

## The relationship between audit quality and managers' overconfidence

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### Abstract

*Financial statements are a tool for reporting and presenting the results of management representative to be in charge of company's resources with the role of an auditor validating the financial statements so that the users of financial statements can use them for judgment and decision making. Thus, the managers do useful accounting information reporting in the financial statements. The managers' overconfidence is one of the manager's actions. As a result, according to the abovementioned, the relationship between audit quality and managers' overconfidence was examined in this study. The study statistical population or spatial territory included companies listed in the Tehran Stock Exchange. The correlation analysis method (using the panel data technique) was used to analyze the data and test the research hypotheses. The results of testing the research model showed that the audit quality has a significant adverse impact on managers' overconfidence of companies' according to Lin et al. model.*

**Keywords:** Audit quality; Managers' overconfidence; financial statements.

## Introduction

International events such as the economic crises have led to highlighted major role of reliable and high quality financial reports. Such events also reflect the importance of audit quality in other aspects and areas of financial reporting. Access to the quality of financial reporting depends on accuracy of each of the rings of financial reporting chain. One of the rings playing a major role in supporting the quality of financial reporting around the world, either in the public sector or the private sector of capital market, is independent audit. Independent audit is an important part of organizational underlying supervision and inspection and an important activity based on the public interests assuring that the information contained in the financial statements are presented fairly and accurately. From the perspective of agency theory, the issue plays an important role in reducing information asymmetry and agency problems between management and owners as well as between the majority and minority of shareholders (Sarban, F., 2013). Therefore, audit quality is considered the most important thing for developers of auditing standards.

To strengthen the quality of auditing, the developers of auditing standards immediately take action to develop auditing standards and quality control standards. These standards create a foundation to support the high quality audit. However, it is important to note that other effective factors, such as users' vision, skill and competence of the auditors, activities of others in the financial reporting chain, laws and regulations and the business environment have also a significant influence on audit quality. Audit quality is achieved during the process of identifying and implementing the required actions for access to quality objectives, which improvement requires a coordinated approach (Shojaa, A., 2010).

Audit firms must work on improving the quality of audit in an organized and continuous process due to constant changes in the business environment, financial reporting standards, regulations and technology and changes in the environment in which the auditor has accepted the audit work. Thus, following the audit quality is not a program with a definite output; rather, it is a process ensuring that with improvement of audit quality factors in an environment where audits are performed, the audit quality would also improve. DeAngelo defines the audit quality as a joint probability based on which an appointed auditor would discover the important misstatements in financial reports and report them as well. In a more comprehensive definition, Davidson & Neu describe audit quality as the auditor's ability to detect and remove significant misstatements and conducted manipulation in reported earnings (Sadri, P., 2012).

Managers' overconfidence encompasses different meanings. In the field of finance, it includes such cases in which the managers often think that their companies are more likely to be successful than other firms (GhaemMaghami, M., 2011). Such managers are called overconfident. An overconfident manager allocates a longer period for the continuation of his company rather than other companies. The overconfident managers are optimistic about investment costs (Shabahang, R., 2009); thus, they underestimate these costs less than their actual amounts and overestimate the returns from investments. This overconfidence of managers is applied in anticipating the costs and sales as well. These managers overestimate their ownership interest in gaining and integration with great optimism and overconfidence. Such attitude in integration and acquisition could explain future losses. In addition to overconfident managers, there are also irrational managers that cause distortion in the company's investment and achievement of unexpected benefits by their performance. However, the overconfident managers are more likely to be liable for destroying the company's value than irrational managers (Daheshi et al., 2010). By excessive relying on the

previous results, the overconfident managers underestimate the risks and expect an unreal profits in the future. In their first studies, Malmendier and Tate have used the criterion of overconfidence; however, in further research, they stated that the previous studies have been management's optimism and not overconfidence. In their study, Komeil et al (2011) used the Malmendier and Tate criterion (2008), and used the management optimism instead of overconfidence. But, Blit A. Vakian (2008) and Hillary Hsu (2011) distinguished between overconfidence and optimism.

Optimism is defined as the tendency of individuals to overestimate the results of positive events and underestimated the results of unpleasant events. Overconfidence is defined as overestimation of the accuracy of an individual estimates of the future (Anwar S. Ahmad and Scott Duelaman, 2012).

#### Research literature

- In a study, Grammar and Valio (2012) evaluated the impact of managers' overconfidence on analysts' views by using Malmendier and Tate criteria for measuring self-confidence in connection with the time of applying the trade options. The study results showed that the analysts forecast the profits of companies with high self-confident managers optimistic. Thus, the number of times that the net profit of the company predicted more than the actual amount is more than the number of times that profit forecast has been less than the actual amount.
- In a study, Huang et al. (2011) studied the effect of overconfidence on the sensitivity of cash flows investment and also the impact of agency costs on this relationship. The results showed that on average, the overconfidence of managers increases the sensitivity of cash flows investment, and the impact is significantly greater in companies with higher agency costs. They also believed that inefficient investment caused by overconfidence can be reduced by reducing agency costs.
- Aghai and Kochaki (1996) believe that the quality of audit firms' work is different, and through observing the institutions directly, one cannot recognizes that which institution has a higher quality in its operation. The research shows that the factors of size, age, reputation and brand of audit firms can be distinguishing criteria for audit quality.
- Langari (2001) examined the quality control factors in the audit organization, including supervision, division of labor, training, qualification, promotions, work sustainability, monitoring, independence, impartiality, counseling, employment criteria, facilities, duties description, personnel assessment, and investigating the business players. The results indicate the non-compliance with quality control factors in the audit organization.
- Aghai and Mojtahedzadeh (2005) evaluated the factors affecting independent audit quality from the perspective of users and independent auditors. Information necessary to realize the objectives of the study were collected using a questionnaire. The study population consisted of two groups:
  - Users of audit services, including managers (senior experts), investment companies and executives (senior managers) of banks credits sector
  - Independent auditors, including auditing companies' partners, senior managers and technical managers of audit organization

The results show that the respondents emphasized much more on twenty-four factors. The next results of this study show that in most cases, there is no significant difference between the views of auditors and users.

#### Research methodology

This research was conducted within the framework of inductive-deductive studies. This means the theoretical foundation and research background were reviewed through library studies, articles and sites in a deductive form, while the information gathering to approve or reject the hypotheses was done in an inductive form.

#### Main hypothesis

- The audit quality has an impact on managers' overconfidence.

#### Sub-hypotheses

- The audit quality has an impact on managers' overconfidence based on Lin et al. model (2005).
- The audit quality has an impact on managers' overconfidence based on Malmendier and Tate model (2005).
- The audit quality has an impact on managers' overconfidence based on Richardson model (2006).

#### Testing the research hypotheses

##### Testing the first hypothesis

The first hypothesis was expressed as follows:

- The audit quality has a significant impact on managers' overconfidence based on Lin et al. model (2005).

According to Table 4-5, the research model has a variance inconsistency problem. Then, the generalized least squares estimation method should be used to test the model. In addition, as the model has not the self-correlation problem, the AR parameter was not used.

The results show that audit quality had an adverse and significant impact on managers' overconfidence of companies based on Lin et al. model. This relationship was strong and significant according to the regression coefficient of -0.71. Also, the company size had a positive and significant effect on managers' overconfidence; however, the mentioned impact was weak based on regression coefficient of 0.016 and in comparison with the effect of audit quality. The effect of controlling variable of operating cash flow was positive and significant according to the regression coefficient. This indicates that the companies with higher operating cash flows have overconfident managers and vice versa. The controlling variables of company age and book value / market value ratio also had a positive relationship with overconfidence. However, this correlation was not significant, while the controlling variable of leverage had a significant and inverse relationship with overconfidence of managers.

The results of statistic F (0.000) also shows that the model is significant in the general case, and the Durbin-Watson statistic (1.98) also occurs in the optimal range. In addition, the results related to the adjusted coefficient of determination suggest that in the study period, 0.78 of changes in managers' overconfidence has been affected by audit quality and controlling variables of the company.

Thus, considering the significance, and at the same time, strong and inverse effect of audit quality on managers' overconfidence, we cannot rule out the first hypothesis of the study.

Table 1: Results of the research model

Variable	<i>EGLS</i>		
	Coefficients	Statistic t	Probability t
Audit quality	-0/71	52/73	0/0000
Company size	0/016	2/38	0/0175
Financial leverage	-187/2023	-3/81	0/0001
Company age	0/026	0/8863	0/3757
Company's book/market value ratio	4/72	1/098	0/2725
Operating cash flow	25/72	2/137	0/0329
Constant variable	-235/83	-1/368	0/1715
Coefficient of determination	0/848		
Adjusted coefficient of determination	0/781		
Durbin - Watson statistic	1/98		
Statistic F	138/6037		
Probability of statistic F	0/0000		

### Testing the second hypothesis

The second hypothesis was expressed as follows:

- The audit quality has a significant impact on managers' overconfidence based on Malmendier and Tate model (2005).

According to Table 4-5, the research model has a variance inconsistency problem. Then, the generalized least squares estimation method should be used to test the model. In addition, as the model has not the self- correlation problem, the AR parameter was not used.

The results show that audit quality had an adverse and significant impact on managers' overconfidence of companies based on Malmendier and Tate model. This relationship was not significant according to the regression coefficient of -0.59. Also, the company size had a positive and significant effect on managers' overconfidence. The effect of controlling variable of operating cash flow was positive and significant according to the regression coefficient. This indicates that the companies with higher operating cash flows have overconfident managers and vice versa. The controlling variables of company age and book value / market value ration also had a positive relationship with overconfidence. However, this correlation was not significant, while the controlling variable of leverage had a significant and inverse relationship with overconfidence of managers.

The results of statistic F (0.000) also shows that the model is significant in the general case, and the Durbin-Watson statistic (1.92) also occurs in the optimal range. In addition, the results related to the adjusted coefficient of determination suggest that in the study period, 0.90 of changes in managers' overconfidence has been affected by audit quality and controlling variables of the company.

Thus, considering the significance, and at the same time, strong and inverse effect of audit quality on managers' overconfidence, we cannot rule out the second hypothesis of the study.

Table 2: Results of the research model

Variable	<i>EGLS</i>		
	Coefficients	Statistic t	Probability t
Audit quality	-0/59	48/12	0/0783
Company size	0/21	1/89	0/0041
Financial leverage	-98/147	-4/12	0/0042
Company age	0/011	1/19	0/0951
Company's book/market value ratio	12/854	0/984	0/5741
Operating cash flow	16/42	3/158	0/0054
Constant variable	-98/523	-3/526	0/28741
Coefficient of determination	0/898		
Adjusted coefficient of determination	0/901		
Durbin - Watson statistic	1/92		
Statistic F	140/87		
Probability of statistic F	0/0000		

**Testing the third hypothesis**

The third hypothesis was expressed as follows:

- The audit quality has a significant impact on managers' overconfidence based on Richardson model (2006).

According to Table 4-5, the research model has a variance inconsistency problem. Then, the generalized least squares estimation method should be used to test the model. In addition, as the model has not the self- correlation problem, the AR parameter was not used.

The results show that audit quality had an adverse and significant impact on managers' overconfidence of companies based on Richardson model. This relationship was inverse and significant according to the regression coefficient of -12.36. Also, the company size had a positive and significant effect on managers' overconfidence. The effect of controlling variable of operating cash flow was positive and significant according to the regression coefficient. This indicates that the companies with higher operating cash flows have overconfident managers and vice versa. The controlling variables of company age and book value / market value ration also had a positive relationship with overconfidence. However, this correlation was not significant, while the controlling variable of leverage had a significant and inverse relationship with overconfidence of managers.

The results of statistic F (0.000) also shows that the model is significant in the general case, and the Durbin-Watson statistic (1.99) also occurs in the optimal range. In addition, the results related to the adjusted coefficient of determination suggest that in the study period, 0.79 of changes in managers' overconfidence has been affected by audit quality and controlling variables of the company.

Thus, considering the significance, and at the same time, strong and inverse effect of audit quality on managers' overconfidence, we cannot rule out the third hypothesis of the study.



Table 3: Results of the research model

Variable	<i>EGLS</i>		
	Coefficients	Statistic t	Probability t
Audit quality	-12/36	24/36	0/0389
Company size	0/18	2/11	0/6854
Financial leverage	-74/19	-5/69	0/0042
Company age	0/029	2/11	0/0912
Company's book/market value ratio	15/965	1/369	0/1697
Operating cash flow	29/854	2/896	0/0254
Constant variable	-100/98	-1/987	0/3688
Coefficient of determination	0/812		
Adjusted coefficient of determination	0/791		
Durbin - Watson statistic	1/99		
Statistic F	140/87		
Probability of statistic F	0/0000		

### Conclusion

The results of testing the study hypotheses

The three research hypotheses had been stated as follows:

- The audit quality has an impact on managers' overconfidence based on Lin et al. model (2005).
- The audit quality has an impact on managers' overconfidence based on Malmendier and Tate model (2005).
- The audit quality has an impact on managers' overconfidence based on Richardson model (2006).

The results of the study model showed that the audit quality has had a significant and adverse impact on managers' overconfidence based on Lin et al. model. The above results are consistent with the studies' results of Kramer and Liu (2012), Huang et al. (2011), Firchid (2009), Malmendier et al. (2005), Richardson (2006), Lafond et al. (2008), Ball et al. (2008), Aghai and Mojtahedzadeh (2005), Ebrahimi and Seyedi (2009), Mahmoodabadi and Mehtari (2013), Mojtahedzadeh and Farshi (2013) and Shoorzi et al. These results were inconsistent with the research results of Moradzadehfard et al. (2012), Hassas Yeganeh and Azainfar (2011), Pourheydari and Ghafari (2012), Khaleghi Moghadam and Ahmad Khan Beigi (2012), Karami et al. (2011), Ahmad and Dallman (2007), Anwar and Dülmen (2007), and Garcia et al. (2008).

### Suggestions

Suggestions based on research results



1. The study results show that the firm size and cash flows of debt are effective on managers' overconfidence. Therefore, the market participants are recommended to consider these point when making decisions.
2. It is recommended to the shareholders of listed companies on the stock exchange to pay attention to the company's cash flow as much as possible while choosing the dividend policy at the assembly (which is usually ignored).

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## References

1. Sarbani, F., 2013, The impact of conditional and unconditional conservatism on earnings forecast error, Master's thesis, Islamic Azad University of Arak
2. Shabahang, R., 2009, Managerial Accounting, Audit Organization, Sixteenth Edition, Vol. I
3. Shojaa, A., 2010, Comparison the ratio of market added value to accounting earnings ratio with the economic added value to accounting earnings ratio of companies listed on the Tehran Stock Exchange, Accounting Master Thesis, Islamic Azad University of Arak
4. Sadri, P., 2012, Study the relationship between earnings forecast error per share and unordinary return on shares of new entrants in the Tehran Stock Exchange, Master's thesis, Islamic Azad University of Arak
5. Ghaemmaghami, M., 2011, Evaluating the relationship between accounting conservatism and risk of bankruptcy in listed companies in Tehran Stock Exchange, Master's thesis, Islamic Azad University of Arak
6. Daheshi, A., et al., 2010, Study of the effectiveness of 340 auditing standards (addressing future financial information) on the quality of earnings forecasts, Journal of Accounting Research, Issue 3, Pages 5-36