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The effect of audit committee financial expertise on relationship between companies irresponsibility and stock price crash risk

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Abstract:
The present study aims to investigate the effect of corporate irresponsibility on stock price crash risk by emphasizing the moderating role of financial expertise of the audit committee in companies listed on the Tehran Stock Exchange. To estimate the multiple regression model to test the hypothesis, the aforementioned model was used using panel data by the pooled data method in companies listed on the Tehran Stock Exchange and Eviews 9 statistical software was used for statistical analysis. In this research, 150 companies (1050 company-years) were selected to test the research hypothesis between 2014 and 2020. The Levin, Lien and Wu tests were used to test the reliability of research data, the Jarque-Bera test was used to determine the normality of the data, the regression method was used to express the relationship between variables, t-test statistics to test the significance of regression coefficients, and finally the F-test statistic was used to determine the significance of the equation. In general, the results of testing the research hypotheses indicate that corporate irresponsibility has a significant positive effect on stock price crash risk. The results also show that the financial expertise of the audit committee has a significant moderating effect on the relationship between corporate irresponsibility and stock price crash risk. In fact, the financial expertise of the audit committee reduces the positive relationship between corporate irresponsibility and stock price crash risk.

Keywords: Financial expertise, Audit committee, Corporate irresponsibility, Stock price crash risk.
Classifications: C22, C58.

1   Introduction

Stock price crash is a phenomenon in which the stock price undergoes a sudden and severe negative adjustment [26]. Due to self-interested motives, management uses accounting systems to overstate the performance of the company by delaying the release of bad news and accelerating the release of good news, which leads to stock price bubbles [19]. The purpose of accounting and financial reporting is to meet the information needs of users [39]. The main tool for transferring information to external parties is the basic financial statements [40]. The income statement is one of the basic financial statements that is important in evaluating the duties of management or their accountability for the resources at their disposal. Since the responsibility for preparing financial statements lies with the management of the business unit and given the direct access of managers to information and having the power to choose accounting methods, it is possible to manipulate financial statements; Therefore, if managers cause loss or damage to the company by not performing their responsibilities properly, they will be able to hide these events [16]. Therefore, the asymmetry of information between management and shareholders becomes problematic. While the main objective of shareholders is to maximize their wealth by maximizing the value of the company, usually such an objective is overlooked by management and as a result, shareholders doubt about the optimum use of their capital and wealth by management [18]. Thus, shareholders demand oversight of management decisions so that managers take steps in the interests of shareholders by their own power. For this reason, studying the role of financial expertise of the audit committee on the relationship between corporate irresponsibility and stock price crash risk is important.

The audit committee is part of the corporate governance structure and is a key factor in the financial reporting process, which increases the credibility of financial statements. The presence of financially literate individuals on the audit committee can, through better oversight of management decisions, force managers to perform their duties and responsibilities properly. They can also reduce the risk of stock price crash through their effective oversight and by increasing the quality of financial information [20]. Therefore, given the high importance of studying stock price crash risk in companies, and the fact that this issue has received less attention in the domestic literature so far, this research intends to examine the effect of financial expertise of the audit committee on the relationship between corporate irresponsibility and stock price crash risk in companies listed on the Tehran Stock Exchange. Studying this issue can lead to a review or expansion of the results of past studies in the field of stock price crash risk and evidence from the research can provide useful information to lawmakers in the capital market as well as accounting standard setters. It can also provide a basis for conducting new research in the field of accounting, identifying limitations and recommendations based on research findings.

In order to better understand the impact of financial expertise of the audit committee on the relationship between corporate irresponsibility and stock price crash risk, the theoretical foundations of the research from the perspective of different researchers are first presented, then the research background which includes a review of foreign and domestic research related to the topic is briefly presented. Then the research hypotheses, research method, model for testing hypotheses, operational definitions of variables and statistical analysis are presented. Finally, the research results and recommendations are provided.

2   Theoretical Foundations and Literature Review

Sudden fluctuations in stock prices of companies in recent years and especially after the 2008 financial crisis have attracted the attention of many researchers and professionals [11], [15]. Stock price volatility has two forms: sudden increase in stock prices and sudden decrease in stock prices [14], [41]. When stock prices experience an abnormal decrease in a short period of time, it is referred to as stock price crash risk [42], [21]. Due to the importance shareholders attach to their stock returns, the phenomenon of stock price crashes that lead to a sharp decrease in returns has received more attention from financial researchers compared to jumps [1]. When managers make decisions in their self-interest due to conflicting interests, they manipulate financial information due to information asymmetry to mislead investors and distort the actual performance of the company [47]. Therefore, if company managers are able to conceal bad news for a long period of time, it seems that negative information will be stored within a company. However, there is a limit for companies in terms of the amount of bad news they can successfully hide and keep secret. This limit exists because if, at a particular time, the amount of bad news collected reaches a certain threshold or special level, it will become too costly or impossible to continue hiding them. When the collection of bad news reaches the last point (the tipping point), all of them are suddenly released and cause high negative returns for shareholders, leading to a market adjustment and a drop in stock prices [25], [30]. The sudden disclosure of accumulated information about a company's actual performance leads to a drop in stock prices of companies [26].

Many researchers believe that changes in a company's stock price are due to its internal management [29]. In situations where information enters the market randomly and the process of disseminating information is done systematically regardless of its good or bad nature, it can be said that the published information has an asymmetric distribution. In other words, if the management quickly discloses all information, this would cause the stock returns to have a symmetric distribution. This means that the average positive return on good news should be equal to the average negative return on bad news [48], [22]. Therefore, a company's policies in controlling and disclosing news can have an impact on the stock price crash risk [33].

One of the factors that can affect the risk of stock price crash is corporate irresponsibility [24]. Corporate irresponsibility is considered any illegal, unethical (misconduct), and irresponsible disclosure by the company, which is subject to punishment or penalty [12]. Many companies have been criticized in recent years for their irresponsible behavior, and their behavior has resulted in legal penalties and severe fines [13], [31]. There are two schools of thought in empirical literature regarding the relationship between corporate irresponsibility and stock price crash risk. According to the first viewpoint, corporate irresponsibility leads to a reduction in the stock price crash risk. Based on the efficient market hypothesis, supporters of this viewpoint, which mainly associates corporate misconduct with shareholder wealth, believe that the disclosure of corporate misconduct leads to an immediate decrease in the company's stock price, meaning that corporate misconduct is revealed within a limited time frame and its effects are less severe than hiding it for a long time [27].

According to the viewpoint of information asymmetry, corporate irresponsibility leads to an increase in the risk of stock price crash [10], [45]. [32] state that management tends to delay the disclosure of bad news related to crimes. For this reason, managers' tendency to hide bad news from outsider investors increases the risk of stock price crash. Recent studies have also confirmed that managers' concealment of bad news is due to concerns about losing their job position, reputation, and even annual bonuses, which is why they keep news of misconduct hidden [23].

On the other hand, previous research has shown that monitoring mechanisms, managers' abilities, and opportunities to withhold negative news are limited and have an impact on the risk of stock price crash [36]. One of the monitoring mechanisms that has received a lot of attention in recent years in studies is the role of the audit committee with financial expertise [37]. Research literature shows that audit committees with financial expertise have a high motivation to monitor financial activities. Active and accurate monitoring by the audit committee with financial expertise leads to limiting the opportunistic behavior of management in disclosing company news. With precise monitoring by the audit committee with financial expertise, information asymmetry between management and shareholders is reduced, controlled accumulation of bad news is prevented, and as a result, the risk of stock price crash decreases [34].

Given that the risk of stock price crash is one of the most important factors that investors consider when making their decisions today, most of the research conducted in Iran has focused on the risk of stock price crash and its influential factors, but so far, no research has been conducted in Iran on the impact of the financial expertise of the audit committee on the relationship between corporate irresponsibility and the risk of stock price crash. Therefore, due to the paucity of sufficient research on the subject, this has motivated researchers to conduct a study in this area.

3   Research Background

3.1   Foreign Research

[46] investigated the impact of the financial expertise of the audit committee on the risk of stock price crash. In this study, financial statements of 75 companies listed on the French Stock Exchange from 2006 to 2015 were used. The results of the study's hypothesis testing showed that the financial expertise of the audit committee has a significant negative effect on the risk of companies stock price crash.

[28] examined the impact of tax evasion on the risk of f stock price crash. In this study, financial statements of 134 companies listed on the Chinese Stock Exchange from 2004 to 2015 were used. The results of the study's hypothesis testing showed that tax evasion has a significant positive effect on the risk of companies stock price crash.

[44] investigated the impact of corporate irresponsibility on the risk of stock price crash. In this study, financial statements of 1529 companies listed on the US Stock Exchange from 2003 to 2015 were used. The results of the study showed that corporate irresponsibility has a significant positive effect on the risk of stock price crash.

[17] examined the impact of internal corporate governance on the risk of stock price crash. In this study, financial statements of 655 companies listed on the Malaysian Stock Exchange from 2010 to 2019 were used. The results of the study's hypothesis testing showed that the financial expertise of the audit committee has a significant negative effect on the risk of stock price crash.

[38] investigated the impact of corporate social responsibility (CSR) on the risk of stock price crash. The financial statements of 225 companies listed on the Vietnamese Stock Exchange from 2007 to 2017 were used in this study. The results of the hypothesis testing showed that CSR has a significant negative effect on the risk of stock price crash of companies.

[35] examined the impact of internal corporate governance on the risk of stock price crash. The financial statements of 1798 companies listed on the Korean Stock Exchange from 2010 to 2019 were used in this study. The results of the hypothesis testing showed that the financial expertise of the audit committee has a significant positive effect on stock price crash risk.

[37] investigated the impact of corporate governance on stock price crash risk of companies listed on the UK Stock Exchange from 1997 to 2010. The results of their research showed that corporate governance has a significant negative effect on the stock price crash risk.

3.2 Domestic studies

Sadeghi and Esmaeilzadeh (2021) examined the impact of CEO power on stock price crash risk with the moderating role of the quality of accruals in companies listed on the Tehran Stock Exchange. The information of 142 companies listed on the Tehran Stock Exchange was used as the statistical sample during the period of 2011-2020. The results of this study showed that the quality of accruals as a moderating variable has a positive effect on the relationship between CEO power and the stock price crash risk in companies listed on the Tehran Stock Exchange.

[6] examined the moderating role of audit report on the relationship between audit committee effectiveness and the stock price crash risk. The study period covered the years 2012-2018, and the sample included 120 companies listed on the Tehran Stock Exchange. The multivariate regression and EVIEWS 10 software were used to implement and test the hypotheses. The results of this study showed a significant relationship between the effectiveness of the audit committee and the stock price crash risk, and the audit report moderated the relationship between the effectiveness of the audit committee and the stock price crash risk.

[3] investigated the impact of audit committee on the stock price crash risk, with a focus on voluntary disclosure of ethics. The study period was between 2012 and 2016, and the sample included 76 companies listed on the stock exchange. The ordinary least squares regression method was used to test the research hypotheses. The results showed that after controlling for other variables, the variables that affect the quality of audit committee in voluntary disclosure of ethics have a significant impact on the stock price crash risk.

[5] studied the impact of financial reporting quality on the stock price crash risk. The study included 110 companies for the period of 2010-2016. To measure the quality of financial reporting, the [32] and [43] models were used, and the monthly stock return skewness coefficient was used to measure the stock price crash risk. The research was of an applied nature and used a post-hoc method and pooled data testing. The Eviews statistical software was used to test the research hypotheses. The results showed a significant negative relationship between the quality of financial reporting and the stock price crash risk. Therefore, with the improvement of accounting information quality, the stock price crash risk decreases due to the reduction of conflict of interest.

[2] investigated the role of CSR and its impact on the stock price crash risk. The research hypotheses were tested using pooled data for the companies listed on the Tehran Stock Exchange for the period of 2009-2013. The results of the first hypothesis did not confirm a significant relationship between CSR and the stock price crash risk based on the negative skewness condition. However, the results of the second hypothesis confirmed a significant negative relationship between CSR and the stock price crash risk based on the criterion of low to high stock price volatility.

[8] examined the role of CSR and its impact on the stock price crash risk. The

sample consisted of 86 companies over the period 2010-2015, and their level of CSR was calculated using data envelopment analysis (DEA). Using a pooled data method and multiple regression analysis, the research aimed to study the impact of the CSR coefficient on the stock price crash risk. The findings showed that there was no significant relationship between the level of CSR and the stock price crash risk.

4   Research hypotheses

The research hypotheses for investigating the impact of corporate irresponsibility on the stock price crash risk for companies listed on the Tehran Stock Exchange were formulated as follows:

H1: Corporate irresponsibility has a significant impact on the stock price crash risk of companies accepted in the Tehran Stock Exchange.

H2: The financial expertise of the audit committee moderates the relationship between corporate irresponsibility and the stock price crash risk of companies accepted in the Tehran Stock exchange.

5   Research method

The research was applied in terms of its objective, and post-hoc in terms of its timing, i.e. data analysis was conducted based on past information (financial statements). Since this research seeks to find a meaningful relationship between the research variables (financial expertise of the audit committee, irresponsibility of the company and the risk of falling stock prices), the research falls under the category of correlation studies. The library method was used to collect relevant information on the background and theoretical foundations, followed by collecting data from selected company financial statements and explanatory notes, as well as official websites and information sources of the Tehran Stock Exchange, Tadbir Pardaz software, and company websites.

6   Research model

With respect to the models, which have been used in studies of [46], [28], and [44], they were utilized along with adjustment and development of given models to test hypotheses.

Model 1:

$$\text{SPCR}_{it} = \beta_0 + \beta_1 \text{CI}_{it} + \beta_2 \text{ACFE}_{it} + \beta_3 \text{SIZE}_{it} + \beta_4 \text{LEV}_{it}$$
$$+ \beta_5 \text{ROA}_{it} + \beta_6 \text{BSIZE}_{it} + \beta_7 \text{BIND}_{it} + \mu_{it}$$

Model 2:

$$\text{SPCR}_{it} = \beta_0 + \beta_1 \text{CI}_{it} + \beta_2 (\text{ACFE} \times \text{IC})_{it} + \beta_3 \text{SIZE}_{it}$$
$$+ \beta_4 \text{LEV}_{it} + \beta_5 \text{ROA}_{it} + \beta_6 \text{BSIZE}_{it}$$
$$+ \beta_7 \text{BIND}_{it} + \mu_{it}$$

In the above model:

SPCR_{it} : the stock price crash risk for company i in year t,

CI_{it} : the corporate irresponsibility of company i in year t,

ACFE_{it} : the financial expertise of the audit committee members of company i in year t,

SIZE_{iit} : the size of company i in year t,

LEV_{it} : the financial leverage of company i in year t,

ROA_{it} : the return on assets of company i in year t,

BSIZE_{it} : the size of the board of directors of company i in year t,

BIND_{it} : the independence of the board of directors of company i in year t,

β_0 : the constant coefficient,

β_1 to β_7 : the coefficients of the research variables, and ,

μ_{it} : the regression model error (residuals).

7   Research Variables

7.1   Independent Variable

Corporate Irresponsibility: In this research, the corporate irresponsibility variable is calculated as the ratio of total fines imposed on the company to the company's total assets. Company fines include the total amount of tax fines, insurance fines, fines resulting from legal disputes, and other fines resulting from the company's failure to fulfill its responsibilities [44].

7.2   Dependent Variable

Stock price crash risk: To measure the stock price crash risk, the Low-to-High Volatility measure was used based on the model (3) by [14].

Model 3:

$$\text{DUV}_{i,t} = \log \left\{ \left[(n_u - 1) \sum \text{DOW } W_{i,t}^2 \right] \Big/ \left[(n_d - 1) \sum \text{UP } W_{i,t}^2 \right] \right\}$$

In the above model:

n_u : the number of weeks in which the weekly net return of company i in year t is

greater than its annual average in the same year.

n_d : the number of weeks in which the weekly net return of company i in year t is less than its annual average in the same year.

$\sum \text{DOW W}_{i,t}^2$: the sum of the square of the weekly net return of company i in year t, where the weekly net return is less than the mean.

$\sum \text{UPW}_{i,t}^2$ the sum of the square of the weekly net return of company i in year t, where the weekly net return is greater than the mean.

$W_{i,t}$: the specific weekly return of company i in year t and is calculated from equation (1).

$$W_{i,t} = \ln\left(1 + \varepsilon_{i,t}\right) \tag{1}$$

In the above model, $\varepsilon_{i,t}$ is the residual weekly return of company i in month t and is calculated as the residual or leftover from the model in model (4).

Model 4:

$$R_{i,t} = \alpha_i + \beta_{1,i}R_{m,t-2} + \beta_{2,i}R_{i,t-1} + \beta_{3,i}R_{m,t} + \beta_{4,i}R_{m,t+1} + \beta_{5,i}R_{m,t+2} + \varepsilon_{i,t}$$

Where $R_{i,t}$ is the stock return of company i in week t during the fiscal year and Rm,t is the market return in week t. To calculate the weekly market return, the index at the end of the week is subtracted from the index at the beginning of the week and the result is divided by the index at the beginning of the week ([46]).

7.3 Moderating Variable

Financial Expertise of the Audit Committee: The financial expertise of the audit committee is measured by the ratio of members with financial expertise to the total members of the audit committee. A financial expert is defined as someone who has a university degree or a national or internationally recognized professional qualification in financial matters (accounting, auditing, or finance) and is actively engaged in this field ([46]). Finally, to use this variable in the inferential statistics of the research, we first calculate the median value. If the value is higher than the median in the fiscal year under study, this variable is equal to one, and otherwise, it is zero.

7.4 Control Variables

The control variables used in this study are similar to those used in other studies such as [7], [9], [4], [46], [16], and [21].

Company Size: To determine company size, the logarithm of the total asset value of the company at the end of the fiscal year under study is used.

Financial leverage: To determine financial leverage, the ratio of total debt to total assets at the end of the fiscal year under study is used.

Return on assets: To determine return on assets, the ratio of net income to total shareholders' equity at the end of the fiscal year under study is used.

Board size: In this study, board size is determined by the total number of directors who are members of the board of directors.

Board independence: In this study, board independence is determined by the ratio of non-executive directors to the total number of board members.

8   Population, Sampling Method, and Research Sample

The statistical population of this study includes all companies listed on the Tehran Stock Exchange during the period 2014 to 2020. Due to the large number of companies in the statistical population and some inconsistencies among the members of the population, the following constraints were imposed on the selection of the research sample:

1) Companies should not have changed their fiscal year during the study period.

2) Companies should not have had an operational hiatus of more than three months during the study period.

3) Companies should not have engaged in brokerage activities and should not belong to banks, holdings, or leasing companies.

4) Their fiscal year should end in December of each year.

5) The required information for data extraction should be available.

Due to the above limitations, 150 companies were selected as the sample using systematic elimination.

9   Data Analysis

9.1   Descriptive Statistics

The information related to the descriptive statistics of the quantitative variables of the study is presented in Table 1. The main central indicator is the mean. As shown in Table 1, the average of the variable of corporate irresponsibility during the tested years was 0.04. This means that the cost of fines for companies is about 4% of their total cost. The median for this variable was also 0.04, which means that half of the data is less than and half is greater than this value. One of the most commonly used parameters of dispersion is the standard deviation. The standard deviation indicates the degree of variation of the squared dependent variable data around the mean, and the smaller it is, the more normal the distribution of the data related to that variable. Other variables are also interpretable in the same

way. Among the research variables, corporate irresponsibility and company size have the least (0.03) and the most (0.670) amount of dispersion, respectively.

Table 1: descriptive statistics of quantitative research variables

Quantitative variable	Mean	Median	Max.	Min.	SD
Stock price crash risk	-0.11	-0.09	2.81	-3.56	0.67
Corporate irresponsibility	0.04	0.04	0.38	0.00	0.03
Audit committee expertise	0.42	0.33	1.00	0.20	0.17
Company size	6.77	6.79	8.92	4.81	0.67
Financial leverage	0.64	0.70	0.87	0.10	0.17
ROA	0.13	0.10	1.15	-0.47	0.20
Board size	5.13	5.00	9.00	5.00	0.50
Board independence	0.51	0.57	1.00	0.00	0.20

9.2   Examining Collinearity

The absence of collinearity between the independent and control variables of the research model is one of the assumptions considered in linear regression, which must be examined before testing the model. To examine the problem of collinearity between the research variables, the inflation factor of variance was used. As shown in Table 2, the inflation factor for all variables used in the first and second models of the research is less than 10; therefore, there is no collinearity problem between the variables used in the research models.

Table 2: Examination of Collinearity Problem

Variables	Variance inflation	
	Model 1	Model 2
Corporate irresponsibility	1.016	2.127
Audit committee expertise	1.080	-
Audit committee expertise * corporate irresponsibility	-	2.121
Company size	1.024	1.029
Financial leverage	1.035	1.027
ROA	1.017	1.012
Board size	1.012	1.016
Board independence	1.009	1.015

9.3   Examining the Reliability of Research Variables

One of the assumptions in regression is the reliability of the research variables. The reliability of the variables used in the model means that the mean and variance of the variables have remained constant across different years. Therefore, using these variables in the model will not create a spurious regression. The reliability test was performed using the Levene, Lynn, and Cho tests. The results of the reliability test for the research variables in Table 3 show that the significance level of all variables is less than five percent and the research variables are reliable.

Table 3: Reference: research findings

Variables	Statistics	Sig. level
Stock price crash risk	-8.87	0.00
Corporate irresponsibility	-12.83	0.00
Corporate irresponsibility * Audit committee expertise	-13.50	0.00
Company size	-25.09	0.00
Financial leverage	-48.37	0.00
ROA	-24.99	0.00
Board size	-6.35	0.00
Board independence	-16.80	0.00

9.4   Model Selection Test

As shown in Table 4, the error level of the Chow test for the first and second research models (0.00) is less than 5 percent, so the panel data method is used. Also, the error level of the Hausman test for the first research model (0.50) and for the second research model (0.11) is higher than 5 percent, so the random effects data method is used.

Table 4: Reference: research findings

Model	Test	Test statistics	Sig. level	Results
1	Chow test	4.76	0.00	Panel data
1	Hausman test	7.25	0.50	Random effects
2	Chow test	1.35	0.00	Panel data
2	Hausman test	12.98	0.11	Random effects

9.5   Testing Research Hypotheses

According to Table 5, since the value of the Durbin-Watson statistic for the first research regression model is 1.95 and for the second research model is 2.01, and these

values are between 1.5 and 2.5, the hypothesis of serial correlation or autocorrelation among the residuals of the research models is rejected, and it can be accepted that the residuals in the independent regression models are independent. Also, since the significance level of the F-statistic for the research models is less than 5 percent, it can be accepted that the research models are reliable. Additionally, the coefficient of determination for the first and second research models is 0.56 and 0.51, respectively, indicating that 56 percent and 51 percent of the variation in the dependent variable can be explained by the variables used in the first and second research models. The significance level for the variable "corporate irresponsibility" in the first model is 0.00, and since the significance level is less than the 5 percent error level, it can be accepted that corporate irresponsibility has a significant positive effect on the risk of stock price crash, and the hypothesis is accepted. Since the coefficient of the variable "corporate irresponsibility" in the first model is positive, it can be accepted that corporate irresponsibility has a significant positive effect on the risk of stock price crash.

To confirm or reject the second hypothesis, we first look at the coefficient of corporate irresponsibility in Model 1. As it is evident, corporate irresponsibility is 0.26 and significant at the 95% confidence level, and it increases the stock price crash risk. Now, we look at the coefficient of the financial expertise of the audit committee in Model 2, which is -0.16, and at the 95% confidence level, it reduces the stock price crash risk. In the next step, we examine the coefficient of (corporate irresponsibility * financial expertise of the audit committee) in Model 2; this coefficient is 0.09, and its significance level is also 0.00, indicating the acceptance of the second hypothesis at the 95% confidence level. When the financial expertise of the audit committee is multiplied by corporate irresponsibility, it decreases from 0.22 to 0.09. In fact, the financial expertise of the audit committee reduces the positive relationship between corporate irresponsibility and the stock price rash risk.

10   Discussion and Conclusion

The present study was conducted with the aim of examining the effect of the financial expertise of the audit committee on the relationship between corporate irresponsibility and the risk of stock price crash. For this purpose, two hypotheses were designed based on the theoretical foundations and previous studies. In Hypothesis 1, the effect of corporate irresponsibility on the risk of stock price decline was investigated. The results of Hypothesis 1 testing indicated that corporate irresponsibility has a significant positive effect on the stock price crash risk of companies accepted in the Tehran Stock Exchange. Therefore, with the increase in corporate irresponsibility, the risk of stock price decline increases, and Hypothesis 1 is confirmed at the 95% confidence level. The results of this research hypothesis are similar to the findings of [44]. In their study, [44] examined the effect of corporate irresponsibility on the risk of stock price crash using the financial statements of

Table 5: Research Hypothesis Test Results

Variable	Description	Model 1	Model 2
Intercept	Coefficient	0.59	0.64
	Sig. level	0.00	0.00
Corporate irresponsibility	Coefficient	0.26	0.22
	Sig. level	0.00	0.00
Audit committee expertise	Coefficient	-0.16	-
	Sig. level	0.00	-
Corporate irresponsibility*Audit committee expertise	Coefficient	-	0.09
	Sig. level	-	0.00
Company size	Coefficient	-0.09	-0.08
	Sig. level	0.00	0.00
Financial leverage	Coefficient	0.11	0.12
	Sig. level	0.00	0.00
ROA	Coefficient	-0.13	-0.13
	Sig. level	0.00	0.00
Board size	Coefficient	-0.08	-0.08
	Sig. level	0.03	0.03
Board independence	Coefficient	-0.12	-0.11
	Sig. level	0.00	0.00
Coefficient of determination		0.56	0.51
F-statistic Sig. level		0.00	0.00
Durbin-Watson statistic		1.95	2.01

1525 accepted companies in the US stock exchange from 2003 to 2015. The results of the research hypotheses indicate that corporate irresponsibility has a significant positive effect on the risk of stock price crash of companies. According to their belief, with the increase in corporate irresponsibility, financial crimes in companies increase, and in such situations, companies engage in opportunistic behaviors to hide bad news caused by their irresponsibility. Eventually, with the increase in internal pressure due to the retention of bad news caused by financial crimes, the sudden disclosure of such news increases the risk of stock price crash of companies.

In the research hypothesis, the effect of the financial expertise of the audit committee on the relationship between corporate irresponsibility and the risk of stock price crash was investigated. The results of the hypothesis testing showed that the financial expertise of the audit committee has a significant negative effect on the relationship between corporate irresponsibility and the risk of stock price crash in companies listed on the Tehran Stock Exchange. This means that the financial expertise of the audit committee reduces the positive relationship between corporate irresponsibility and the risk of stock price crash. The second hypothesis of the study is confirmed at the 95% confidence level. The results of this hypothesis are similar to the results of the study by [17]. In their research, using financial statement information of 655 companies listed on the Malaysian Stock Exchange between 2010 and 2019, it was shown that the financial expertise of the company's

audit committee had a significant negative impact on the stock price crash risk. In fact, increasing the financial expertise of the audit committee will reduce the opportunistic behavior of managers in hiding bad news caused by corporate irresponsibility, and managers will be less able to hide bad news of financial crimes, and with the up-to-date disclosure of negative news, a sudden drop in stock prices will decrease.

Based on the results of the present study, the following recommendations are proposed:

1) Considering the research results on the positive effect of corporate irresponsibility on the stock price crash risk, investors, creditors, analysts, and brokers are recommended to pay special attention to the role of financial crimes resulting from corporate irresponsibility in decision-making because corporate irresponsibility plays an important role in increasing the risk of stock price crash.

2) As the research results in the descriptive statistics section showed, financial crimes of companies account for about 4.5% of the total cost of companies. Considering that the financial expertise of the audit committee is an influential factor in reducing the positive relationship between corporate irresponsibility and the risk of stock price crash, the company boards are suggested to employ financial experts when choosing audit committee members.

To conduct further research related to the research topic, the following proposals are suggested for future studies:

1) Investigating the effect of other measures of the audit committee (the size of the audit committee, the independence of the audit committee) on the relationship between corporate irresponsibility and the risk of stock price crash in companies listed on the Tehran Stock Exchange.

2) Investigating the effect of corporate governance (the size of the board of directors, the independence of the board of directors) on the relationship between corporate irresponsibility and the risk of stock price crash in companies listed on the Tehran Stock Exchange.

3) Investigating the effect of ownership structure (institutional ownership, managerial ownership) on the relationship between corporate irresponsibility and the risk of stock price crash in companies listed on the Tehran Stock Exchange.

4) Investigating the effect of audit quality (audit size, audit tenure, audit fees) on the relationship between corporate irresponsibility and the risk of stock price crash in companies listed on the Tehran Stock Exchange.

11   Research Limitations

1- The effects related to type of industry have not been considered in this study. With respect to probable difference between intensity and weakness of observed

relations in various industries, attention should be paid to the impact of type of industry on interpretation of results.

2- The effects caused by difference in accounting methods of measurement and reporting of financial events may affect research results while no adjustment was done in this regard.

Despite aforementioned constraints at above, it is argued that such restrictions have not been led to challenge the results of study and this research is valid at appropriate level.

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