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ИССЛЕДОВАНИЕ ВЛИЯНИЯ САМОУВЕРЕННОСТИ МЕНЕДЖЕРОВ НА УКЛОНЕНИЕ ОТ УПЛАТЫ НАЛОГОВ С УЧЕТОМ НАДЗОРНОЙ РОЛИ КОМИТЕТА ПО ФИНАНСОВОМУ АУДИТУ

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АННОТАЦИЯ

Самоуверенные генеральные менеджеры могут использовать свое положение и влияние в своих компаниях в интересах достижения личных амбиций, за которыми может последовать агрессивная налоговая политика, а также уклонение от налоговых платежей. Между тем деятельность комитетов по финансовому аудиту направлена на то, чтобы выбирать методы учета, проводить независимую оценку достоверности финансовой отчетности, а также разрешать выявленные противоречия в отношении финансовой информации. Настоящее исследование направлено на изучение влияния деятельности комитета по финансовому аудиту на взаимосвязь между самоуверенностью менеджеров и их уклонением от уплаты налогов в компаниях, допущенных к биржевому рынку ценных бумаг Тегерана, в период с 2015 по 2020 г. Данное исследование носит прикладной характер с точки зрения его целей и использует методы корреляционного анализа. Для анализа статистических данных использовалась многомерная линейная регрессия. При проведении статистического анализа использовался программный пакет Eviews. Полученные результаты показали, что чрезмерная самоуверенность менеджеров в значительной степени коррелирует с уклонением от уплаты налогов, данная связь является линейной. Таким образом, получено, что увеличение самоуверенности менеджеров также приводит к большему уклонению от уплаты налогов компанией. Более того, в дальнейших результатах исследования было установлено, что деятельность Комитета по финансовому аудиту оказывает существенное влияние на взаимосвязь между самоуверенностью менеджеров и уклонением от уплаты налогов компанией, причем с обратным эффектом.

Ключевые слова: самоуверенность менеджеров, уклонение от уплаты налогов, ревизионная комиссия, биржевой рынок ценных бумаг

INVESTIGATING THE EFFECT OF THE MANAGERS' OVERCONFIDENCE ON THE TAX AVOIDANCE CONSIDERING THE MODERATING ROLE OF AUDIT COMMITTEE

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ABSTRACT

The overconfident general managers use their position and influence in their companies to reach their personal ambitions that can be followed by invasive tax policies, lower tax payments and showcasing of the higher incomes in relation to the general manager's reward. In between, the audit committees have been designed so as to act independently and resolve the conflicts between the internal and external managers regarding the financial information and the selection of the accounting methods. Thus, the present study aims at investigating the effect of the audit committee on the relationship between the mangers' overconfidence and tax avoidance in the companies accepted to Tehran's securities exchange market for the years between 2015 and 2020. The present study is an applied research in terms of the study objectives and it is a correlation-descriptive research in terms of the method. In order to investigate the study subject, multivariate linear regression was used for data analyses. Then, Eviews Software package was utilized to perform the statistical analyses of the obtained information. The results indicated that managers' overconfidence is significantly correlated with tax avoidance and that the relationship is direct meaning that the increase in the managers' overconfidence causes an increase in the company's tax avoidance, as well. Moreover, it was found out in the other study's findings that the audit committee (financial expertise of the audit committee) exerts a significant effect on the relationship between the managers' overconfidence and company's tax avoidance and that the effect is reverse.

Keywords: managers' overconfidence, tax avoidance, audit committee, securities' exchange market.

Introduction

Tax avoidance includes anything that reduces a company's tax amount in a comparison of the profits before and after tax and it does not necessarily include improper behaviors. In fact, according to Hanlon, M. and Heitzman, S. [13], tax avoidance points to a closed set of tax planning strategies that can include illegal tax evasion as well as legal tax plans. In most of the countries, a substantial part of the governments' income resources is supplied by taxing. Tax avoidance and tax evasion in the countries have caused the tax revenues to be smaller than what is estimated. This has made the countries apply their efforts for reducing the tax avoidance and amending taxing system. Furthermore, based on the prior research, tax avoidance can have a negative effect on company value and stock shares' price; it can be also followed by the negative market reactions.

As one of the most serious attributes that influence the decisions made by the organizations' managers, overconfidence is amongst the most important of the modern behavioral-financial concepts reserving a particular position in the financial and psychological theories. Since managers, as compared to ordinary people and other staff members, possess a higher power and greater decision-making rights, their personality can influence their decisions and methods. Overconfidence is a managerial attitude forcing the companies to change their financial reports. This perspective has been supported by the standards of auditing statements (SAS), no.9, which expresses that the special attitudes are the contingent stimuli of the fraud [12].

Rijsenbilt A. and Commandeur H. have vividly proved that overconfidence of the managers is a psychological status associated with a higher probability of fraud [19]. As stated by these managers, managers with overconfidence can apply invasive tactics for meeting their needs for self-admiration. Prior studies agree that audit committee is negatively associated with profit management [21] and improves the quality of the financial reporting. Audit committees tend to share the experiences and knowledge amongst the members with various skills and this can support the effective supervision on the general manager's decisions. Larger audit committees are envisioned as the sources of talents and human workforce which together guarantee the quality of the financial disclosure [1].

In addition, as expressed by Quang Khai Nguyen, audit committees have been designed in such a way that they can act independently to resolve the controversies between the internal and external managers concerning the financial information and selection of the accounting methods [18]. They have been designed so as to supply the supervisory management for protecting and guarding the shareholders' wealth and they are capable of limiting and preventing the arbitrary managerial decisions [22]. The efficiency of this committee guarantees the quality of the audit committee via supervising the main accounting choices as a result of which such arbitrary behaviors as profit management or fraud are reduced [29]. Furthermore, Thiruvadi, S. and Huang, H. W. (2011) have come to this recognition that the audit committees play a significant role in avoiding or, at least, limiting the accounting scandals and arbitrary managerial behaviors [27].

According to the prior studies, the individual features of the senior managers and general managers influence the decision-making in organizational level, including the invasive tax policies. However, tax avoidance is influence not only by the general managers individually but also by another set of factors in organizational level. Thus, the present study aims at investigating the effect of the managers' overconfidence on the tax avoidance through the moderating role played by the audit committee.

Study's Theoretical Foundations

Managers' Overconfidence

Overconfident managers are the ones who intentionally overestimate the company's good performance and underestimate its weak performance [5]. In another definition by Malmendier and Tate (2008), general managers' overconfidence has been explicated as the general managers' being prone to predict a lot of positive results or overestimation of the positive results' occurrence [16]. Roll (1986) was the first person who used the term general managers' overconfidence in financial grounds and showed that the existence of overconfident managers is a reason why the mergers happen and companies' value are reduced and more money is spent on the company goals' accomplishment [20]. Following his lead, Malmendier and Tate (2005 and 2008) expressed that overconfidence leads to more investment with the managers becoming willing to perform mergers and acquisitions that end in reduction in the company's value [16, 17].

Overconfidence in managers makes them overestimate the cash flows and prospective profitability of their business entities. This might cause confusion in the selection of the financial supply methods by the managers in such a way that such overconfident managers always imagine that their companies have been valuated less than reality [14]. Glesir et al (2003) have shown regarding the professional and nonprofessional managers' overconfidence that the professional and more sophisticated managers, as compared to nonprofessional and less sophisticated ones, are more overconfident in performing many of their own duties, especially the identification and recognition of the processes as well as prediction of the fluctuations and changes in the shares' prices.

Overconfident managers spend a longer period for continuing their companies' activities in contrast to the other companies' managers. Overconfident managers are optimistic about the investment costs [7]. Managers' overconfidence is a personality characteristic that can be defined in the form of a behavioral bias and possession of unreal (positive) beliefs regarding each of an outcome's aspects under the uncertainty conditions. In this case, mean estimations would be exaggerated [25].

Tax Avoidance

Tax avoidance is often defined as the tax reduction. This definition conceptually follows the explanations by Dyreng et al (2008) that include all the transactions influencing the companies' tax liabilities [11]. The above definition does not distinguish between the real activities favoring and targeting tax and the avoidance activities that have been specifically considered for tax reduction and the tax payment advantages intended by the influential activities. If tax avoidance is considered as reflecting a chain of tax planning strategies wherein there are things like municipal bond investors who fall on one of the two extremes (lower tax), words like tax non-observance, tax evasion, tax aggression and tax sheltering would be closer to the chain's other end. The tax planning activities or tax strategy can fall on any point in the chain's length considering the quality of the activities' aggressiveness in line with tax reduction. Anyway, as in art, there is also a degree of aggression (beauty) seen in the commercial activities by the onlookers meaning that various individuals have different ideas about the transactions' aggression. Various words are often used for describing the tax reporting behaviors (aggression, shelter, evasion, non-observance and so forth). In this research and in line with reducing the concentration on the semantic matters, the general term "tax avoidance" has been applied [13].

The discussions on tax avoidance have been mostly presented about the companies wherein such a subject as the separation of ownership from control has been posited because the real persons are less frequently engaged in tax evasion and tax avoidance due to their consideration of issues like the discovery and penalty likelihood and risk-aversion and/or internal motivations such as social responsibility [6]. However, the shareholders of the companies normally expect the managers to seek their own personal interests and they seek reductions in the tax debts and increases in the tax avoidance as far as the additional profits attained from the reduction in the probable debts surpass the additional costs they expect. Therefore, tax avoidance can be a reflection of the agency theory and it may lead to tax decisions more serving the managers' personal interests. Therefore, one of the challenges in the face of the shareholders and the board of managers is finding the controlling methods and motivations parallel to the minimization of the agency costs [15].

Desai et al (2007) believe that the managers seeking for their personal interests render the company's structure more complicated and perform transactions that bring about reductions in the tax and, in this way; they are actually taking advantage of the company's resources for their personal interests [9]. They believe that the existence of strong tax agents causes increase in the supervision on the mangers' tasks and reductions in the misuse of the companies' internal resources.

Audit Committee

Horwich (2003) believes that the audit committee causes better management performance as well as increase in the reliability of the financial reporting process through financial statements' quality and accuracy supervision and internal controls and correct financial reporting [30]. As believed by Lambe (2005), audit committees cause reductions in the management's illegal actions and improvements in the quality of financial reporting via supervising the accuracy of the financial statements and other important financial issues, investigating the significant accounting judgments and estimations, examining the internal controls and risk management systems, effective supervision on internal auditing, proposing the appointment of independent audit, investigating the audit's independence and exploring the effectiveness of the auditing works and offering non-auditing services [31].

Xie et al (2003) investigated the relationship between the existence of audit committee and creation of the obligations and liabilities as well as the relationship between the number of the audit committee's sessions and amount of the debts [32]. The results of the study indicated that the existence of an active audit committee along with a larger number of auditing sessions and hiring of members with financial expertise are some of the important factors giving rise to the reductions in the earnings smoothing risk and illegal managerial actions. Klein (2002) concluded in a research that there is a negative relationship between the audit committee's independence and creation of abnormal obligations stemming from the management's fraud meaning that the reduction in the audit committee's independence increases the abnormal obligations [33].

Audit committees should take measures in line with the accomplishment of each of their tasks. The supervisory role of the audit committee is vital particularly in achieving a high quality of financial reports. Higher transparency in the audit committees' activities and programs would be accompanied by more trust in the shareholders and the other financial reports' users. The effectiveness of the audit committee can be also approached from this perspective that independent auditors should take into account the effectiveness of the audit committee's supervision over the financial reporting when evaluating the control environment as a part of the internal control methods governing the financial reporting [8].

The audit committee's members are expected to be constantly in touch with the key strategic individuals of the company. For example, it is usually helpful to the head of the audit committee to meet the company's independent audit before the final auditing session and ask for the issues that may have caused worries to the audit and let the other members of audit committee know about them, if any. The audit committee should discuss about performance evaluations, retention and dislocation and salary and wage of the independent and internal auditors in the course of the sessions annually and examine the scales required for each of these cases [24]. Dezort and Hoston (2003) believe that the audit committee should hold sessions at least four times a year. Additionally, it has to hold specialized meetings with the independent audits, internal audits and management at least once a year.

Anderson and Reeb (2003) believe that the specify he type of the required controls and quality of their functioning in the beginning of the work. To do so, sessions are held in the presence of the management and the internal auditors [34]. Then, audit committee should hold a session in the presence of the independent audit so as to investigate the adequacy of the company's internal controls. Treadway (national fraudulent financial reporting) Commission has offered a report regarding the internal controls' framework. In this report, internal controls' evaluations have been mentioned as one of the primary duties of the audit committee. It defines the internal controls as a process designed for logically ensuring the accomplishment of the organizational objectives (efficiency and effectiveness of the operations, reliability of the financial reporting and match with the rules and regulations) [4].

Based on a research by Kalbers and Fogarty (1993), there is a relationship between the amount of the audit committees' power and their effectiveness [35]. From their perspective, the effectiveness can be ensured by three factors, namely financial reporting, independent auditing and internal controlling methods. Regarding the effect of sophistication on the audit committee members' judgment, Dezort (1998) has come to this conclusion that possession of experience causes considerable differences in the evaluation of the internal controls by the audit committee members. In other words, the experienced members in the audit committee make a lot better judgments about the internal controls similar to those of the independent audits in contrast to the non-experienced members [10].

Study Background

Emma Garcia-Meca et al (2021) dealt with the effect of the managers' overconfidence on the tax avoidance considering the moderating role of the audit committee in Spanish companies based on 1303 observations/years for a period of time from 2008 to 2017 [12]. The study findings indicated that the managers' overconfidence is positively correlated with the tax avoidance. It is also observed in the other results that the audit committee has a negative effect on the relationship between the managers' overconfidence and tax avoidance.

Xiaomei Han et al (2021) investigated the effect of the tax avoidance in Chinese companies on the staff's wage levels and the internal gap between the executive managers and ordinary staff members based on the salary distribution perspective [28]. The results indicated that the companies' tax avoidance can considerably improve all the staff members' mean wage level with the interest, including the staff members' reward, stemming from the tax avoidance not being equally distributed. Most of the wage increases are allocated to the senior management and this widens the gap between the managers' wage and the ordinary staff's wage.

In an investigation of the audit committee and auditing quality, Salem Al-Hababsah and Sina Yekini (2021) performed empirical analyses with regards to the industrial expertise, legal expertise and gender diversity in Jordan based on 1035 observations (year/company) and according to two auditing quality record indices and through the use of the various estimation methods and stated that the industrial expertise of the audit committee is significantly important parallel to the guaranteeing of the auditing quality [23]. However, the legal expertise of the audit committee and the gender diversity of the audit committee were found not exerting a large deal of effect on the auditing quality.

In a research termed "investigating the cost of research and development and prospective performance of the company" in Vietnam during the years from 2007 and 2016, Tebourbi et al (2020) emphasized on the role of the overconfidence and governmental ownership. The study results were indicative of the idea that the R&D cost influences the future performance of the company [26]. They also concluded that overconfidence and governmental ownership significantly and positively influences the company's future performance.

Lai et al (2021) investigated the effect of the manager's extreme overconfidence and efficiency of investment in human workforce and their findings indicated that the companies with overconfident general managers feature lower efficiency of investment in the human workforce [36].

Having investigated the effect of management's overconfidence on the efficiency of the investment in the human workforce of the companies accepted to Tehran's securities exchange market during the years from 2014 to 2019 based on a sample comprised of 120 companies, Raja'eizadeh et al (2021) used panel data-based multiple regression analysis to conclude that management's overconfidence exerts an inverse and significant effect on the efficiency of investment in human workforce.

Tajwidi and Gha'em (2021) investigated the properties of audit committee and profit management for 88 companies accepted to Tehran's securities exchange market for a period between 2013 and 2015 [2]. Their results signified that the participation of the financial experts in the audit committee, increase in the independence and size of the audit committee are significantly associated with the lower profit manageability. Moreover, the study findings implied the existence of C-shaped inverse relationship between the audit committee's independence and profit management. Put differently, low independence of the audit committee does not enable the prevention of the managers' opportunistic behaviors.

Setayesh and Ebrahimi (2021) dealt with the relationship between the substitutive relationship of the financial leverage application in the capital structure and tax avoidance amongst the companies accepted to Tehran's securities exchange market [3]. To do so, they used a sample composed of 1026 observations. The results of the first hypothesis's test were expressive of the negative and significant relationship between the use of financial leverage and tax avoidance so the financial leverage can be substituted for the tax avoidance with almost similar results. The results obtained from the second hypothesis's test indicated that financial leverage's cost moderates the relationship between the financial leverage and tax avoidance practices.

Study Method

The present study is an applied research in terms of the objectives and it is a correlation-descriptive research in terms of the method. Use has been made herein of the regression analysis method. in order to collect the required information, reference was made to the information in such banks as Rah Avard Nowin or Tadbir Pardaz. The data related to each of the variables were gathered by referring to CDAL website.

In terms of the spatial realm, the study incorporates Tehran's securities exchange market. Due to the large vastness of the population and study sample volume and considering the incongruity of some of the study's participants, screening methods were applied for selecting the study sample volume. The chosen sample included all the companies accepted to Tehran's securities exchange market. The study inclusion criteria were the followings:

- The companies' shares should have been transacted from 2015 until 2020 in Tehran's securities exchange market actively and without transactional cessation.
- The companies should not be members of the financial intermediation industries, investment firms, banks and insurance companies.
- Their fiscal year should end in March and they should have not changed their fiscal year.
- They should have been accepted to Tehran's securities exchange market before 2015.
- They should have not been eliminated from Tehran's securities exchange market until the end of 2020.

Study Model

The hypotheses would be tested and estimated using the following models.

The statistical model for the investigation of the first hypothesis:

$$Tax\ avoidance\ Q_{it} = \alpha_0 + \beta_1 overcon + \beta_2 Size + \beta_3 BM + \beta_4 LEV + \beta_5 Loss + \beta_6 CF + \varepsilon$$

The statistical model for the investigation of the first hypothesis:

$$Tax\ avoidance_{it} = \alpha_0 + \beta_1 overcon + \beta_2 Exp\ Committee + \beta_3 (overcon \times Exp\ Committee) + \beta_4 Size + \beta_5 BM + \beta_6 LEV + \beta_7 Loss + \beta_8 CF + \varepsilon$$

Overconfidence

Companies' investment decisions contain information about the management's extreme confidence. In order to measure this variable, two indicators, namely managers' bias prediction and investment surplus, can be utilized. In this research and in match with the study by Ahmad and Duellamanm (2013), investment surplus has been applied for measuring the managerial overconfidence [5]. To do so, the following regression model is estimated in a cross-sectional manner and, after that, the residual is calculated for every year. If the following model's residual is found larger than zero for a company, it would mean that excessive investment has been made in that company. In this regard, model's residual being found equal larger than zero, a value equal to unity is assigned to the investment term otherwise it is assigned with a zero indicating that no excessive investment had been made (Jahanshahi, 2018).

$$ASSET_{it} * GR_{it} = \beta_0 + \beta_1 SALE_{it} * GR_{it} + \varepsilon_{it}$$

In order to assess tax avoidance, the following relation is used as it has also been utilized in the study by Carmen (2018).

$$\text{effective tax rate} = \frac{tax\ cost}{pre - tax\ profit}$$

Since the more the effective tax rate is reduced for a company, the higher its tax avoidance would be, the computed tax rates should be multiplied by minus one (-1).

Audit Committee

According to the study by Rousta'ei et al (2020), in order to measure the audit committee's effect, use has been made herein of the audit committee's financial expertise in this way that a value equal to unity would be assigned thereto in case a company's audit committee is found possessing financial expertise (most of the team members are specialists) otherwise a value equal to zero would be assigned thereto.

Control Variables

$Size_{it}$: the natural logarithm of the company's market value at the end of the fiscal year as the company size scale

BM_{it}: the ratio of the company's book value to market value

$Leverage_{it}$: a company i's financial leverage in year t and it is obtained via dividing the debts by the assets' book value.

$Loss_{it}$: it is the company's loss; if a company is found having sustained losses during the current year, it is unity otherwise it is zero.

CF_{it}: it is obtained based on the ratio of the operating cash flow to the total assets.

In order to investigate the study subject, data analyses have been carried out using multivariate linear regression in this way that the information obtained from the investigation of the studied variables is inserted in Excel Software and the calculations are conducted for gaining the results. Then, Eviews Software package is run for statistical information analyses.

Findings

The descriptive statistics will be presented first and, then, the inferential statistics are given.

In order to investigate the stationary nature of the data, unit root test will be utilized.

Considering table (), it can be stated that the null hypothesis indicating the existence of a unit root for the variables cannot be accepted since the probabilities calculated in Levin, Lin and Chu's test are below 0.05 hence all of the variables are stationary.

In order to specify the model's type in various time periods and cross-sections of the panel data, restricted F (Chaw) test will be used. The test's results have been given in table (3).

The outputs of F-statistic tests indicated that the null hypothesis is rejected because the significance level is below 5%; so, the panel format is selected from amongst the panel data and cumulative regression (combined) data. Furthermore, in order to select the fixed and random effects of the model, Hausman's test will be utilized herein. The random effects' model will be selected in case that the significance level of

Table 1 – Variables' descriptive indices

Panel A	Continuous variables				
	Mean	Median	Maximum	Minimum	Standard Deviation
Tax avoidance	0.10	0.10	0.91	-0.24	0.11
Managers' overconfidence	-0.02	-0.10	1.70	-0.88	0.36
Company size	15.49	15.32	20.80	11.90	1.77
Financial leverage	0.58	0.57	1.48	0.03	0.23
Operating cash flow	0.11	0.09	0.73	-0.46	0.14
Book value to market value	0.24	0.19	0.95	-0.74	0.24
Panel B	**Discrete variables**				
Variable's name	Class type	Frequency	Percentage		
Audit committee	0	209	23.22		
	1	691	76.78		
Company's loss	0	766	85.11		
	1	134	14.89		

Table 2 – Summary of the unit root test's results-Levin, Lin and Chu test

Variable's name	Test statistic	Significance level	Result
Tax avoidance	-39.77	0.0000	Stationary
Managers' overconfidence	-18.78	0.0000	Stationary
Audit committee	-4.06	0.0000	Stationary
Company size	-39.25	0.0000	Stationary (first order)
Financial leverage	-8.90	0.0000	Stationary
Operating cash flow	-13.19	0.0000	Stationary
Book to market value	-14.67	0.0000	Stationary
Company loss	-5.62	0.0000	Stationary

Table 3 – The results of Chaw (restricted-F) test in an investigation of the study's hypotheses model

Model	F-statistic	P-value	Chow test's result	Test type
First model	46.01	0.0000	H_0 is rejected	Panel data
Second model	42.25	0.0000	H_0 is rejected	Panel data

Hausman test is found equal to 5%; the fixed effects' model will be selected in case that the significance level of Hausman's test is found below 5%.

Hypothesis One: Managers' overconfidence significantly influences the tax avoidance.

It has been found out in an investigation of the overall model's significance that F-statistic's significance level is smaller than 5% (0.00); hence, the model is significant and H_1 hypothesis is accepted for the F-test in a 95% confidence level. The determination coefficient of the model, as well, is expressive of the idea that the explanatory variables account for 0.91% of the tax avoidance variations. Moreover, the adjusted determination coefficient has been calculated equal to 0.89%. Additionally, in order to investigate the correlation between the error terms, the Durbin-Watson statistic should be taken into consideration. Its value is 1.91 and in an acceptable range, so the error terms' correlation assumption is rejected. Considering the results of the mangers' overconfidence test, since the significance level is below 5% which is reflective of its significant relationship with the company's tax avoidance, the first hypothesis is accordingly affirmed in a 95% confidence level. Since the coefficient obtained for this variable is positive, there is subsequently approved that there is a direct relationship between the managers' overconfidence and company's tax avoidance. In addition, the control variables like operating cash flow, book to market value and company size are not significantly associated in a 95% confidence level with the company's tax avoidance considering the larger than 5% significance rate. However, the financial leverage and company loss are significantly associated with tax avoidance considering the fact that the significance level has been found below 5%.

Hypothesis Two: Audit committee exerts a significant effect on the relationship between the managers' overconfidence and tax avoidance.

Table 4 – Results of Hausman's test in an investigation of the study's hypotheses

Hausman test	Statistic	P-value	Result of Hausman test	Test type
First model	31.06	0.000	H_0 is rejected	Fixed effects
Second model	31.39	0.0001	H_0 is rejected	Fixed effects

Table 5 – Results of the study's first hypothesis estimation

Variables	Coefficients	Coefficients' standard deviation	t-statistic	Significance level
Managers' overconfidence	1.177064	0.393150	2.993934	0.0031
Book to market value	-0.003204	0.007995	-0.400760	0.6887
Operating cash flow	0.004121	0.007612	0.541329	0.5884
Financial leverage	0.032553	0.011254	2.892483	0.0039
Company loss	-0.092576	0.0071259	-12.98566	0.0000
y-intercept	0.063775	0.025079	2.542911	0.0112
Other statistical information				
Determination coefficient		0.91		
Adjusted determination coefficient		0.89		
F-statistic		51.29		
Significance level of F-test		0.00		
Durbin-Watson test statistic		1.91		

Table 6 – Results of study's second hypothesis estimation

Variables	Coefficients	Coefficients' standard deviation	t-statistic	Significance level
Managers' overconfidence	1.199716	0.103086	11.63801	0.0000
Audit committee	-6.001956	0.903222	-6.645054	0.0000
Audit committee × managers' overconfidence	-0.079200	0.036430	-2.174018	0.0302
Book to market value	-0.005332	0.008104	--0.657876	0.5108
Operating cash flow	0.002568	0.007638	0.336218	0.7368
Financial leverage	0.030283	0.011509	2.631213	0.0087
Company loss	-0.091325	0.007170	-12.73636	0.0000
Company size	0.002133	0.001293	1.649149	0.0995
y-intercept	0.062965	0.025527	2.466636	0.0139
Other statistical information				
Determination coefficient		0.91		
Adjusted determination coefficient		0.90		
F-statistic		54.33		
Significance level of F-statistic		0.00		
Durbin-Watson Statistic		1.91		

In an investigation of the overall model's significance, it was found out that the model is significant considering the F-statistic's significance level being found below 5% (0.00); hence, H_1 of the F-test is accepted in a 95% confidence level. The determination coefficient, as well, is expressive of the idea that the explanatory variables account for 0.91% of tax avoidance. Moreover, the adjusted determination coefficient has been calculated equal to 0.90. In addition, in an investigation of the correlation between the error terms, the Durbin-Watson statistic should be taken into account and, because it has been obtained equal to 1.91 with it being in an acceptable range, the error terms' correlation presumption is rejected.

Considering the results of testing the hypothesis regarding the interactive effects of the audit committee and managers' overconfidence, the second hypothesis of the study is confirmed in a 95% confidence level since significance rate of the foresaid interactive effects has been found below 5% which is reflective of a significant relationship between the interactive effects of the audit committee and managers' overconfidence on the tax avoidance. However, since the coefficient obtained for this variable is negative, the audit committee is found reversely moderating the relationship between the managers' overconfidence and tax avoidance.

Furthermore, such control variables as the operating cash flow, book to market value and company size are not significantly associated with tax avoidance considering their significance level's being found larger than 5% in a 95% confidence level; but, financial leverage and company loss have been found significantly correlated with tax avoidance considering a smaller than 5% significance level.

Conclusion

Tax avoidance can take place under the effects of certain company-related factors such as shares' ownership, familial ownership, quality of the corporate governance and so forth. Therefore, it is necessary to investigate other factors that can influence the tax avoidance decisions and moderate the managers' overconfidence in this regard. Audit committee is amongst the pillars of a business entity's leadership and the companies and shareholders rely on the judgments by the audit committee's members for more careful supervision on grounds like risks, prevention of the company resources' wastage, accuracy of financial reports and observance of the statutory and legal requirements. Considering the fact that the present study aimed at investigating the effect of the managers' overconfidence on the tax avoidance, the audit committee's evaluations feature a lot of significance because it is the audit committee that is responsible for revising the financial statements.

The results indicated that the managers' overconfidence is directly and significantly correlated with tax avoidance since its significance level has been found below 5% in a 95% confidence level; it means in other words that the increase in the managers' overconfidence causes an increase in the company's tax avoidance. These findings are consistent with the results of the study by [12]. It was also observed in the other study findings that the audit committee (its financial expertise mostly) significantly and reversely influences the relationship between the managers' overconfidence and company's tax avoidance meaning that the more the audit committee hires financially specialized members, the more the relationship between the managers' overconfidence and tax avoidance would be moderated. These results are in accordance with the findings of the study [12].

These results and findings are especially important to the shareholders, potential investors, board of directors, auditors and, generally, the society for they can be accordingly made aware of the detrimental outcomes of the overconfidence in the managers. Every company and involved representative should take it into account that the adoption of the invasive tax policies might end in heavy fines and defamation. Therefore, it is necessary to supervise and control the extremely overconfident managers' decision-making. In fact, one of the most important outcomes of this study is the recognition of the relationship the various corporate governance tools such as audit committee can establish with the restriction of the overconfident managers' arbitrary behaviors. Every firm should endeavor to supervise its managers (especially those who exhibit excessive overconfidence) through its audit committee. Therefore, the present study can have significant outcomes for the corporate governance and auditing studies regarding the method of the audit committees' exertion of control on the managerial decisions made by the overconfident managers. Furthermore, based on the results, the investors are suggested to regularly supervise their overconfident general and other managers' decisions otherwise they may harm the companies, their fame and reputation and their resources in the course of their objectives' accomplishments. The policy-makers are recommended to appoint managers who are transparent and less overconfident so as to avoid their adoption of possibly damaging strategies such as tax avoidance. The policy-makers and the supervisory institutions should try to limit the managers' power hence the contingent damages that can be caused by the overconfident managers to the companies.

References

1. *Barzegar Ghodratollah, Hasan Nattaj Kordi Mohsen, Abbasi Ali*. The effect of the audit committees' properties on the tax avoidance in the companies accepted to Tehran's securities exchange market // Accounting and auditing studies. – 2020. – V. 9(33). – pp. 25-42.

2. *Tajwidi Elnaz, Gha'em Panah Mohsen*. Properties of the auditing committee and profit management // Accounting and auditing research. – 2021. – V. 13(49). – pp. 155-174.

3. *Setayesh Muhammad Hussein, Ebrahimi Fahimeh*. The substitutive relationship between the financial leverage in the capital structure and tax avoidance // Financial accounting and auditing studies. – 2021. – V. 13(49). – pp. 53-72.

4. *Abernathy A., Sawan N*. The impact of audit committee characteristics on the implementation of internal audit recommendations // Journal of Financial Economics. – 2015. – V. 24. – pp. 61-74.

5. *Ahmed A., Duellamanm S*. Managerial overconfidence and accounting conservatism // Journal of Accounting Research. – 2013. – V. 51 (1). – pp. 1-30.

6. *Allingham Michael G., Sandmo A*. Income tax evasion: A theoretical analysis // Journal of Public Economics. – 1972. – V. 1. – P. 323-338.

7. *Carpenter I*. Situational and institutional determi nants of firms' R&D search intensity // Strategic Management Journal. – 2018. – V. 28(4). – pp. 369–381.

8. *Choi Y.K., Han S.H., Lee S*. Audit committees, corporate governance, and shareholder wealth: evidence from Korea // J. Acc. Public Policy. – 2014. – V. 33(5). – pp. 470–489.

9. *Desai M., Dharmapala D., Fung W.* Taxation and the evolution of aggregate corporate ownership concentration // In: Auerbach, A., Hines, J., Slemrod, J. (Eds.), Taxing Corporate Income in the 21st Century". – Cambridge University Press, New York, 2007. – pp. 345–383.

10. *Dezort FT.* An Analysis Of Experience Effects On Audit Committee Members Oversight Judgments // Accounting Organizations & Society. – 1998. – (January). – pp. 1-22.

11. *Dyreng S., Hanlon M., Maydew E.* Long-run corporate tax avoidance // The Accounting Review. – 2008. – Vol. 83. – No. 1. – pp. 61-82.

12. *Emma García-Meca, Maria-Camino Ramón-Llorens, Jennifer Martínez-Ferrero.* Are narcissistic CEOs more tax aggressive? The moderating role of internal audit committees // Journal of Business Research. – 2021. – V. 129. – pp. 223-235. DOI: https://doi.org/10.1016/j.jbusres.2021.02.043.

13. *Hanlon M., Heitzman S.* A review of tax research // Journal of accounting and Economics. – 2010. – V. 50(2–3). – pp. 127–178.

14. *Ishikawa M., Takahashi H.* Overconfident Managers and External Financing Choice // Review of Behavioral Finance. – 2010. – V. 2. – pp. 37–58.

15. *Jensen M., Meckling W.* Theory of the firm: managerial behavior, agency costs and ownership structure // Journal of Financial Economics. – 1976. – V. 3. – pp. 305–360.

16. *Malmendier U., Tate G.* CEO overconfidence and corporate investment // Journal of Finance. – 2005. – V. 60 (6). – pp. 2661–2700.

17. *Malmendier U., Tate G.* Who makes acquisitions? CEO overconfidence and the market's reaction // J. Financ. Econ. – 2008. – V. 89 (1). – pp. 20–43.

18. *Quang Khai Nguyen.* Audit committee structure, institutional quality, and bank stability: evidence from ASEAN countries // Finance Research Letters. – 2021. – V. 46. – Part A. 102369. DOI: https://doi.org/10.1016/j.frl.2021.102369.

19. *Rijsenbilt A., Commandeur H.* Narcissus enters the courtroom: CEO narcissism and fraud // Journal of Business Ethics. – 2013. – V. 117(2). – pp. 413–429. DOI: https://doi.org/ 10.1007/s10551-012-1528-7.

20. *Roll R.* The hubris hypothesis of corporate takeovers // Journal of Business. – 1986. – V. 59. – pp. 197-216.

21. *Saleh N.M., Iskandar T.M., Rahmat M.M.* Audit committee characteristics and earnings management: Evidence from Malaysia // Asian Review of Accounting. – 2007. – V. 15 (2). – pp. 147–163. DOI: https://doi.org/10.1108/13217340710823369.

22. *Salem Alhababsah, Alaa Alhaj-Ismail.* Does shared tenure between audit committee chair and engagement partner affect audit outcomes? Evidence from the UK // The British Accounting Review. – 2021. 101067. DOI: https://doi.org/10.1016/j.bar.2021.101067.

23. *Salem Alhababsah, Sina Yakini.* Audit committee and audit quality: An empirical analysis considering industry expertise, legal expertise and gender diversity // Journal of International Accounting, Auditing and Taxation. – 2021. – V. 42. 100377. DOI: https://doi.org/10.1016/j.intaccaudtax.2021.100377.

24. *Samaha K., Khalif H., Hussainey K.* The impact of board and audit committee characteristics on voluntary disclosure // Journal of international accounting, auditing and taxation. – 2015. – V. 24. – pp. 13-28.

25. *Skala D.* Overconfidence in Psychology and Finance an Interdiscplnary Literatireb Review // Interdisciplinary Literature Review. – 2008. – V. 4. – pp. 33-50.

26. *Tebourbi M., Oesch D., Schmid M.M.* Investigate the cost of research and development and the future performance of the company with emphasis on the role of overconfidence and government ownership, and firm value: Evidence from the EU area // European Financial Manage. – 2020. – V. 19(3). – pp. 452–469.

27. *Thiruvadi S., Huang H.W.* Audit committee gender differences and earnings management // Gender in Management. – 2011. – V. 26(7). – pp. 483–498. DOI: https://doi.org/10.1108/ 17542411111175469.

28. *Xiaomei Han, Jie Wang, Hanxiu Cheng.* The effect of corporate tax avoidance on salary distribution——Empirical evidence from publicly listed companies in China // International Review of Financial Analysis. – 2021. – V. 78, 101917. DOI: https://doi.org/10.1016/j.irfa.2021.101917.

29. *Yoon Ju Kang.* Are Audit Committees more challenging given a specific investor base? Does the answer change in the presence of prospective critical audit matter disclosures? // Accounting, Organizations and Society. – 2019. – V. 77, 101051. DOI: https://doi.org/10.1016/j.aos.2019.04.001.

30. *Horwich A.* The Role and Responsibilities of Audit Committees: Banking & Financial Services Policy Report. 2003.

31. *Lambe A.* Audit Committees step into the limelight // Accountancy Ireland, Feb. – 2005. – V. 37. – No. 1. – pp. 48-51.

32. *Xie B., Davidson III W. N., DaDalt P. J.* Earnings management and corporate governance: the role of the board and the audit committee // Journal of corporate finance. – 2003. – V. 9. – №. 3. – pp. 295-316.

33. *Klein A.* Audit committee, board of director characteristics, and earnings management // Journal of accounting and economics. – 2002. – V. 33. – №. 3. – pp. 375-400.

34. *Anderson R. C., Reeb D. M.* Founding-family ownership and firm performance: evidence from the S&P 500 // The journal of finance. – 2003. – V. 58. – No. 3. – pp. 1301-1328.

35. *Kalbers L. P., Fogarty T. J.* Audit committee effectiveness: An empirical investigation of the contribution of power // Auditing. – 1993. – V. 12. – No. 1. – pp. 24.

36. *Lai S., Li X., Chan K. C.* CEO overconfidence and labor investment efficiency // The North American Journal of Economics and Finance. – 2021. – V. 55. – pp. 101319.

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