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The Effect of Auditor's Characteristics on the Future Stock Price Crash Risk

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Abstract

Negative skewness is among the features of crash risk that finally result in more volatility in the negative return. The contributing factors to stock price crash risk spread at the firm level, but the agency cost brings about information asymmetry. Should the information asymmetry between managers and investors be high, negative news about the firms would not transfer to the capital market on time, so when negative information holding passes the threshold, it will spread rapidly in the market and causes a drop in the stock price. According to the empirical observations, corporate governance is designed to decline agency cost and stock price crash risk. Hence, we can consider the auditors as a type of corporate governance effective in reducing agency costs and information asymmetry, so the objective of the present study is to assess the effect of auditor's characteristics on future stock price crash risk. To reach the study's objective, 90 listed firms on the Tehran Stock Exchange were analyzed for 9 years from 2011 to 2019 using the descriptive-correlation analysis method and the multivariate regression test. The results of this study proved a significant and negative relationship between the auditor's characteristics (such as consistency in the unqualified opinion and improved audit opinion) and the risk of the stock prices crash in the future. These findings reinforce the role of the audit report in evaluating the reliability of financial reporting and verifying that the auditor's opinion impacts the market analysis. The results also show that the market can distinguish between the various types of auditors' opinions. Also, they show a negative and significant relationship between an auditor's characteristics (the tenure of the auditor) and the risk of the characteristics stock prices crash in future. The empirical observations of this study are consistent with the supervised learning paradigm (theory). By showing that the auditors' characteristics reduce the existing risk in financial markets, the present study contributes to the literature on determining factors in stock price crash risk and is the first study to assess the effect of improved and consistent qualified auditor's opinion on future stock price crash risk.

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1. Introduction

The stock price is a widely used index that directly reflects the market response to new information about the company's future (Yun Lee, 2020). Accounting researchers have focused mainly on information asymmetries between managers and shareholders to explain the market crash. According to Jin and Myers (2006), managers intend to magnify company performance and prospects to spread the good news to the market and prevent bad news by choosing a specific strategy. If the cost of keeping bad news is less than the associated profit, managers tend to publish bad news all at once. Thus, stock prices fall as soon as the accumulated bad news is circulating in the market. Stock price fall hurts the investors as well as affiliates at the company level. It shakes investors' confidence in the company's management, reduces the demand for securities and liquidity of the relevant stocks, and thus leads to a loss of market value (Chua et al. 2019).

Recent studies provide empirical evidence in support of Jin and Myers (2006) theory regarding stock price crash risks and various corporate factors or the manager's specific motivations that facilitate or limit bad news (Hutton, Marcus and Tehranian, 2009; Kim et al., 2016; Kim, Li and Zhang, 2011a, 2011b; Kim, Wang and Zhang, 2016; Kim and Zhang, 2014; Robin and Zhang, 2015). However, little is known about how auditors' characteristics affect stock price crash risk. Auditors play an essential role in overseeing managers' production and dissemination of information. Auditors often gain accurate information about companies while interacting with corporations. Auditors' information may contain valuable private information that could not easily be obtained from corporate financial statements, voluntary disclosures, or even very complex analyses. Since auditors have more information about a company than investors and analysts, researchers look at any changes in the auditor as an essential issue and try to discover and understand the reasons for the change.

According to the existing literature, the quality of corporate financial reporting and audited financial statements increases with the auditor's tenure due to the familiarity and better understanding of business operations, accounting systems and reporting issues, thus improving audit quality. Therefore, investors have less uncertainty in investment-related decisions and estimating returns, reducing stock price falls (Su, Zhao and Zhou, 2016). Since management is responsible for preparing financial reports, accounting users such as market participants expect an objective third party to ensure that the reported information is accurate. The audit report provides the auditor's opinion on how the company's financial statements comply with generally accepted accounting principles. In this way, stakeholders make decisions based on audited information, assuming reasonable, complete, fair, and impartial (Arens, Elder and Beasley, 2008). In other words, considering the potential conflict of interest that may exist between management and owners of capital in terms of information asymmetry, the auditor's review of financial information increases the validity of the information and reduces the information risk (Danescu and Spatacean, 2018). An audit report can be a source of information, leading to changes in market indicators. The independent auditor's report plays an important role in validating financial statements and has the potential to ensure timely disclosure of bad news, thus limiting stock price crash risks (Habib and Jiaying Huang, 2019).

In this study, we expand the research literature by examining the role of independent auditors in stock price crash risks due to activities related to an accumulation of bad management information. This study also contributes to the microstructure literature and the economic implications of financial reporting, which show that the content of the audit report affects the validity of the firm's financial statements and that the market can distinguish between different types of statements. The findings of this study can show the importance and necessity of this research and fill the research gap in this field. This study can provide new evidence of the Iranian environment, enrich the relevant literature, and help investors in decision makings to quickly adjust their valuation, thus reducing the likelihood of sharp fluctuations in stock prices.

2. Literature Review and Hypothesis Development

2.1. Auditor opinion and stock price crash risk

The main view about stock price crash risk in the financial sector is that the risk of falling arises from the accumulation of bad news resulting from its deliberate concealment by management. When bad news is spread, stock prices fluctuate irregularly and eventually fall as negative information reaches the market. Discussion and research on stock price crash risk come from two aspects. The first aspect is the risk factors for falling. Information environment (De Fond et al., 2015) and representation problems due to opportunistic management behaviours, such as avoiding tax by corporate, additional in-service benefits for managers (Xu et al., 2014) over-investing are the two main sources of falling risk. The second aspect is the impact of internal and external corporate governance mechanisms on the risk of a crash, such as ownership structure (Wang, Cao and Ye, 2015), institutional investor equity (Xu, Yu and Yi, 2013) and independent auditing (Jiang and Yi, 2013). Due to the objective existence of agency problems, management is motivated to act opportunistic behaviours by hiding bad news for personal gain, which leads to stock price crash risk.

Many studies on agency theory have shown a conflict of interest between shareholders and management. The opportunistic behaviour of management may be curbed by considering external corporate governance mechanisms. One of these mechanisms may be relying on independent auditing, which plays an effective role in promoting the concept of accountability and strengthening stakeholder trust in financial statements (Wanis, 2021). This increases the importance of the audit, which aims to comment on the financial statements through the auditor's comments which are issued at the end of the audit process, where the results affect the quality of the financial statements and thus reduce the costs and increase trust in published data.

According to signalling theory, information released by the company signals investors to make investment decisions. In this way, it is possible to inform investors by publishing an audit report on the reasonableness of the company's financial statements. According to signalling theory, earnings statements and audit reports contain essential information that can influence the investment decision-making process for investors. Since the audit report contains the auditor's opinion on the validity of the financial statements, it has the potential of signalling (Muslih and Nuryatno Amin, 2018).

According to Arens, Elder and Beasley (2015), users of financial statements rely on the auditor's report to ensure the company's financial reporting. An audit opinion on the financial statements of companies that have been made public may affect the company's stock price. A good audit opinion is information that can increase a company's stock price, while an unfavourable audit opinion is an information that lowers a company's stock price. Therefore, the audit report can contain information that affects the company's stock price. Tahinakis, John and Evaggelia (2010) concluded in their study that audit reports contain limited information for investors and are not part of their decision-making process. Kipkosgei (2010) also concluded from his research that a very weak relationship exists between audit opinion and stock price. The research results of Selahatdin Kelten and Sarıtas (2020) showed that although the statistical results show the significance of the effects of the audit report in both markets (Turkey and Germany), its effect on the German stock market is less than on Turkey. Al-Othman (2019) found in his research that there is a statistically significant difference between stock prices after shifting the adjusted to the unadjusted type of report, while no statistically significant difference in stock price is presented as shifting the type of report from unadjusted to adjusted. Is.

Ianniello and Galloppo (2015) concluded that audit reports are informative for investors. On the other hand, the issues raised in independent auditors' reports, especially the containing clauses, are used for decision-making by various groups, including investors and financial analysts, affecting

stock prices and making the stock market react (Ittonen, 2012). Muslih and Nuryatno Amin (2018) found that the effect of audit opinion on stock price was not significant, and it was found that potential investors did not use audit reports in the decision-making process.

Since the commentary is so specific that its meaning is generally largely clear to all users, including investors, the audit report reflects the risk of the information (claims being consistent with the facts). Managers often have incentives to hide bad news by manipulating reported financial information, which may subsequently increase the risk of stock prices falling (Hutton, Marcus and Tehranian, 2009). An independent auditor plays a vital role by validating financial statements and can ensure that bad news is disclosed promptly, thus limiting stock price crash risk.

According to Purba (2009), commenting on the continuity of activity can affect investors' perceptions of the company's performance (Cahyaning Wibowo, 2019). This view will cast doubt on investors' investment decisions. Therefore, this statement is considered bad news that can affect the stock market's reaction. This reaction is reflected through changes in stock trading volume. On the other hand, changing audit opinions is not in the interest of shareholders. They can interpret this change as misinformation implemented by management (Melumad and Ziv, 1997). Previous studies have also found that auditing changes affect investor response (Firth, 1978; Ianniello and Galloppo, 2015). Assuming that the audit statements adjusted by the stock market are considered bad news, the market may react to this news, and this reaction is reflected in the price and volume of stock transactions which add to the fall in stock prices. Therefore, changing the comment will also affect the market; in other words, improving the comment will positively affect stocks' prices and trading volume. In other words, an improvement in the auditor's report (i.e., a change from an unfavourable report to a more favourable report) will lead to faster disclosure of information, and faster disclosure will lead to a market reaction. An improvement in the auditor's comments is also good news for the company. Investors expect auditors to provide warning signs in their reports in the form of audit commentary in cases where their owners are threatened. These arguments lead to the expression of the first and second hypotheses of the research as follows:

1- There is a significant relationship between consistency in the auditor's qualified opinion and future stock price crash risk.

2- There is a significant relationship between improvement in the auditor's opinion and future stock price crash risk.

2.2. Auditor’s tenure and stock price crash risk

Recent financial crises have addressed the auditors 'willingness to monitor owners' bad news reporting (PCAOB, 2010; Financial Crisis Inquiry Commission, 2011). In August 2011, the Public Company Accounting Oversight Board raised concerns about the auditor's independence and tenure. Despite these concerns, it is not clear whether the long-term relationship between the auditor and the client will lead to more bad management news. On the one hand, if auditors want to keep track of and prevent bad news from the client, it can be important to develop the auditor's knowledge of the client. Over time, auditors better understand their client's business and learn more about important issues that need special attention (Beck and Wu, 2006; PCAOB, 2011a; Price Water House Coopers, 2013). This "monitoring through learning" view shows that the auditor's long tenure helps prevent the client from keeping bad news activities. Thus, auditors' ability to identify and prevent bad news retention activities improves, and the risk of stock prices fall reduced (Callen and Fang, 2017). On the other hand, if a long-term relationship with the client reduces the auditor's independence (Davis, Soo and Trompeter, 2009; PCAOB, 2011b), auditors with a long tenure may be less aware of their clients' bad news retention activities. Measuring the retention of bad news by managers is challenging because managers have several methods (such as manipulating accruals, changing classifications, off-balance-

sheet accounting, and non-transparent accompanying notes to financial statements) by which they hide bad economic news.

Contrary to concerns recently raised about the long-term relationship between the auditor and the client, there is compelling evidence consistent with monitoring through a learning perspective that indicates the auditor's tenure is negatively associated with the risk of a stock price crash next year (Callen and Fang, 2017). Accordingly, the development of client-specific knowledge throughout the auditor-client relationship enables auditors to identify and prevent client news retention activities effectively.

Therefore, the auditor's knowledge of the client provides important input for creating a high-quality audit, including identifying and preventing the retention of bad news by management. Acquiring client-related knowledge requires a significant learning curve in the early years, especially when learning the many potential ways an employer can gather bad news. Auditors gradually understand their client's business over time and learn more about important issues that need special attention (Beck and Wu, 2006; Johnson, Khurana and Reynolds, 2002). Accordingly, the auditor's long tenure should help prevent the client from holding bad news in all financial reporting methods and thus reduce the risk of future stock price falls.

According to Mautz and Sharaf (1961), a long-term relationship with a client reduces the auditor's independence. The Audit Accountability Report (AICPA, 1978) noted that as auditor tenure increases, auditors are more likely to succumb to pressure from their clients on financial reporting choices because they are too familiar with client management ("cognitive reasoning") and want to benefit from it by retaining the customer ("Motivational Argument"). Thus, from a "cognitive-motivational" perspective, auditors with longer tenure are less likely to be independent and, therefore, less aware of their client's bad news retention activities, thus increasing the risk of future stock price falls. As a result, the relationship between the auditor's tenure and stock price crash risk is not already clear. (Callen and Fang, 2017). Given these conflicting views, the relationship between the auditor's tenure and stock price crash risk is an empirical question, so the third hypothesis of the research is as follows:

3- there is a significant relationship between auditors' tenure and future stock price crash risk.

3. Research Methodology

3.1. The population of the statistical sample

The research data are extracted from the audited financial statements of listed firms on the Tehran Stock Exchange during 2011-2019 from Internet databases, including the Codal Website and the official website of the Stock Exchange. Table 1 displays the selected sample.

3.2.Regression models

To test the hypotheses of the study, after screening and sample selection from the listed firms on the Stock Exchange and collecting information from the defined variables in the operational definition of variables, the following measures are adopted:

Regression model for the first hypothesis: The conceptual framework of the research

$$CRASH_{it} = \beta_0 + \beta_1 OI_{it} + \beta_2 Size_{it} + \beta_3 Lev_{it} + \beta_4 MB_{it} + \beta_5 Roa_{it} + \varepsilon_{it}$$

Regression model for the second hypothesis:

$$CRASH_{it} = \beta_0 + \beta_1 CUO_{it} + \beta_2 Size_{it} + \beta_3 Lev_{it} + \beta_4 MB_{it} + \beta_5 Roa_{it} + \varepsilon_{it}$$

Regression model for the third hypothesis:

$$CRASH_{it} = \beta_0 + \beta_1 ADTTenure_{it} + \beta_2 Size_{it} + \beta_3 Lev_{it} + \beta_4 MB_{it} + \beta_5 Roa_{it} + \varepsilon_{it}$$

Table 1. The statistical sample of the study

No. of listed firms on the Tehran Stock Exchange at the end of 2019	436
No. of firms entered the Tehran Stock Exchange during the period of the study	(74)
No. of affiliated firms withholdings, intermediaries, banks, investment, insurance, and leasing during the period of the study	(109)
No. of firms with financial yearend other than March during the period of the study	(110)
No. of firms with no available information	(7)
No. of firms with more than 6 months of transaction halt during the period of the study	(46)
No. of firms understudy	90

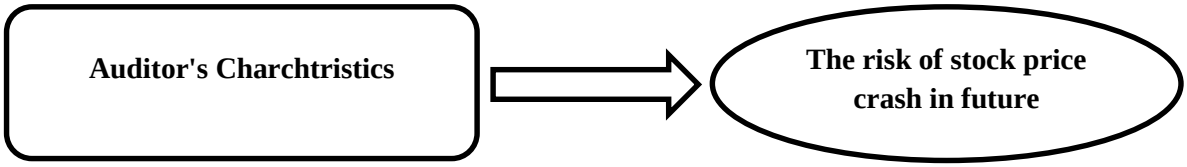

Figure 1. The concptual framework of the research

3.3. Research variables

3.3.1. Independent variables

auditor's tenure: a dummy variable that should include the auditor's tenure is more than 3 years 1; otherwise, 0 will be assigned (Kyriakou and Dimitras, 2018).

Improved auditor's opinion: improved opinion compares the opinion in the year under study with that of the previous year. For example, if an unqualified opinion is issued in the previous year and the auditor's report shows the qualified one in the current year, it is the improved opinion. Hence, in this paper, inspired by Cullinan et al. (2012), in case of change in opinion from unqualified to qualified 1, otherwise, 0.

Consistence in qualified opinion: In the previous year, the independent auditor issued qualified opinions on financial statements, which will happen in the upcoming period. The qualified opinion indicates that the firm's financial statements are by the accepted accounting principles and shown appropriately in all significant aspects. Hence, if the auditor's report in the year t and t-1 is qualified 1 otherwise, 0 will be assigned (Ianniello and Gallappo, 2015).

3.3.2. Dependent variable

future stock price crash risk

The skewness coefficient model of Chen, Hong and Stein (2001) and Hutton, Marcus and Tehraninan (2009) measures the future stock price crash. According to Chen, Hong and Stein (2001), the signs of the stock price crash are formed in the year prior to the actualization of the phenomenon under study and are the marks of negative skewness in the return of the company's stock. Therefore, the companies with the experience of negative skewness in their previous year's stock return will face a higher probability of the crash of their stock prices in the future year.

According to Hong and Stein (2003), stock return is an alternative solution to measure the asymmetry in the distribution of the return of negative skewness. Equation (1) can measure the negative skewness of the stock return.

Eq. (1)

$CRASH_{it}=NCSKEW_{it}=-(n(n-1)3⁄2\sum W_{J\theta 3})/((n-1)(n-2)(\sum W_{J\theta}2)\ 3⁄2))$

$NCSKEW_{it}$: negative skewness coefficient of monthly special return of the firm i in the year t. WJɵ: the firm's special monthly return of the firm i in month ɵ during the fiscal year estimated from equation 2. N: no. of observed months of return during the fiscal year. In the above table, the more the value of the negative skewness coefficient, the more is the firm exposed to stock price crash risk. According to eq, the firm's special monthly return is shown by w. (2) is equal to the natural logarithm of figure 1 plus the residual figure calculated via Eq. (3).

Eq. (2)

$W_{J\theta}=Ln|1+\varepsilon_{J\theta}|$

εJɵ: is the residual of the firm J in month ɵ and is defined as the remaining return or residual estimated via Eq. (3).

$r_{Jt}= \alpha_J+\beta_{1j}r_{mt-2}+ \beta_{2j}r_{mt-1}+ \beta_{3j}r_{mt}+ \beta_{4j}r_{mt+1}+ \beta_{5j}r_{mt+2}+\varepsilon_{J\theta}$

In eq. (3), rit is the firm's stock return i in month t, and rmt is the monthly return of the market based on (market index). Rmt: is market return in t period. In this paper, the price and cash earnings index of the Tehran Stock Exchange (TEDPIX) is used to calculate the market return that is calculable using the following formula:

$$R_{mt} = \frac{TEDPIX_t - TEDPIX_{t-1}}{TEDPIX_{t-1}}$$

Where

TEDPIX: is the return of price and cash earnings of the stock exchange at the end of period t

TEDIPIX: is the return of price and cash earnings of the stock exchange at the beginning of period t; Rmt: return mean of the market in month t

3.3.3. Control variables

Firm size: natural logarithm of total assets (Yun Lee,2020)

Return on assets: net profit of ordinary shareholders divided by total assets (Yun Lee,2020)

Financial leverage: total liabilities divided by total assets (Yun Lee,2020)

Market value to book value of equity (Yun Lee,2020)

$MB = \frac{MVE}{BVE}$

4. Results

4.1. Descriptive statistics

Table 2 illustrates the descriptive statistics of the existing firms in the sample.

Table 2. descriptive analysis of values related to dummy variables

Variable	Sig.	Dummy variable	Frequency	Frequency percentage	No. of observations
Improved opinion	OI	0	758	0.936	810
		1	52	0.064	
Auditor's tenure	ADTTenure	0	311	0.384	
		1	499	0.616	
Consistence in qualified opinion	CUO	1	337	0.416	
		0	473	0.584	

Since the variable of improved auditor's opinion and consistency in qualified opinion is a dummy with the mean value of 0.064 and 0.416, we can claim that among the sample firms of the study, about 6% have a change in unacceptable opinion to acceptable and 42% acceptable report in current and the previous year.

Table 3. Descriptive statistics of the research variables

Variable	Sig.	Mean	Std. dev.	Kurtosis	Skewness	Max.	Min.
future stock price crash risk	CRASH	-0.263	0.879	3.326	-0.751	2.928	-3.457
Financial leverage	LEV	0.588	0.224	2.933	-0.010	0.066	1.343
Market value to book value of equity	MB	2.294	1.075	8.505	1.848	-2.391	13.160
Return on assets	ROA	0.134	0.267	23.375	3.358	-0.939	2.206
Firm size	SIZE	27.953	1.572	3.660	0.515	23.616	32.987
No. of observations: 810							

As shown in Table 3, the future stock price crash risk variable is -0.263, indicating undesirable news publications' effect on the stock price.

4.2. Results of unit root test of variables

This section will discuss the reliability of variables and their related tests in combined data. The Levin Lin Chu test is used to assess reliability in this paper.

Table 4. Unit root test (Levin, Lin, and the Chu)

Variable	Levin, Lin, and the Chu	Significance	Result	Variable	Levin, Lin, and the Chu	Sig.	Result
CRASH	-24.678	0.000	Reliable	OI	-6.280	0.000	Reliable
LEV	-13.410	0.000	Reliable	CUO	-3.203	0.001	Reliable
MB	-21.185	0.000	Reliable	ADTTenure	-14.218	0.000	Reliable
ROA	-18.699	0.000	Reliable	SIZE	-12.648	0.000	Reliable

Since the significance level of the test for all study variables is smaller than 0.05, the existence of unit root in series is rejected, and the data are stationary.

4.3. Results of hypothesis testing

Tables 5, 6, and 7 illustrate the information related to the study's hypotheses, respectively. The multivariate linear regression for the used variables is applied for each hypothesis. To measure the significance, the F-Fisher is used, and the coefficient of determination is used to measure the explanatory power of patterns.

Table 5. The results of the first hypothesis testing

Sign	Coefficients	T statistic	Probability	VIF	Test	Value	probability
C	-23.732	-12.515	0.000	-	Coefficient of determination	0.439	
OI	-0.195	-1.374	0.017	1.066	Durbin-Watson	2.373	
SIZE	0.844	12.705	0.000	1.045	F-Limer	2.712	0.000
LEV	-0.048	-0.018	0.855	1.121	Hausman	105.186	0.000
MTB	0.051	2.376	0.018	1.045	F-Fisher	5.957	0.000
ROA	-1.485	-9.409	0.000	1.174			

As can be seen in tables 5, 6, and 7, the values of the f statistic and their subsequent probability show that the null hypothesis, that is, the insignificance of the entire pattern (all coefficients are 0), is rejected and the estimated regression pattern is significant, in general. The independent variables explain about 24, 24, and 26% of changes of the dependent variables, respectively—the lack of autocorrelation among residuals obtained using the Durbin-Watson statistic. According to table 5, since the significance level of the variable of improved auditor's opinion is smaller than 5%, there is a significant relationship between improved auditor's opinion and future stock price crash risk, so the first hypothesis of the study concerning the relationship between **improved auditor's opinion and** future **stock price crash risk is accepted**. According to table 6, since the significance level of the

variable of consistency in qualified opinion is smaller than 5%, there is a significant relationship between consistency in qualified opinion and stock price crash risk, so the second hypothesis of the study concerning the relationship between **consistency in qualified opinion and** future **stock price crash risk is accepted**. According to table 7, since the significance level of the variable of auditor's tenure pinion is smaller than 5%, there is a significant relationship between auditor's tenure and stock price crash risk, so the third hypothesis of the study concerning the relationship between **auditor's tenure and** future **stock price crash risk is accepted**.

Table 6. The results of the second hypothesis testing

Sign	Coefficients	T statistic	Probability	VIF	Test	Value	probability
C	-23.789	-12.595	0.000	-	Coefficient of determination	0.439	
CUO	-0.169	-1.602	0.011	1.009	Durbin-Watson	2.374	
SIZE	0.842	12.705	0.000	1.042	F-Limer	2.566	0.000
LEV	0.004	0.16	0.987	1.116	Hausman	99.785	0.000
MTB	0.050	2.351	0.019	1.022	F-Fisher	5.964	0.000
ROA	-1.524	-9.782	0.000	1.121			

Table 7. The results of the third hypothesis testing

Sign	Coefficients	T statistic	Probability	VIF	Test	Value	probability
C	-22.515	-11.755	0.000		Coefficient of determination	.449	
ADT TENURE	-0.319	-4.027	0.000	1.026	Durbin-Watson	2.376	
SIZE	0.808	12.091	0.000	1.031	F-Limer	2.564	0.000
LEV	0.012	0.045	0.964	1.138	Hausman	96.350	0.001
MTB	0.050	2.382	0.018	1.046	F-Fisher	6.208	0.000
ROA	-1.477	-9.707	0.000	1.133			

5. Conclusion and Suggestions

The present study aims to ass the effect of auditor's characteristics on stock price crash risk among 90 listed firms on the Tehran Stock Exchange during 2011-2019. As the information mediator of the capital market, the auditor is a key reference for investing in collecting trustful information about the listed firms and plays an important role in economic development. Regarding the obtained results from statistical analysis, the information indicates a significant relationship between improved auditor's opinion, consistency in qualified opinion, and future stock price crash risk. The findings contribute to recent studies on the economic consequences of auditor's opinion, strengthen the role of audit reports in assessing the reliability of financial reporting, and emphasize that auditor's opinion influences the market interpretation and that the market can differentiate between different types of opinions. Receiving qualified opinions from the firm is considered good news, so the auditor's opinion is a valuable source of information in the stock market. Thus, auditing reports have valuable information, and positive changes in auditors' opinions bear important information content for the stock market in Iran. The study results align with Al-Othman's (2019) contrast with Muslih and Nuryatno Amin's (2018). Further, the results show that an auditor's tenure is negatively associated with the future stock price crash risk. The empirical results of the study conform with the supervision approach through learning and the development of knowledge specific to the customer during the period of relationship between auditor-employer will allow the auditors to detect and prevent the measures adopted by the employers to hold bad news and that declines the future stock price crash risk. Due to acquaintance and a better understanding of the auditor from the commercial operation, the accounting systems, reporting issues, and finally, improvement in audit quality, the quality of

firms' financial reporting and audited financial statements are increased. Consequently, the investors are more assured about their investment decisions and return prediction, so the results align with Callen and Fang (2017).

According to the results of the study, since the type of report affects those who are addressed, we recommend the supervisory bodies for the quality of auditors, such as the Official Accounting Association, assess various firms and the governance systems more meticulously to create a path for increasing audit quality to not present a qualified report to lower the risk of stock price crash. According to the findings, we recommend that investors and capital market practitioners, in addition to financial variables, consider the tenure of auditors as a determining factor in return and risk of stock price crash. Moreover, we recommend the auditing regulators, including the Official Accounting Association and Auditing Organization, extend the compulsory rotation period of audit firms to five years or more to improve the audit quality.

For future studies, the following suggestions are proposed:

Since the audit features on the risk of falling stock prices in the next year were examined, it is suggested that an issue be considered on the risk of falling stock prices in the current year.

In this paper, the skewness coefficient model of Chen, Hong and Stein (2001), Hutton, Marcus, and Tehranian (2009) is used to calculate the stock crash risk. We recommend that future studies consider the stock price crash risk as a dummy variable if the firm at the end of the fiscal year experienced at least one period of crash 1; otherwise, 0 will be assigned.

References

1. Al-Othman, L. N . (2019). The Reaction of the Financial Market on the Auditor Report: an Empirical Study on Service Companies listed in Amman Stock Exchange (ASE). *Investment Management and Financial Innovations*, 16(1). http://dx.doi .org /10.21511/imfi.16(1).2019.21.
2. American Institute of Certified Public Accountants (AICPA). (1978). Report of the commission on auditors' responsibilities. *The Cohen Commission. New York: AICPA.*
3. Arens, A.A., Elder, R.J. & Beasley, M.S. (2008), Auditing and assurance services. *An Integrated Approach.* 12th Edition. Pearson / Prentice Hall. Education. New Jersey. Hall.https://lib.ugent.be/catalog/rug01:001656781.
4. Arens, A.A., Elder, R.J. & Beasley, M.S. (2015). Auditing and Assurance Services. *Pearson Education Ltd*, 15th Edition.
5. Beck, P. J., & Wu, M. G. H. (2006). Learning by doing and audit quality. *Contemporary Accounting Research*, 23(1): 1–30. https://doi.org/10.1506/AXU4-Q7Q9-3YAB-4QE 0.
6. Cahyaning Wibowo.*A.*,(2019). Analysis of Going Concern Audit Opinion Issuance. *International Journal of Managerial Studies and Research (IJMSR*).7(12): 70-75. http://dx.doi.org/10.20431/2349-0349.0712010 www.arcjournals.org.
7. Callen, J. L., & Fang, X. (2017). Crash risk and the auditor–client relationship. *Contemporary Accounting Research*, 34(3): 1715-1750. https://doi.org/10.1111/1911-3846.12311.
8. Chen, J., Hong, H.,& Stein, J.C.,(2001). Forecasting crashes: Trading volume, past returns, and conditional skewness in stock prices. *Journal of Financial Economics*, 61(3): 345–381. https://doi.org/10.1016/S0304-405 X (01)00066-6.
9. Chua, J., Fangb, J., Kimc, J.B., & Zhou, Y.(2019). Stock price crash risk and auditor-client contracting. *China Journal of Accounting Studies*, 7(2): 184–213. https://doi.org/10.1080/21697213.2019.1661 169.
10. Cullinan, C.P., Wang, F., Yang, B.,& Zhang, J.(2012). Audit opinion improvement and the timing of disclosure. *Advances in Accounting, incorporating Advances in International*

Accounting, 28:333-343. https:// doi.org/10.1016/j.adiac.2012.09.010.
11. Danescu,T.,& Spatacean,O.(2018). Audit opinion impact in the investors' perception – empirical evidence on Bucharest Stock Exchange. Audit financial, 1(149):111-121. http://dx.doi.org/10.20869/AUDITF/2018/149/003.
12. Davis, L. R., Soo,B., & Trompeter,G. (2009). Auditor tenure and the ability to meet or beat earnings forecasts. *Contemporary Accounting Research*, 26 (2): 517-48. https://doi.org/10.1506/car.26.2.8.
13. De Fond, M. L., Hung, M., Li, S., & Li, Y. (2015). Does mandatory IFRS adoption affect crash risk? *Accounting Review*, 90(1): 265–299. https://www. jstor. org/ stable/ 24467271
14. Financial Crisis Inquiry Commission, (2011). The financial crisis inquiry report: final report of the national commission on the causes of the financial and economic crisis in the United States. *Available online at* http://purl.fdlp.gov/GPO/gpo3449.
15. Firth, M. (1978). Qualified Audit Reports: Their Impact On Investment Decisions. *The Accounting Review*, 53(3):642-650. https://www.jstor.org/stable/245672.
16. Habib, A.,& Jiaying Huang, H. (2019). Abnormally long audit report lags and future stock price crash risk: evidence from China, *International Journal of Managerial Finance*, 15(4): 611-635. https://doi.org/10.1108/IJMF-07-2018-0213.
17. Hong, H., & Stein, J.C. (2003). Differences of Opinion, Short-Sales Constraints, and market crashes. *The Review of Financial Studies*. 16: 487-525.http://dx .doi.org/10.1093/rfs/hhg006.
18. Hutton, A.P., Marcus, A.J., & Tehranian, H. (2009). Opaque financial reports, R2, and crash risk. *Journal of Financial Economics*, 94(1):67–86. https:// doi. Org /10 .1016/j.jfineco.2008.10.003.
19. Ianniello, G., & Galloppo,G.(2015). Stock market reaction to auditor opinions - Italian evidence. *Manajerial Auditing Journal*, 30(6):. 610-632. https://doi. org/10 .1108/MAJ-06-2014-1045.
20. Ittonen, K. (2012). Market Reactions to Qualified Audit Reports: Research Approaches, *Accounting Research Journal*, 25 (1),:8-24. http://dx.doi. org/10. 2139/ ssrn.1978759.
21. Jin, L., & Myers, S.C. (2006). R2 around the world: New theory and new tests. *Journal of Financial Economics*, 79(2):257–292. https://doi. org/10. 1016/j .j fineco.2004.11.003.
22. Johnson, V., Khurana, L.,& Reynolds, J. (2002). Audit firm tenure and the quality of financial reports. *Contemporary Accounting Research*, 19 (4):637-60. https://doi.10. 1506/LLTH-JXQV-8CEW-8MXD.
23. Kim, J.-B., & Zhang, L. (2014). Financial reporting opacity and expected crash risk: Evidence from implied volatility smirks. *Contemporary Accounting Research*, 31(3): 851–875. https://doi.org/10.1111/1911-3846.12048.
24. Kim, J.-B., & Zhang, L. (2016). Accounting conservatism and stock price crash risk: Firm-level evidence. *Contemporary Accounting Research*, 33(1):412–441. https://doi. org/10.1111/1911-3846.12112.
25. Kim, J.-B., Li, L., Lu, L.Y., & Yu, Y. (2016). Financial statement comparability and expected crash risk. *Journal of Accounting and Economics*, 61(2–3): 294–312. https://doi.org/10.1016/j.jacceco.2015.12.003.
26. Kim, J.-B., Li, Y., & Zhang, L. (2011a). Corporate tax avoidance and stock price crash risk: Firm-level analysis. *Journal of Financial Economics*, 100(3): 639–662. https://doi.org/10.1016/j.jfineco.2010.07.007.
27. Kim, J.-B., Li, Y., & Zhang, L. (2011b). CFOs versus CEOs: Equity incentives and crashes. *Journal of Financial Economics*, 101(3):713–730. https://doi. org/10. 1016/j.jfineco.2011.03.013.
28. Kim, J.-B., Wang, Z., & Zhang, L. (2016). CEO overconfidence and stock price crash risk.

Contemporary Accounting Research, 33(4):1720–1749. https://doi. org/10.1111 /1911-3846.12217.

29. Kipkosgei, T.C. (2010). The effect of modified audit opinions on share prices for companies quoted at the Nairobi stock exchange. The *University of Nairobi*. http://erepository.uonbi.ac.ke:8080/xmlui/handle/123456789/13998.
30. Kyriakou, M.I & Dimitras, A.I. (2018). Impact of auditor tenure on audit quality: European evidence. *Investment Management and Financial Innovations*, 15(1):374-386. http://dx.doi.org/10.21511/imfi.15(1).2018.31.
31. Mautz, R. K., & Sharaf, H. A. (1961). The philosophy of auditing. Sarasota, FL: *American Accounting Associatio*n.http://lib .ugent.be/catalog/ rug01: 0021 58274.
32. Melumad, N. D., & Ziv, A.(1997). A Theoretical Examination of the Market Reaction to Auditor's Qualifications. *Journal of Accounting Research*, 35(2): 239-256. https://doi.org/10.2307/2491363 .
33. Muslih,M., & Nuryatno Amin, M.(2018). The Influence of Audit Opinion on the Company Stock Price. *Proceeding International Seminar on Accounting for Society*, 1(1). http://openjournal.unpam.ac.id/index.php/Proceedings/article/download/1840/1536.
34. Price water house Coopers LLP (PricewaterhouseCoopers). (2013). Point of view: Mandatory audit firm rotation – other changes would be better for investors. New York, NY: PricewaterhouseCoopers.
35. Public Company Accounting Oversight Board (PCAOB). (2010). Report on observations of PCAOB inspectors related to audit risk areas affected by the economic crisis. Release No. 2010-006. Washington, D.C.: PCAOB.
36. Public Company Accounting Oversight Board (PCAOB). (2011b). Concept release on possible revisions to PCAOB standards related to reports on audited financial statements. Release No. 2011-003. Washington, D.C.: PCAOB.
37. Public Company Accounting Oversight Board (PCAOB). 2011a. Concept release on auditor independence and audit firm rotation. Release No. 2011-006. Washington, D.C.: PCAOB.
38. Purba, M. P. (2009). Asumsi Going Concern: Suatu Tinjauan Terhadap Dampak Krisis Keuangan atas Opini Audit dan Laporan Keuangan. Yogyakarta: Graha Ilmu.
39. Robin, A.J., & Zhang, H. (2015). Do industry-specialist auditors influence stock price crash risk?. Auditing: *A Journal of Practice & Theory*, 34(3): 47–79. http://dx. doi. org/10.2139/ssrn.2169099
40. Selahatdin Kelten,G.,& Sarıtas,H.(2020). The Effect of Annual Independent Audit Reports on Stock Market Performance: Evidence from Turkey and Germany. *Eskisehir Osmangazi Universitesi IIBF Dergisi*, 15(2):389 – 410. https://doi.10.17153/ OGU IIBF.528777
41. Su, L., Zhao, X. & Zhou, G. (2016). Auditor Tenure and Stock Price Idiosyncratic Volatility: The Moderating Role of Industry Specialization, Auditing: *A Journal of Practice & Theory*, 35 (2):147–166. https://doi.org/10.2308/ajpt-51256 .
42. Tahinakis, P., John,M.,& Evaggelia,D. (2010). An Appraisal of the Impact of Audit Qualifications on Firms‘ Stock Exchange Price Fluctuations. *Inventi Impact: microfinance & banking*, 2(1): 86-99. https://doi.org/10.5296/erm.v2i1.335.
43. Wang, H., Cao, F., & Ye, K. (2015). Monitoring or tunnelling? The proportion held by big shareholders and stock price crash risk. *Management World*, 2: 53–65.
44. Wanis, E.A.(2021). The Impact of Audit Quality on The Relationship between Ownership Structure and Stock Price Crash Risk in Egypt. *Academy of Accounting and Financial Studies Journal*, 25(6):1-15.
45. Xu, N., Li, X., Yuan, Q., & Chan, K. (2014). Excess perks and stock price crash risk: Evidence

from China. *Journal of Corporate Finance*, *25*:419–434. https:// 10.1016/j .jcorpfin.2014.01.006.

46. Xu, N., Yu, S., & Yi, Z. (2013). Institutional investor herding behavior and stock price crash risk. *Management World*, 7: 31–43. https://caod.oriprobe.com/article s/40403943/ ji_gou_tou_zi_zhe_yang_qun_xing_wei_yu_gu_ jia_be ng.htm.
47. Yun Lee, K . (2020). Stock Price Crashes and Auditors' Client-Retention Decisions. *Journal of Accounting, Auditing & Finance*. 1–25. https://doi.org/ 10.11 77 /0148558X20929485.