To test the research hypotheses, the following regression model will be used:

$$ATS_{it} = \beta_0 + \beta_1 ACI_{it} + \beta_2 ACFS_{it} + \beta_3 ACS_{it} + \beta_4 FC_{it} + \beta_5 ACI * FC_{it}$$

$$+ \beta_6 ACFS * FC_{it} + \beta_7 ACS * FC_{it} + \beta_8 SIZE_{it} + \beta_9 SG_{it}$$

$$+ \beta_{10} LEV_{it} + \beta_{11} ROA_{it} + \beta_{12} PPE_{it} + \beta_{13} LIQ_{it} + e_{it}$$

AT is the dependent variable and indicates aggressive tax.

ACI is the independent variable and indicates the independence of the audit committee.

ACFS is the independent variable and indicates the financial expertise of the audit committee members.

ACS is the independent variable and indicates the size of the audit committee.

FC is the moderating variable and indicates financial constraint.

SIZE is the control variable for the size of the company and is equal to the natural logarithm of the company's total assets.

SG is the control variable for sales growth and is equal to the current year's sales minus the previous year's sales divided by last year's sales.

LEV is the control variable for financial leverage and is equal to the ratio of long-term debt to the company's total assets.

ROA is the control variable for asset returns and is equal to the ratio of net profit to the total assets of the company.

PPE is the control variable for the company's property, plant, and equipment and is equal to the ratio of property, plant, and equipment to the total assets of the company.

LIQ is the control variable for the company's liquidity and is equal to the ratio of cash to the total assets of the company.

To respond to the second, fourth, and sixth hypotheses, the above model was implemented in two groups of companies with high and low financial constraints, and their results were compared with each other.

4- Data Analysis

Descriptive Statistics of Research Data

To somewhat make the hidden information in the data concise and tangible and to obtain an overview of the characteristics of the samples under examination, the preparation and organization of descriptive statistics are undertaken. This information includes central and dispersion indices such as the mean, median, standard deviation, minimum, and maximum range of variations.

Table 1 - Descriptive Statistics

Elongation factor	Skewness coefficient	Maximum	minimum	Standard deviation		average	variable
1/14	1/90	2/19	-1/115	0/141	0/105	0/108	*ATS*
-0/473	1/24	1	0	0/426	0	0/24	*ACI*
-1/74	0/515	1	0	0/485	0	0/38	*ACFS*
1/629	1/41	1	0	0/254	1/00	0/93	*ACS*
-2/00	0/007	1	0	0/500	1/00	0/50	*FC*
1/07	0/846	20/18	11/19	1/577	14/46	14/68	*SIZE*
1/45	1/67	6/59	-1/00	0/553	0/176	0/265	*SG*
0/475	1/01	0/117	0/000	0/022	0/019	0/025	*LEV*
1/27	0/360	0/603	-0/404	0/138	0/088	0/106	LONG
0/040	0/815	0/093	0/001	0/018	0/027	0/0274	*PPE*
1/40	1/83	0/082	0/000	0/0089	0/004	0/007	*LIQ*

Hypothesis Testing

Before estimating the model, it is necessary to test the stationarity of all variables used in the estimations, as non-stationarity in variables, whether in time series or panel data, leads to the problem of spurious regression. Unlike what is common with time series data, for panel data, one cannot use the Dickey-Fuller and Augmented Dickey-Fuller tests, but rather, it is necessary to test the collective stationarity of variables. In this research, due to the presence of cross-sections (many companies and few time series), the Maddala and Wu (1999) test has been used.

Table 2 - Unit Root Test for Variables

LIQ	FC	ACS	ACFS	ACI	ATS	
16- >2×10	16- >2×10	16- >2×10	16- >2×10	16- >2×10	16- >2×10	P - test value
	PPE	LONG	LEV	SG	SIZE	
	16- >2×10	16- >2×10	16- >2×10	16- >2×10	16- >2×10	P - test value

As observed, the P-value for all variables is less than 0.05. Therefore, the stationarity of all variables can be accepted.

Hypotheses One, Two, and Three

To examine the first to third hypotheses, the following regression model will be fitted:

$$ATS_{it} = \beta_0 + \beta_1 ACI_{it} + \beta_2 ACFS_{it} + \beta_3 ACS_{it} + \beta_4 FC_{it} + \beta_5 SIZE_i + \beta_6 SG_{it} + \beta_7 LEV_{it} + \beta_8 ROA_{it} + \beta_9 PPE_{it} + \beta_{10} LIQ_{it} + e_{it}$$

As stated, before testing the regression model, it is necessary to conduct tests to select the best regression model. The tests carried out are as follows:

The first test is the F-Limer test. If the P-value is less than 0.05, the panel regression method is chosen; otherwise, the OLS regression is selected.

Table 3 - F-Limer Test Results for Hypotheses One, Two, and Three Models

The F Limer test indicates that at the 5% error level, between the OLS method and the panel method, the panel method should be used. After the panel model is selected for the correct identification and recognition of the model used and to determine whether it is a fixed effects model or a random effects model, we use the Hausman test. If the test value is less than 0.05, the fixed effects method is chosen; otherwise, the random effects method will be chosen. The results of this test are as follows:

Table 4 - Hausman test for the first, second, and third research hypotheses

test result	P- value	Statistics of KhiDo	null hypothesis (H0)
Ho is rejected The fixed effects method is better	0/039	19/09	Using the random effects method

The fixed effects method is better.

As observed, the estimation of the model by the fixed effects method is better.

To test whether the model errors used have serial autocorrelation, we use the Breusch-Godfrey test.

If the value is less than 0.05, it can be said that the data examined have serial autocorrelation. The test results are as follows:

Table 5 Breusch-Godfrey test for the first, second, and third research hypotheses

test result	P - value	Khi Do statistics	null hypothesis (H0)
Ho is rejected There is serial autocorrelation	0/000	57/31	There is no serial autocorrelation

As observed, the value is less than 5%, so serial autocorrelation of the model error is accepted. To test whether the model errors used have heteroscedasticity, we use the Breusch-Pagan test. If the value is less than 0.05, it can be said that the data examined have heteroscedasticity. The test results are as follows:

Table 6 Breusch-Pagan test for the first, second, and third research hypotheses

test result	P - value	Khi Do statistics	null hypothesis (H0)
Ho is not rejected There is homogeneity of error variance	0/135	14/90	There is homogeneity of error variance

As observed, the value is greater than 5%, so the homoscedasticity of the model error is accepted. In this regard by summarizing the regression assumptions, it was concluded that we should use generalized panel regression. After performing this regression, the results are as follows:

Table 7 - Model results for the first, second, and third research hypotheses

result	P - value	statistics)	Standard deviation of the error	Variable coefficients In the model	VIF	Coefficients
Significance in the model	0/001	3/203	0/050	0/162	-	Width from the origin
Significance in the model	0/000	-2/75	0/011	-0/031	1/39	***ACI***
Significance in the model	0/020	-2/32	0/010	-0/0002	1/09	***ACFS***
Significance in the model	0/000	-19/48	0/019	-0/038	1/11	***ACS***
Significance in the model	0/000	17/2	0/0011	0/019	1/19	***FC***
Lack of significance in the model	0/176	-1/35	0/0032	-0/0043	1/08	***SIZE***
Lack of significance in the model	0/237	-1/18	0/009	-0/011	1/12	***SG***
Lack of significance in the model	0/419	-0/807	0/262	-0/211	1/14	***LEV***
Significance in the model	0/006	2/77	0/045	0/125	1/17	LONG
Significance in the model	0/001	-3/18	0/296	-0/944	1/11	***PPE***
Lack of significance in the model	0/058	-1/89	0/601	-1/14	1/07	***LIQ***
0/533			Assignment tax			
47/82	F statistic		Model significance test			
0/000	P - value					
2/23	Camera statistics - Watson		Durbin-Watson test			
0/318	P - value					

As observed in Table 7, the maximum VIF values are less than 5; therefore, the presence of all variables in the model will not be compromised. Also, the value 0.000 of the significance test of the model confirms the suitability of the model, and on the other hand, the results of the determination coefficient show that 53.3% of the model also confirms the model's suitability.

On the other hand, the results of the dependent variable are explained by the independent variables.

Considering the results, the independent variable ACI in this model is statistically significant at the 95% level of confidence, and the coefficient of this variable is negative in the model. Therefore, the independence of the audit committee has a negative and significant impact on the company's aggressive tax strategies.

Considering the results, the independent variable ACFS in this model is statistically significant at the 95% level of confidence, and the coefficient of this variable is negative in the model. Therefore, the financial expertise of the audit committee members has a negative and significant impact on the company's aggressive tax strategies.

Considering the results, the independent variable ACS in this model is statistically significant at the 95% level of confidence, and the coefficient of this variable is negative in the model. Therefore, the size of the audit committee has a negative and significant impact on the company's aggressive tax strategies. In the control variables, considering the results, the independent variable FC in this model is statistically significant at the 95% level of confidence.

According to the results, the independent variable SIZE in this model is not statistically significant at the 95% confidence level. According to the results, the independent variable 5G in this model is not statistically significant at the 95% confidence level.
According to the results, the independent variable LEV in this model is not statistically significant at the 95% confidence level.
According to the results, the independent variable ROA in this model is statistically significant at the 95% level of confidence.
According to the results, the independent variable PPE in this model is statistically significant at the 95% level of confidence.
According to the results, the independent variable LIQ in this model is not statistically significant at the 95% confidence level.
The fourth, fifth, and sixth hypotheses
To investigate these hypotheses, the regression model below will be fitted separately for companies with more and less financial constraints:

$$ATS_{it} = \beta_0 + \beta_1 ACI_{it} + \beta_2 ACFS_{it} + \beta_3 ACS_{it} + \beta_4 SIZE_{it} + \beta_5 SG_{it}$$
$$+ \beta_6 LEV_{it} + \beta_7 ROA_{it} + \beta_8 PPE_{it} + \beta_9 LIQ_{it} + e_{it}$$

As mentioned, before testing the regression model, it is necessary to conduct tests to select the best regression model. The first test is the F-Limer test. If the P-value is less than 0.05, the panel regression method will be chosen; otherwise, the OLS regression method will be selected.
Table 8 F-Limer test results for the research hypotheses four, five, and six

test result	- Amount	F statistic	Null Hypothesis (H0)	Model type
H0 hypothesis is rejected. The panel method is better	0/000	2/077	Preference of OLS method	More financial constraints
H0 hypothesis is rejected. panel method is better)	0/000	2/818	Preference of OLS method	Less financial constraints

The F Limer test indicates that at a 5% error level, the panel method should be used between the OLS method and the panel method. After the panel model is selected, the Hausman test is used to correctly identify whether the fixed effects model or the random effects model is used. If the test value is less than 0.05, the fixed effects method will be selected; otherwise, the random effects method will be chosen. The results of this test are as follows:
Table 9- Hausman test for the fourth, fifth, and sixth research hypotheses

test result	P- value	Chi-square statistic	null hypothesis (H0)	Model type
Ho is not rejected. The random effects method is better	0/425	8/84	Using the random effects method	More financial constraints
Ho is rejected. The fixed effects method is better)	0/0037	24/447	Using the random effects method	Less financial constraints

As can be seen, the P-value in the model with a higher financial restriction is more than 5 percent, and in the model with a lower financial restriction, it is less than 5 percent; thus the random and fixed effects models are respectively accepted. To test whether the error of the model used has a serial correlation, the Breusch-Godfrey test is used. If the value is less than 0.05, it can be said that the data under review have serial correlation. The test results are as follows:

Table -10 Breusch-Godfrey test for the fourth, fifth, and sixth research hypotheses

test result	P - value	Statistics of KN Do	Null hypothesis (H0)	Model type
HO is rejected There is serial autocorrelation	0/0012	10/36	There is no serial autocorrelation	More financial constraints

As observed, the value in both models is less than 5%, hence the serial correlation of the model error is accepted. To test whether the model error used has heteroscedasticity, we utilize the Breusch-Pagan test. If the value is less than 0.05, it can be said that the data under investigation has heteroscedasticity. The test results are as follows:

Table 11- Breusch-Pagan test for the fourth, fifth, and sixth research hypotheses

Ho is not rejected There is homogeneity of error variance	0/274	11/03	There is homogeneity of error variance	Limitation Elle s
Ho is not rejected There is homogeneity of error variance	0/573	7/62	There is homogeneity of error variance	Limitation or a less

As observed, the P-value in both models is more than 5%, hence homoscedasticity of the model error is accepted in these two models. In this context, by summarising the assumptions of the regression, it has been concluded that a generalized panel regression should be used. After conducting this regression, the results are described in the table below.

Table 12 Results of the fourth, fifth, and sixth research hypothesis models

$$ATS_{it} = \beta_0 + \beta_1 ACI_{it} + \beta_2 ACFS_{it} + \beta_3 ACS_{it} + \beta_4 SIZE_{it} + \beta_5 SG_{it} + \beta_6 LEV_{it} + \beta_7 ROA_{it} + \beta_8 PPE_{it} + \beta_9 LIQ_{it} + e_{it}$$

	P – value	t statistic	Standard deviation of the error	In the model	VIF	Coefficients
Significance in the model	0/025	2/26	0/079	0/180	-	Width from the origin
Significance in the model	0/000	-17/069	0/0018	-0/032	1/18	***ACI***
Significance in the model	0/000	-3/310	0/0017	-0/0055	1/29	***ACFS***
Significance in the model	0/000	-4/209	0/0037	-0/016	1/17	***ACS***
Lack of significance in the model	0/871	-0/162	0/006	-0/00089	1/09	***SIZE***
Lack of significance in the model	0/288	-1/063	0/012	-0/013	1/07	***SG***
Lack of significance in the model	0/406	-0/831	0/502	-0/417	1/11	***LEV***
Lack of significance in the model	0/574	-0/562	0/069	-0/039	1/19	LONG
Lack of significance in the model	0/093	-1/682	0/516	-0/867	1/14	***PPE***
Lack of significance in the model	0/492	-0/687	0/805	-0/553	1/17	***LIQ***
0/209			Assignment tax			
39/97	F statistic		Model significance test			

As observed in Table 12, the maximum VIF values are less than 5, so the presence of all variables in the model will not confound it. Also, the value (0.000) of the model's significance test confirms the suitability of the model. On the other hand, the determination coefficient results show that in the model, "more financial constraint" and "less financial constraint" explain 20.9% and 37.7% of the dependent variable, respectively, by the independent variables.

In companies with more financial constraints

Based on the results, the independent variable ACI in this model is statistically significant at the 95% confidence level.

Based on the results, the independent variable ACFS in this model is statistically significant at the 95% confidence level.

Based on the results, the independent variable ACS in this model is statistically significant at the 95% confidence level.

According to the results, the independent variable SIZE in this model is not statistically significant at the 95% confidence level.

According to the results, the independent variable SG in this model is not statistically significant at the 95% confidence level.

According to the results, the independent variable LEV in this model is not statistically significant at the 95% confidence level.

According to the results, the independent variable ROA in this model is not statistically significant at the 95% confidence level.

According to the results, the independent variable PPE in this model is not statistically significant at

the 95% confidence level.
According to the results, the independent variable LIQ in this model is not statistically significant at the 95% confidence level in companies with fewer financial constraints.
According to the results, the independent variable ACI in this model is statistically significant at the 95% confidence level.
According to the results, the independent variable ACFS in this model is not statistically significant at the 95% confidence level.
According to the results, the independent variable ACS in this model is statistically significant at the 95% confidence level.
According to the results, the independent variable SIZE in this model is not statistically significant at the 95% confidence level.
Table 13 Group test for examining the fourth, fifth, and sixth hypotheses

P - value	t statistics	variable
0/000	17/09	*ACI*
0/000	51/61	*ACFS*
0/000	28/49	*ACS*

In the fourth research hypothesis, the results of the group test for comparing the coefficients of the ACI variable indicate that in this test, the statistic is statistically significant at the 95% confidence level. On the other hand, the absolute value of the t-statistic in the model with greater financial constraints is greater than in the model with fewer financial constraints. Therefore, the impact of the independence of the audit committee on bold taxation in companies with financial constraints is less weak.
In the fifth research hypothesis, the results of the group test for comparing the coefficients of the ACFS variable indicate that in this test, the statistic is statistically significant at the 95% confidence level. On the other hand, the absolute value of the t-statistic in the model with greater financial constraints is greater than the model with fewer financial constraints. Therefore, the impact of the audit committee's financial expertise on bold taxation in companies with financial constraints is less weak.
In the sixth research hypothesis, the results of the group test for comparing the coefficients of the ACS variable indicate that in this test, the statistic is statistically significant at the 95% confidence level. On the other hand, the absolute value of the t-statistic in the model with greater financial constraints is greater than in the model with fewer financial constraints. Therefore:
The impact of the size of the audit committee on bold taxation in companies with fewer financial constraints is weaker.
Table 14 - Summary of research hypotheses results

	The independence of the audit committee has a negative and significant effect on the company's reckless taxation.	First
	The financial expertise of the members of the audit committee has a negative and significant effect on the company's tax liability.	Second
	The size of the audit committee has a negative and significant effect on the tax liability of the company.	Third
	The effect of audit committee independence on tax evasion is weaker in companies with less financial constraints.	Fourth
	The effect of financial expertise of audit committee members on tax evasion is weaker in companies with less financial constraints.	the fifth

5. Conclusion and Suggestions

The results of the first hypothesis test of the research showed that the independence of the audit committee has a significant impact on the company's aggressive tax. On the other hand, given that the sign of the independence variable coefficient of the audit committee in this hypothesis model is negative, the impact of the audit committee's independence on the company's aggressive tax is negative or inverse, and the first hypothesis of the present research is accepted. The results of this hypothesis indicate that as the number of independent or non-executive members in a company's audit committee increases, activities related to tax avoidance or aggressive tax activities in that company decrease, and the level of the company's aggressive tax will be reduced. The results of this hypothesis are in line with the findings of Ting Ting Zheng and colleagues (2019), Barzegar and colleagues (2020), Ramazani (2019), and Abbasi (2017).

The results of the second hypothesis test of the research showed that the financial expertise of the audit committee members has a significant impact on the company's aggressive tax. On the other hand, given that the sign of the financial expertise variable coefficient of the audit committee members in this hypothesis model is negative, the impact of the financial expertise of the audit committee members on the company's aggressive tax is negative or inverse, and the second hypothesis of the present research is accepted. The results of this hypothesis indicate that as the number of members with financial expertise in a company's audit committee increases, activities related to tax avoidance or aggressive tax activities in that company decrease, and the level of the company's aggressive tax will be reduced. The results of the hypothesis are in line with the findings of Ting Ting Zheng and colleagues (2019), Barzegar and colleagues (2020), Ramazani (2019), and Abbasi (2017).

The results of the third hypothesis test of the research showed that the size of the audit committee has a significant impact on the company's aggressive tax. On the other hand, given that the sign of the size variable coefficient of the audit committee in this hypothesis model is negative, the impact of the size of the audit committee on the company's aggressive tax is negative or inverse, and the third hypothesis of the present research is accepted. The results of this hypothesis indicate that as the number of members of a company's audit committee increases, or, in other words, as the size of a company's audit committee becomes larger, activities related to tax avoidance or aggressive tax activities in that company decrease, and the level of the company's aggressive tax will be reduced. The results of this hypothesis are in line with the findings of Ting Ting Zheng and colleagues (2019), Barzegar and colleagues (2020), Ramazani (2019), and Abbasi (2017).

The impact of the independence of the audit committee on aggressive tax practices is weaker in companies with fewer financial constraints. The impact of the financial expertise of the audit

committee on aggressive tax practices is weaker in companies with fewer financial constraints. The impact of the size of the audit committee on aggressive tax practices is weaker in companies with fewer financial constraints.

Reviewing the results related to the test of the fourth hypothesis of the research shows that considering the impact of the independence of the audit committee on aggressive tax practices, the absolute value of the t-statistic in companies with fewer financial constraints is lower compared to the value of this statistic in companies with more financial constraints. Thus, the impact of the independence of the audit committee on aggressive tax practices in companies with fewer financial constraints is weaker, and the fourth hypothesis of the present research is also accepted. Moreover, reviewing the results related to the test of the fifth hypothesis of the research shows that given the impact of the financial expertise of audit committee members on aggressive tax practices, the absolute value of the t-statistic in companies with fewer financial constraints is lower compared to the value of this statistic in companies with more financial constraints. Therefore, the impact of the financial expertise of the audit committee members on aggressive tax practices in companies with fewer financial constraints is weaker, and the fifth hypothesis of the present research is also accepted. Finally, reviewing the results related to the test of the sixth hypothesis of the research indicates that considering the impact of the size of the audit committee on aggressive tax practices, the absolute value of the t-statistic in companies with fewer financial constraints is lower compared to the value of this statistic in companies with more financial constraints. Hence, the impact of the size of the audit committee on aggressive tax practices in companies with fewer financial constraints is weaker, and the sixth hypothesis of the present research is also accepted.

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