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Research Article

# **How Managers and Audit Committee Affect Internal Control Weakness**

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## **Abstract**

This paper assesses how the board, CEO, and audit committee's characteristics influence internal control weakness. In order to test the hypotheses, data of listed companies on the Tehran Stock Exchange during 2012-2016 are collected. Panel data analyses indicate that managerial education level and audit committee independence inversely influence internal control weakness. However, there is no significant relationship between managers' or audit committees' other characteristics and internal control weakness.

**Keywords:** Internal Control Weaknesses, Board Characteristics, CEO Characteristics, Type of Audit Report

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# 1. Introduction

The internal control aims to reach the objectives, which are classified into one or several distinctive, and at the same time, similar groups (International Standard 315). Such a definition of internal control is general and inclusive due to its focus on the internal control subsets. For example, we could separately concentrate on the controls dominating the financial reporting or those on the terms and conditions.

According to Paragraph 302 of this Act, management is bound to disclose all existing internal control weaknesses in its quarterly and annual reports (Sarbanes-Oxley Act). The main objective of sections 302 and 404 of the Sarbanes-Oxley Act is to inform the investors of the disclosure of internal control weaknesses, which may increase the financial errors and decrease managers' ability for the earnings management.

After the financial scandals, the Sarbanes-Oxley Act's provision attracted the management's attention to internal controls, more increasingly, and several requirements imposed to public companies that in terms of variation and the scope of effectiveness are considered as thorough and penetrative. The Sarbanes-Oxley Act's significance is to justify the effectiveness of internal control weaknesses, which is the topic of many conducted studies on the determining factors, the effects, and the results of material internal controls' weaknesses.

In Iran, the Stock Exchange has recently embarked on the publication of a draft internal control guideline for those publishers listed on the Tehran Stock Exchange, based on which the management is responsible for monitoring the effectiveness of internal control and should provide reports on the results of internal control evaluation (Tehran Stock Exchange guideline, 2012).

# 2. Literature Review and Hypothesis Development

After the financial scandals, the Sarbanes-Oxley Act's provision attracted the management's attention to internal controls, more increasingly and several requirements imposed to public companies that in terms of variation and the scope of effectiveness are considered as thorough and penetrative. The Sarbanes-Oxley Act's significance is to justify the effectiveness of internal control weaknesses, which is the topic of many conducted studies on the determining factors, the effects, and the results of material internal controls' weaknesses. Skaife et al. (2007) indicated a relationship between the weak point and the firm characteristics, including firm complication, organizational changes, firm size, profitability, and investing resources on internal controls (Skaife et al., 2007).

In Iran, the Stock Exchange has recently embarked on the publication of a draft internal control guideline for those publishers listed on the Tehran Stock Exchange, based on which the management is responsible for monitoring the effectiveness of internal control and should provide reports on the results of internal control evaluation (Tehran Stock Exchange guideline, 2012).

In most cases, internal control weaknesses, which the auditor reported, are mentioned in the management letter. Still, there is a difference between those weaknesses reported in the management letter and those disclosed in the auditor's report and by the legal inspector. The latter type is material internal weaknesses disclosed in the auditor's report due to their significance. The management letter is optional and has no predefined standard shape. Ther report is important due to the following reasons:

- 1- Improving the relationships with the management, and;
- 2- Suggesting those tax and managerial services that audit firms cannot propose (Brown and Lim, 2012).

Therefore, the management letter cannot supersede the weakness report's legal position as some countries' regulations set it. Despite the suitable design and

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How Managers and Audit Committee Affect Internal Control Weakness implementation of controls, auditors try to explore maerial weaknesses in the design of controls and those tests performed concerning the control's not/running. This area's common methods include a questionnaire-based survey and other checklist methods, analysis flowcharts, observation-based documentation, system realization, and some documentary proceedings. Auditors attempt to deal with the material weaknesses affecting the effectiveness of control operation via the control test. The test is complete when the risk of exploration inability is at a low level. An appropriate risk model for internal auditing control will help the auditors determine the range of control operations' effectiveness (Brown and Lim, 2012).

Chen, Eshleman, and Soileau (2016) declared that it is less likely to find internal control weakness in companies where most board members are women. They showed that even a woman member could lower the possibility of internal control weakness. Chen et al. (2017) argued that companies with women board members are more likely to have an internal control weakness and suggested that the presence of women board members in small firms, regardless of whether they are in the audit committee or not, would lower the internal control weakness.

To monitor the management and participate in decision-making, the board of directors requires various skills, including accounting, banking, and regulation, to influence the increase of firm value. This issue's underlying hypothesis is that inexperienced members in accounting or financial knowledge cannot explore the current problems in financial reporting. Moreover, the presence of an experienced financial factor will cause other members to be sensitive and cognizant (Erickson et al., 2005).

Ahmad et al. (2015) carried out a study on the relationship between the board characteristics, risk management, and internal control disclosure among the listed Malaysian companies. The sample of this study includes 150 companies in the main Malaysian Stock Exchange Market in 2013. This study shows an appropriate level of disclosure among the companies mentioned in the Malaysian Stock Exchange. As declared in this study, the board characteristics contribute to the monitoring of risk. In addition, the board characteristics, like specialization, could higher the level of confidence of the internal control.

Given the facts mentioned above, research hypotheses are proposed as follows:

- **H1**. There is a negative and significant relationship between the board's level of education and internal control weakness.
- **H2**. There is a negative and significant relationship between the board members' financial expertise and internal control weakness.
- **H3**. There is a negative and significant relationship between the gender diversity of the board members and internal control weakness.
- **H4**. There is a negative and significant relationship between the board members' interlock and internal control weakness.
- **H5**. The board members' interlock contributes to the relationship between the board members' level of education and internal control weakness.

Lee (2016) conducted a study on the relationship between overconfidence of the CEO and the presence of internal control weaknesses (ICW), using a sample of 495 U.S companies during 2004-2011. The data obtained from internal control weaknesses and CEOs, based on the results of experimental analyses, showed that the CEO's overconfidence would positively affect the internal control weakness (ICW).

Lin et al. (2014) carried out a study on the effect of the board characteristics on the quality of internal control in the U.S, using a sample of 4.374 non-financial companies. Their obtained results revealed that, based on Section 404 of the Sarbanes-Oxley Act, CEO entrenchment and age have a significant relationship with the disclosure of internal control weakness. In general, results showed that the board characteristics are

highly probable to affect internal control mechanisms' power.

Given the facts above, research hypotheses are formulated as follows:

- **H6**. There is a negative and significant relationship between the CEO's level of education and internal control weakness.
- **H7**. There is a negative and significant relationship between the CEO's financial expertise and internal control weakness.

One of the most challenging issues is the presence of independent people in the audit committee. An independent manager is selected from outside the main company, satellite and dependent companies, and the firm's control shareholders. Irrespective of the criticisms expressed in action toward the concept of independence, the terms of being independent, etc., the study results are about the audit committee's independence, the fulfillment of those internal control objectives dominating the financial reporting, and the discrepancies and incompatibilities. The general supervisory board, the blue ribbon committee, the national association of public company managers, and Coopers believe that the audit committee's performance enjoys a high quality when the audit committee members are independent, enhancing the financial reporting credibility.

The corporate governance system is a concept introduced recently concerning accountability and the enhancement of information quality. The audit committee is considered as one of the major specialized committees of the board that causes the improvement, health, and quality of the financial reporting, the improvement of the internal control quality, auditors' performance, and will help the board be accountable, make sure that the operations of units are aligned with the rules and regulations, and prevent the illegal actions of the management. The audit committee should carry out its duties in an appropriate way. A transparent and written charter will help the committee and others understand the responsibilities. According to the audit committee charter passed on Dec. 2012 in Tehran Stock Exchange, an audit committee is constituted of 3-5 members, most independent and have a financial specialization, under the board's direct selection and appointment. The independence of the audit committee is the cornerstone of its effectiveness. The specialized committee is not yet that common in Iran. Still, since the Tehran Stock Exchange obliged the firms to do so, we hope to observe such committees' establishment and effective operation in all firms. Such monitoring, controlling, and strategic mechanisms would be influential when all its members have sufficient financial expertise and record. Such a committee will lead to more reliable data, and high-quality reports would be available to the management. The manager could provide better analyses and more concise predictions of each share's profit to the users (Jame'ei and Rostamian, 2016).

The audit committee's gatherings are where the committee and the board members share their information about firm performance, policies, and plans. The more the number of the meetings, the more successful the relations would be among managers and the board members (Erickson et al., 2005).

Within a study entitled, "the disclosure of material weakness in internal control: to what extent the gender of the audit committee members is important?" Parker et al. (2017) attempted to identify the factors related to disclosing material internal controls' weaknesses. According to gender studies in behavioral science, they realized that the audit committee's women members inspect the internal controls more accurately than what is performed by men. Thus firms with women members in the audit committee are more likely to report the material internal controls' problems.

Given the facts above, research hypotheses are formulated as follows:

- **H8**. There is a negative and significant relationship between the audit committee's financial expertise and internal control weakness.
  - **H9**. There is a negative and significant relationship between the audit committee's

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independence and internal control weakness.

**H10**. There is a negative and significant relationship between the audit committee effort and internal control weakness.

# 3. Research Methodology

In terms of objective, this paper is practical. Practical studies aim to develop practical knowledge throughout a specific area. Moreover, this study is descriptive in data collection (since it is about the status quo and lending a helping hand to the decision-making process) and correlational. The range of dependency of the dependent variable is studied in proportion to the independent one.

The duration of the study is from 2012 to 2016.

This study's realm is the listed companies on the Tehran Stock Exchange, and their non/financial data are used for calculating the research variables.

The statistical population of this study includes all listed companies on the Tehran Stock Exchange with the following qualifications:

- Their financial yearend should be at the end of March in each year to be able to use the data together and in a panel model, if required,
- The companies chosen should be affiliated with investment companies, financial intermediaries, holdings, banks, and insurances,
- The financial period should not be changed during the study, and;
- The data required should be completely presented during 2011-2016.

The sampling method is elimination. Companies with the above conditions would be selected. If the number of selected companies is high, a number of them would be omitted using the removal sampling.

# 3.1. Data collection and analysis method

In this study, first, the library method and documentary studies are used for data collection, based on which the theoretical principles and the literature of the study were gathered from specialized Persian and English journals. Then, the required data for hypothesis testing were extracted via financial statements and descriptive notes of the selected companies, the board reports, CDs, video and statistical archive of the Tehran Stock Exchange, and Tehran Stock Exchange's website as Tadbir Pardaz and Rah Avaran-e Novin Software.

After confirming the accuracy, the collected data were transferred to Excel Software and prepared for the required analysis. The final data analysis was conducted using the EViews Econometric Software.

# 3.2. Hypothesis testing model

Due to the growth of managers' understanding of internal controls' role in creating a competitive advantage and industrial development, several methods are proposed to test, measure, and evaluate internal controls. The models used in this study are as follows:

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ICMW_{it} = \beta_0 + \beta_1 Board \ Education_{it} + \beta_2 Board \ Expertise_{it} + \beta_3 Board \ Gender_{it} + \beta_4 Board \ Interlock_{it} + \beta_5 Type \ Audit \ Rep + \beta_6 CEO \ Education_{it} + \beta_7 CEO \ Expertise_{it} + \beta_8 ACE_{it} + \beta_9 ACI_{it} + \beta_{10} ACE_{it} + \beta_{11} ACED_{it} + \beta_{12} Size_{it} + \beta_{13} \ LOSS_{it} + \varepsilon_{it}
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Where the dependent, independent, and control variables are as follows:

*ICMW* it: weakness in the internal control structure, such that if the auditor reports a material weakness in the internal control, we assign one; otherwise, it would be 0.

Board Education it: the level of education of the board members; if at least one of the members of the board has a master's or Ph.D. degree, we assign 1; otherwise, it would

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be 0.

Board Expertise it: financial expertise of the board members; if a member of the board has an academic degree in the field of finance or accounting, we assign 1; otherwise, it would be 0.

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Board Gender it: gender diversity of the board members; if a board member is a woman, we assign 1; otherwise, it would be 0.

Board Interlocks it: the interlock of the board members, if at least a member of the board is affiliated with the board of another company, we assign 1; otherwise, it would

Type Audit Rep: type of audit report, if the report is acceptable, we assign 1; otherwise, it would be 0.

CEO Education it: the level of education of the CEO; if the CEO has a master's or Ph.D. degree, we assign 1; otherwise, it would be 0.

CEO Expertise it: financial expertise of the CEO; if the CEO has an academic degree, we assign 1; otherwise, it would be 0.

ACE it: Auditing Committee Expertise: The audit committee's financial expertise is calculated according to the proportion of audit committee members with professional accounting and auditing certificates to total audit committee members.

ACI it: Auditing Committee Independent: audit committee independence, achieved by the proportion of independent audit committee members to total audit committee members.

ACE01 it: Auditing Committee Effort: audit committee effort, which means the logarithm of the committee's number of sessions.

ACEL it: Auditing Committee Education: the level of education of the audit committee, if at least one of the audit committee members has masters or Ph.D. degree, we assign 1; otherwise, it would be 0.

Size it: the natural logarithm of sales is used in order to measure the firm size.

Loss it: if the company experiences loss, we assign 1; otherwise, it would be 0.

# 3.3. The statistical method used for model estimation

The integrated data techniques are used in order to estimate the research models. Such data are the combination of two datasets, namely time series and cross-sectional. The integration of time series and cross-sectional data and the necessity of using them is mostly due to the increase in the number of observations, the increase of the degree of freedom, the decrease of variance heterogeneity, and the linearity among the variables. Moreover, such data determine those effects that cannot be simply observed in crosssectional and time-series data, more appropriately.

Given the data used as panel data, the third type of data are used in this study.

## 3.4. Regression model estimation using the integrated data

The estimation of those relations in which the integrated data are used is not a simple task. In general, the following model indicates the integrated data:

$$Y_{it} = \beta_{1it} + \sum_{k=2}^{k} \beta_{kit} x_{kit} + e_{it}$$

 $Y_{it} = \beta_{1it} + \sum_{k=2}^{k} \beta_{kit} x_{kit} + e_{it}$ Where, i = 1, 2, ..., N is the cross-sectional units and t = 1, 2, ..., T refers to time. Yit is a dependent variable for ith cross-sectional unit in the year t and  $x_{kit}$  is also kth non-random independent variable for ith cross-sectional unit in the year t. It is hypothesized that the disrupted sentence of  $e_{it}$  has 0 mean of  $(E(e_{it}) = 0)$  and fixed variance of  $E(e_{it}^2) = \delta_e^2$ ).  $\beta_{kit}$  are passive parameters of the model that measure the dependent variable's reaction to the Kth independent variable changes in ith crosssection and tth time. In general, it is hypothesized that these coefficients are different for all cross-sectional and time units. Still, in most of the studies, the variation of these

coefficients was also extremely for all sections and all times. Given the nature of the topic under study and other conditions, the author determines the appropriate hypotheses about the parameters.

# 4. Results of descriptive statistics

We need to be acquainted with descriptive statistics of variables in order to assess the general and basic specifications of them for model estimation, accurate analysis, and for realizing the statistical population under study. Table 1 depicts a summary of the characteristics of descriptive statistics related to the variables used in this study. The reported statistics comprise indexes, and central criteria, including mean, median, and dispersion indexes, involving standard deviation, skewness, and kurtosis of the variables under study.

**Table 1.** The results of descriptive statistics of dependent, independent, and control variables

<b>Table 1.</b> The results of	descriptiv	e statisti	cs of deper	ident, mae	pendent, a	na control	variables
Variable	Mean	Median	Skewness	Kurtosis	Standard deviation	Minimum	Maximum
Audit committee financial expertise ACE	0.469	0.666	1.446	-0.129	0.390	0.000	1.000
Audit committee effort ACE01	1.088	1.079	1.864	0.022	0.111	0.903	1.278
Audit committee educational level ACEL	0.223	0.000	2.760	1.326	0.416	0.000	1.000
Audit committee independence ACI	0.433	0.666	1.477	-0.219	0.353	0.000	1.000
The board educational level BOARD_EDUCATION	0.311	0.000	1.661	0.813	0.463	0.000	1.000
The board interlock BOARD_INTERLOCK	0.674	1.000	1.556	-0.746	0.468	0.000	1.000
The board financial expertise BOARD_EXPERTISE	0.302	0.000	1.742	0.861	0.459	0.000	1.000
The board gender diversity BOARD GENDER	0.050	0.000	17.99	4.122	0.218	0.000	1.000
CEO educational level CEO_EDUCATION	0.451	0.000	1.038	0.196	0.497	0.000	1.000
CEO financial expertise CEO_EXPERTISE	0.356	0.000	1.359	0.599	0.479	0.000	1.000
Internal control weakness factors ICMW	0.436	0.000	1.065	0.256	0.496	0.000	1.000
Firm loss LOSS	0.102	0.000	7.825	2.612	0.304	0.000	1.000
Firm size SIZE	6.137	6.081	4.068	0.612	0.626	4.415	8.316
Type of audit report TAR	0.571	1.000	1.084	-0.290	0.495	0.000	1.000

#### 4.1. Inferential statistics

Since in the present study the collected information is about 123 listed companies in Tehran Stock Exchange by using 13 variables to evaluate the effect of independent variables on dependent ones, the regression analysis is the most appropriate method of

hypothesis testing. As mentioned previously, this paper's data fitting model is based on the panel tests that, by using the statistical software of Eviews and the statistical tests of the mentioned model, it is possible to accept or reject the research hypotheses. The non-correlation of the residuals (errors) should be confirmed in the regression in order to be able to use the linear regression. Durbin-Watson Statistic is used to assess the independence of errors. In general, if the Durbin-Watson statistic is between 1.5 and 2.5, the hypothesis of non-correlation among model errors would be accepted.

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#### 4.2. Model selection tests

The F-Limer test is used to determine between two regression models with common sentences (regular) and regression with fixed effects that one is more appropriate. Provided that the F test's obtained probability confirms the null hypothesis, the regression with pooled effects would be employed. If the model with pooled effects is selected, we need another test to determine whether the model with pooled effects is suitable or the one with the random effects, for which the Hausman test is used. If this test's obtained probability confirms the null hypothesis, fixed effects should be used in the related regression model. If the null hypothesis is rejected, the random effect is more appropriate. The data of this study are classified as pooled in the classification of panel data. Lexically, pooled means a combination, and as can be seen in this class, all data are in equal condition and have equal behavior with each other.

**Table 2**. The results of model selection tests

	F-Limer test		Breusch-	Pagan test	Hausman		
Description	Statistic	Probability level	Statistic	Probability level	Statistic	Probability level	Result
Research model	1.07	0.75	2.03	0.15			Integrated model

#### 4.3. Correlation test

Durbin-Watson statistic is used in order for the non-correlation of the model. If the statistic is between 1.5 and 2.5, the null hypothesis, namely non-correlation among residuals, would be accepted; otherwise, H0 would be rejected, meaning a correlation among the residuals. Based on the statistic and its probability level of the related test, the null hypothesis concerning lack of correlation would be rejected. To deal with the autocorrelation problem, AR(1) entered into the model Durbin-Watson statistic of 2.317 is obtained. Since the resultant amount is between 1.5 and 2.5, there is no autocorrelation problem.

**Table 3.** The results of the correlation test

Test of autocorrelation						
Statistic	Probability level					
26.7	0.000					

## 4.4. Variance homogeneity

According to the statistic and the probability level of the related test, the null hypothesis concerning variance homogeneity is rejected, so the GLS method deals with the variance homogeneity problem.

**Table 4.** The results of the variance homogeneity test

Test of variance homogeneity					
Statistic	Probability level				
321	0.000				

## 4.5. Testing the main research model

As can be seen in Table 5, the probability level indicates that the whole regression is significant with the value of 0.00, and this shows that the model is significant at a 95% level of confidence and also the  $R^2$  value shows that the changes of independent variables describe 0.78 of changes of the dependent variable.

**Table 5.** The results of the combined regression test of the research model

Model	LPM POOLED							
	Coefficient	Standard error	t statistic	Sig.				
Audit committee financial expertise (ACE)	-0.001	0.000	-2.056	0.040				
Audit committee effort (ACE01)	-0.000	0.002	-0.330	0.740				
Audit committee educational level (ACEL)	-0.000	0.000	-0.587	0.562				
Audit committee independence (ACI)	0.000	0.001	0.704	0.480				
The board educational level BOARD_EDUCATION	9.00E-05	0.000	0.308	0.761				
The board interlock BOARD_INTERLOCK	-0.000	0.000	-2.204	0.031				
The board financial expertise BOARD_EXPERTISE	-0.001	0.000	-4.310	0.000				
The board gender diversity BOARD_GENDER	-0.000	0.000	-2.120	0.030				
CEO educational level CEO_EDUCATION	-0.000	0.000	-1.907	0.061				
CEO financial expertise CEO_EXPERTISE	-3.51E-05	0.000	-0.233	0.820				
Firm loss (LOSS)	-0.000	0.000	-0.810	0.42				
Firm size (SIZE)	0.002	0.000	2.125	0.03				
Type of audit report (TAR)	-0.995	0.001	-572.0	0.00				
The board interlock and audit committee independence BOARD_INTERLOCK*ACI	-0.111	0.050	-2.209	0.02				
The board interlock and the board level of education BOARD_INTERLOCK*BOARD_ED UCATION	0.007	0.036	0.205	0.83				
The board interlock and audit committee effort	-0.019	0.048	-0.408	0.68				
C	0.984	0.006	154.4	0.00				
Dealing with the problem of autocorrelation - AR(1)	0.632	0.040	15.46	0.00				
$R^2$	0.78							
Durbin-Watson		2.31						
F statistic		213						
F statistic probability	0.000							

## 4.6. Test of linearity

After the model fitting, we should talk about classic hypotheses. To make sure that there is no linearity in the model, a correlation was set 2 by 2 among the variables, and since all obtained values are under 0.8, there is no linearity problem. Moreover, the control variables' results also indicate a positive and significant relationship between the firm size (SIZE) and internal control weakness.

In addition, there is a positive and significant relationship between firm loss (LOSS) and internal control weakness.

		_	723								89		
	TAR	-0.030	0.018723	0.037	0.030	-0.003	-0.062	0.014	0.035	-0.035	-0/05368	-0.031	-0 106
	SIZE	0.005	0.05844	0.011	0.005	-0.070	600.0	0.093	0.001	600.0	0/054852	-0.079	-
	$\mathbf{SSOT}$	-0.008	-0.04905	0.021	-0.010	-0.006	0.054	-0.048	-0.016	0.051	0/027144	1	-0.079
	CEOEXPERTISE	-0.049	-0.10411	-0.019	-0.069	-0.042	-0.051	0.003	-0.015	-0.003	1	0.027	0.054
	CEO_EDUCATION	0.014	-0.02416	-0.002	0.020	0.001	0.030	-0.062	0.041	1	-0/00381	0.051	600 0
	BOARDGENDER	-0.011	-0.02894	0.010	-0.003	-0.033	0.000	0.024	1	0.041	-0/01537	-0.016	0.001
	BOARDEXPERTISE	-0.063	0.066	0/015172	-0.083	-0.015	-0.015	1	0.024	-0.062	0/003264	-0.048	0.093
	BOARD_INTERLOCK   BOARDEXPERTISE	-0.174	-0.04073	0.0809	-0.190	-0.001	1	-0.015	0.000	0.030	-0/05117	0.054	600 0
	BOARD_EDUCATION	-0.018	-0.01649	0.039	0.043	1	-0.001	-0.015	-0.033	0.001	-0/04254	900'0-	020 0-
	ACI	989.0	-0.03703	0.156	1	0.043	-0.190	-0.083	-0.003	0.020	-0/06982	-0.010	0 005
	ACED	0.106	-0.03204	1	0.156	0.039	0.080	0.015	0.010	-0.002	-0/01902	0.021	0.011
	ACE01	-0.035	1	-0.032	-0.037	-0.016	-0.040	990.0	-0.028	-0.024	-0/10411	-0.049	0.005
	ACE	1	-0.03569	0.106	989.0	-0.018	-0.174	-0.063	0.0114	0.014	-0.04903	-0.008	0 005
		ACE	ACE01	ACED	ACI	BOARD_EDUCATION	BOARD INTERLOCK	BOARDEXPERTISE	BOARDGENDER	CEO_EDUCATION	CEOEXPERTISE	TOSS	SIZE

## 5. Conclusion

The last section of every scientific article is about the discussion and results of what was obtained from the proposed models and tests. This section aims to summarize the study and the results, which could lead to more coherence of each research study in terms of meaning and concept. Hence, first, we reflect on a summary of the previous sections and, given the hypotheses and analyses of section 4, will propose the summary of the results. Finally, we will discuss the suggestions and limitations of the study.

This study is concerned about the relationship between the audit committee's financial expertise, financial expertise of the board, the interlock of the board members, gender diversity of the board members, education level of the CEO, and type of audit report and internal control weaknesses. The present study results indicate a negative and significant relationship between the so-called variables and the internal control weaknesses.

As was expected, there is a significant relationship between the board, the CEO, and the audit committee and internal control weaknesses. This study's results are in line with Fama and Jensen (1983) and Lin et al. (2014). The results of hypotheses testing are indicative of a negative and significant relationship between some characteristics of the board, CEO, and audit committee, including education, financial specialization, and gender diversity of the board and internal control weakness, which seem plausible because, as expected by the increase of the level of education and more specialization of a field of studies for members and organizational departments, their approach to the issue of internal controls has become more specialized; consequently this would lower the internal control weakness. Further, the presence of gender diversity in the board will cause more sensitivities and concentrations on some organized issues, and many cases show that in a board with more gender diversity, compared with a board constituted of men, more important and sensitive issues are discussed, and this would reduce the fraudulent behaviors. These hypotheses indicate that the characteristics above contribute to the performance and management of internal control weakness. However, in contrast to the results, the hypothesis testing of the present study suggests that there is no negative and significant relationship between the level of education of the board, independence, level of education, the audit committee effort, and CEO expertise and internal control weakness, so these hypotheses are not confirmed. The results of this study confirm with that of Erickson et al. (2005) but in contrast to the results of Fama and Jensen (1983) and Lin et al. (2014). Given the number of gatherings of the audit committee, it is hypothesized that several meetings would help establish a relationship between managers and committee members. However, holding excessive sessions, in addition to the costs incurred, including time, the fee for participating in the committee sessions, may deviate the committee members from their operational and daily responsibilities. Hence, the audit committee should keep a balance between the costprofit of the sessions. In case the audit committee can sustain such a balance, depending on the firm setting, it would be capable of attracting economic interests for the firm; otherwise, the number of sessions and no positive effects in evaluations may make a loss to the firm. Moreover, this study shows that the board members' interlock could affect the relationship between audit committee independence and internal control weakness. Still, it does not affect the relationship between the audit committee's financial expertise and education level of the board members and internal control weakness.

# References

Ahmad, R.A.R. Abdullah, N. MohdJamel, N.E.S. and Omar, N. (2015). Board Characteristics and Risk Management and Internal Control Disclosure Level: Evidence from Malaysia. *Procedia Economics and Finance*, 31, 601-610. <a href="https://doi.org/10.1016/S2212-5671(15)01147-8">https://doi.org/10.1016/S2212-5671(15)01147-8</a>

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Journal of
Accounting,
Auditing &
Finance

- Brown, K.E. and Lim, J.H. (2012). The Effect of Internal Control Deficiencies on the Usefulness of Earnings in Executive Compensation. Advances *in Accounting*, 28(1), 75-87. <a href="https://doi.org/10.1016/j.adiac.2012.02.006">https://doi.org/10.1016/j.adiac.2012.02.006</a>
- Chen, Y. Eshleman, J.D. and Soileau, J.S. (2016). Board Gender Diversity and Internal Control Weaknesses. *Advances in Accounting*, 33, 11-19. <a href="https://doi.org/10.1016/j.adiac.2016.04.005">https://doi.org/10.1016/j.adiac.2016.04.005</a>
- Chen, Y. Knechel, W.R. Marisetty, V.B. Truong, C. and Veeraraghavan, M. (2017). Board Independence and Internal Control Weakness: Evidence from SOX 404 Disclosures. *A Journal of Practice & Theory*, 36(2), 45-62. <a href="https://doi.org/10.2308/ajpt-51577">https://doi.org/10.2308/ajpt-51577</a>
- Erickson, J. Park, Y.W. Reising, J. and Shin, H.H. (2005). Board composition and firm value under concentrated ownership: The Canadian evidence. *Pacific-Basin Finance Journal*, 13(4), 387-410. https://doi.org/10.1016/j.pacfin.2004.11.002
- Fama, E.F. and Jensen, M.C. (1983). Separation of Ownership and Control. *Journal of Law and Economics*, 26(2), 301-325. https://www.jstor.org/stable/725104
- Jame'ei, R. and Rostamian, A. (2016). The effect of audit committee financial expertise on the characteristics of predicted profit. *Journal of financial and accounting studies*, 8(29), 1-17. <a href="http://www.sid.ir/Fa/Journal/ViewPaper.aspx?ID=255831">http://www.sid.ir/Fa/Journal/ViewPaper.aspx?ID=255831</a> [In Persian]
- Lee, J.E. (2016). CEO Overconfidence and the Effectiveness of Internal Control Over Financial Reporting. *The Journal of Applied Business Research*, 32(1), 81-100. DOI: 10.19030/jabr.v32i1.9525
- Lin, Y.C. Wang, Y.C. Chiou, J.R. and Huang, H.W. (2014). CEO Characteristics and Internal Control Quality. *Corporate Governance: An International Review*, 22(1), 24-42. <a href="https://doi.org/10.1111/corg.12042">https://doi.org/10.1111/corg.12042</a>
- Parker, R.J. Dao, M. Huang, H.W. and Yan, Y.C. (2017). Disclosing material weakness in internal controls: Does the gender of audit committee members matter?. *Asia-Pacific Journal of Accounting & Economics*, 24(3-4), 407-420. https://doi.org/10.1080/16081625.2015.1057190
- Skaife, A.H. Collins, D.W. and KinneyJr, W.R. (2007). The discovery and reporting of internal control deficiencies prior to SOX-mandated audits. Journal of Accounting and Economics, 44(1-2), 166-192. <a href="https://doi.org/10.1016/j.jacceco.2006.10.001">https://doi.org/10.1016/j.jacceco.2006.10.001</a>

The guidelines of Securities and Exchange Organization (2012), Article 18.