The relationship between Audit Quality and Firm Performance

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Abstract

Several studies have been conducted both to improve the understanding of audit quality and to determine the relationship between audit quality and other variables. One of these variables is firm performance. Therefore, it can be said that this study aims to investigate the relationship between audit quality and performance of the firms listed on Tehran Stock Exchange, so that audit quality will be studied as an external corporate governance mechanism. To achieve this goal, the influence of other variables that may affect firm performance was controlled including firm size, firm age, and financial leverage. Moreover, in order to measure firms' performance, two criteria, i.e. return on assets and Tobin's Q ratio were used. The research sample included 85 firms during 2010 to 2014. Audit quality data were collected from the notes along with financial statements that are released in Codal network1 together with the financial statements of firms. Furthermore, the statistical model used to test the research hypotheses included regression models based on panel data. Hypotheses testing results indicate that there is no significant relationship between audit quality and Tobin's Q ratio while there is a significant relationship between audit quality and return on assets.

Keywords: Agency Theory, Corporate Governance, Firm Performance, Audit Quality.

1. Introduction

Economic, events have made people make financial decisions and judges which require reliable and relevant information. From the users' point of view the information that is prepared under the supervision of an independent person can be considered reliable. An example of such information reporting and monitoring is financial statements and their audit.

Wrong judgment by auditors to ensure financial information in the financial reporting process can lead to unfair win or loss of users such as capital market actors, symmetrical distribution of information and fortune in this market and a threat to the credibility, legitimacy, reputation of the audit profession and fees. According to De Angelo (1981), audit quality is the market assessment of the auditing ability to detect material misstatements and to report discovered distortions. In his view, the auditor who figures out

and reports misstatements is an independent auditor in true sense. Audit quality depends on auditor's ability to detect distortions and to evaluate the strengths as well as the auditor's independence from the market. De Angelo fundamental assumption was that market perceives auditor's quality which represents the actual quality of the auditor and the actual quality of the auditor cannot be viewed and evaluated except based on the audit results.

Therefore, auditing financial statements is one of the most important tools to ensure the transparency of firms' financial information and increases the predictive power of accounting information such as the financial ratios of earnings per share. Thus, the quality of such information enhances as the audit quality increases and the future efficiency that is supported by such information will be closer to reality (Ahmadi and Jamali, 2013).

Statement of the Problem

Corporate ownership through stock ownership had a significant impact on companies' control methods. Thus, owners delegated corporate governance to managers and the stock exchange was established. One of the tools of allocating resources is securities market. Therefore, any problems that arises in the market, is not only an economic issue but it also changes to a social issue that might endanger public interests. To resolve this problem, one of the important concepts introduced in the past two decades is corporate governance (Hassas Yeganeh et al., 2009). Shleifer and Vishny (1997) define corporate governance as a means through which financial suppliers of firms ensure the return on investment. As shareholders employ managers to apply their capital in the firm activities, an information asymmetry occurs between managers and shareholders. Since managers within the company have a competitive information advantage over owners of equity (Zubaidah et al., 2009), such a situation enables the managers to make use of the firm's wealth for their own benefits. Therefore, agency theory introduces corporate governance as a mechanism to reduce these conflicts by monitoring the performance of managers (Brickley and James, 1987). In terms of agency theory, the importance of corporate governance is adjusting agency conflict between managers and shareholders.

Audit quality as an external corporate governance mechanism has been concentrated in some studies. Quality of audit services plays an important role in mitigating asymmetric information and agency problems arising from the separation of ownership from management in firms (Willenborg, 1999).

The relationship between corporate governance and firm performance (as function includes not only economic benefits but also covers management function) is the main research topic related to corporate governance (Kumar and Zattoni, 2013). By the separation of ownership from management and development of a huge conflict of interest between owners and managers, the evaluation of firms' performance and their managers and leaders are the concerns of various sectors such as creditors, owners, government and even managers. Creating value and increasing shareholders' wealth over the long term are the most important goals of firms and the increase in wealth will be achieved only as a result of favorable performance (Kashani Poor and Rasaiian, 2009). Firm's performance results from its activities and its return on capital in a specific period of time. In financial literature, different criteria are used to measure performance such as return on assets, Tobin index, return on investments, return on equity, economic value added, and earnings per share and each of these criteria has some advantages and limitations (Hosseini et al., 2010).

According to the abovementioned points, the main research question is expressed as follows: Is there any relationship between the performance of firms listed on Tehran Stock Exchange and audit quality?

Review of Literature

Valipour et al. (2013) in a study entitled "Moderating role of board of directors' size in the relationship between ownership structure and firm value" came to the conclusion that state ownership, managerial ownership and the number of board of directors' members have positive and significant effect on the value of the company. The results also showed that by increasing the number of members of the board of directors, the relationship between state ownership and firm value lessens and has no impact on the relationship between centralized and managerial ownership and firm value. The research period was from 2001 to 2009. The research sample included 98 firms listed on Tehran Stock Exchange. Data were analyzed using the panel data.

Saeedi and Shiri Qahi (2012) in a research entitled "Ownership structure and firm performance (evidence of Tehran Stock Exchange) "concluded that based on the model with fixed effects, there is no relationship between types of ownership and performance. However, according to generalized regression there is an inverse and significant linear relationship between the holders of more than 5 percent of the firm stocks and its performance. Furthermore, the effect of other factors of ownership structure, i.e. real, legal and the largest shareholders on firm performance was not confirmed. In this study, Tobin's Q ratio was used to evaluate firms' performance. The research population consisted of all companies listed on Tehran Stock Exchange during 2004-2008 and by applying sampling restrictions 93 companies were selected as samples. The statistical method used to test the hypotheses included pooled regression with fixed effects and generalized regression. In this study, Tobin's Q ratio was used to measure performance.

Nikbakht et al. (2010) e in a study entitled "Impact of the features of board of directors on the firm performance" came to the conclusion that board of directors in Iran capital market does not efficiently fulfill its duties to reduce the agency problems and does not have a material impact on firm performance. In this paper, board of directors' size, the proportion of non- executive members in board of directors, the number of board meetings, financial literacy of board members and the separation of CEO role from the chairman of the board were considered as features of board of directors. The company's performance rating was

calculated based on five elements including revenue growth, operating profit growth, net profit growth, return on assets and return on equity. The research population included all companies listed on Tehran Stock Exchange during 2001 to 2008 among which 71 firms were selected as samples. Spearman correlation coefficients test and regression analysis were used for data analysis.

Ebrahimi Kordlor et al. (2010) in their study entitled, "Effect of institutional ownership on performance of companies listed on Tehran Stock Exchange (1998-2006)"came to the conclusion that there is a significant positive relationship between institutional ownership and firm performance. By dividing institutional owners into active and passive groups in this study, the relationship between different institutional investors in the company's ownership structure and their performance was also examined.

The results of the research generally indicated a positive and significant relationship between both types of institutional ownership (both active and passive) and firm performance and hence it cannot be claimed that the activation or lack of activation of institutions have an effect on their supervisory role. The population of this study included all companies listed on Tehran Stock Exchange during 1998-2006. Regression analysis was applied for data analysis. In this study, three indices including Tobin's Q, return on assets, and net profit margin were used to measure performance.

Mousavi et al. (2010 in a study entitled "Evaluation of the impact of the supervisory mechanism of corporate governance on performance of companies listed on Tehran Stock Exchange" came to the conclusion that there is a significant relationship between the concentration of ownership and return on assets. However, a significant relationship between ownership concentration and rate of return on equity and the ratio of market value to book value was not confirmed. In this study, concentration of ownership was used as the monitoring mechanism of corporate governance. Furthermore, three indices including ROE, ROA, and P/B were used as performance criteria. The population of the research included all companies listed on Tehran Stock Exchange during 2005-2007 among which 50 firms were selected as samples. Correlation coefficients test was used for data analysis. In this study, three parameters including return on equity, return on assets and the ratio of market value to book value were used to evaluate performance.

Hassas Yeganeh et al. (2009) in a study entitled, "The relation between corporate governance quality and performance of companies listed on Tehran Stock Exchange" came to the conclusion that there is no significant relationship between corporate governance and performance of firms listed on Tehran Stock Exchange. In this study, the rank of sample companies was measured using a questionnaire containing 25 of corporate governance standards. The population of the research included all companies listed on Tehran Stock Exchange in 2006 among which 90 companies were selected as samples. Regression analysis was applied for data analysis. Tobin's Q was used to measure performance.

Livnat et al. (2016) in a study entitled, "Do directors have a use-by date? Examining the Impact of Board Tenure on Firm Performance" began to investigate whether experienced boards, due to their growing knowledge of the firm environment, would do their supervision and consulting tasks better or because of deterioration of technical knowledge and loss of independence, they would have poor performance. Using an extensive data collection (including 3,000 firms over a period of 18 years), they came to the conclusion that the tenure of the board of directors at first has a positive impact on the company's market value , but after a period of 9 years, the effect is reversed. They also showed that the adverse effect of the tenure of the board on the company's performance is more intense for companies with high growth. They believed that this result is related to deterioration in the ability of managers in technical fields.

Ching et al. (2015) in a study entitled "The relationship among audit quality, earnings management, and financial performance of Malaysian public listed companies" concluded that audit quality has not limited earnings management of Malaysian companies (Companies operating in consumer products industry and industrial products) during 2008-2013. However, high audit quality can improve financial performance of companies. In this research, regression analyses were used to test the hypothesis.

The Effects of the Structure of the Board of Directors on the Performance of Small to Medium Scale Enterprises Zehir et al. (2015) in an article entitled "The effects of the structure of the board of directors on the performance of small to medium scale enterprises" investigated the effect of board of director and its structure on performance of small and medium scale Turkish enterprises. In this study, 703 firms (204 manufacturing firms, 347 service firms, and 152 manufacturing- service firms) were used as samples. The findings of the research indicate that small and medium scale enterprises that have board of directors have better performance than those without board of directors. Moreover, education level of the board has a positive effect on firm performance. Regression analysis and analysis of variance were used to analyze the data.

Mohd Ghazali (2014) in a research entitled "Board of directors and performance of Malaysian companies" concluded that independence of the board and percentage of state ownership have a positive and significant impact on the performance of Malaysian companies. Other findings of the study suggest that since in Malaysia, major businesses are family ones, separating the role of CEO from the head of the board of directors may not improve market performance of the companies. In this study, only the financial data for 2010 were used. In addition, regression analysis was used for hypothesis testing.

Agyemang et al. (2014) in a research entitled "Board of directors and firm performance of banking institutions: A Ghanaian experience" showed that the percentage of non-executive directors positively affected the performance of Ghanaian banking in the period of 2007- 2012. The findings also showed that the number of annual meetings of the board of directors had a positive impact on the performance of these institutions. However, there was no significant relationship between the board size and performance.

Fooladi and Zaleha (2012) in their study entitled "Board of directors, audit quality and firm performance: evidence from malaysia" investigated the effect of three features of board of directors (board independence, CEO duality, size of board) on performance (return on assets, Tobin Q) of Malaysian firms. Moreover, audit quality was studied as one of the eternal corprate governance mechanisms. The findings of the research showed that there is a positive and significant relationship between audit quality and both criteria of firm performance. Furthermore, board independence and CEO duality have positive and negative relationship with Tobin Q, respectively. According to the findings of the study, there is no significant relationship between the features of the board of directors and return on assets. The required Information for data analysis was extracted from the financial statements of 400 Malaysian companies in 2009. The regression analysis was used for data analysis.

Research Method

According to available categories in research method, the present study is an applied research in terms of objective and a descriptive and correlational research in terms of research method. According to the study of companies listed in Tehran Stock Exchange over a period of five years, the structure of the data used in the study is panel data which is a combination of cross sectional and time series data.

In this study, 85 Companies were studied over a period of five years (2010-2014). Therefore, there are totally 425 observations for each of the variables in the research. In other words, 425 Years of companies were analyzed.

Given that in this study we investigate the effect of one of the mechanisms of corporate governance on firm performance the research hypotheses have been developed as the following:

The first hypothesis: There is a positive relationship between audit quality and firm performance based on Tobin's Q ratio.

The second hypothesis: There is a positive relationship between audit quality and firm performance based on the return on assets.

Research Variables

In this study, three groups of dependent, independent and control variables are used. The variables include:

Dependent variable

Firm performance plays the role of the dependent variable. To measure the performance of the firms, the following variables were used:
1. Tobin's Q (market value of asset over its book value)
2. Return on equity (profit before tax on equities)

Independent variable

One of the mechanisms of corporate governance is considered as independent variables:
Audit quality *Aud Q*: Indicator variable (value of 1 if the firm auditor is auditing organization and 0 otherwise)

Control variables

In order to remove other variables that may affect the relationship between independent and dependent variables, the following variables are used as control variables:
1. Firm size *FSize*: Natural logarithm of total assets
2. Firm age: The difference between this year and the year firm was established
3. Financial Leverage *Lev*: Total debt to book value of equity

Research Findings

First, the collected data will be described using statistical indices. Then Jarkko – Bra test is used to examine the solidarity and Bartlett and Brown - Forsythe test is used to investigate basic assumptions of regression models includes evaluating the normality of the dependent variables, lack of co-linearity between explanatory variables and the consistency of the residual variance. In the end, with the help of multiple regression models, the research hypotheses will be tested statistically. In addition, to determine appropriate estimation method (equal effects, fixed effects, random effects) Limer and Hausman tests will be applied.

Given that Tobin's Q and return on assets are used to evaluate firm performance, the results of

hypothesis testing for each of these variables will be reported separately.

Descriptive Statistics
The descriptive indices of the main variables have been reported in Table (1). However, since audit quality is a binary variable calculating indices such as standard deviation and median for it is actually meaningless. That is why the frequency table will be brought for this variable later.

According to the above table, the average life of the studied firms is 36 years with a standard deviation of 13 years. The average value obtained for the fiscal lever shows that the sample companies mainly use debt rather than share to finance their own projects. With respect to return on asset indices, the rate of profitability of sample companies for shareholders is approximately 14% with standard deviation of 14%. The findings show that the studied companies are weak in terms of profitability.

Table 1: Descriptive indices of the main variables of the research

Variable	Number of observations	Mean	Median	standard deviation	minimum	maximum
Company Age	425	36.090	38.000	12.875	11	62
Financial Leverage	425	1.593	1.537	8.004	-64.25	120.84
Firm size	425	13.729	13.601	1.380	10.50	18.82
Tobin's Q ratio	425	1.451	1.234	0.713	0.49	6.53
Return on assets	425	0.138	0.121	0.137	-0.30	0.69

According to this table, the total number of years - now the case in 94 cases (12/21), National Audit organization has only audited 94 cases of the studied companies over the total year and in other cases, another audit institution has carried out the task.

Table 2: Frequency distribution of audit quality

Variable	Variable levels	Number	Percent
audit quality	Corporate Audit	94	12/21
	otherwise	331	88/78

2. Evaluation of Infrastructural Tests
In order for the results of the estimation of regression models to be valid and reliable, a number of basic assumptions need be established that will be reviewed in this section. First, the normality of dependent variables will be tested using Jarkko-Bra test. Then, co-linearity between explanatory variables will be checked out using Pearson correlation test. Finally, the consistency of residuals variance will be examined using Bartlett, Brown-Forsythe tests.

2.1. Normality Assessment
One of the most important basic assumptions in linear regression models is the normality of dependent variable. In this study, two performance indices, Tobin's Q and return on assets play the role of dependent variable. Therefore, in this case, the normality of these two variables is emphasized.

Statistical hypotheses in this test are expressed as follows:

H_0 : The desired variable is normally distributed.

H_1 : The desired variable is not normally distributed.

According to the results set forth in Table (3) , normality is not accepted for either of the dependent variables, i.e. neither for Tobin's Q ratio nor for return on assets (Sig.<0.05). However, as can be seen, after revision the statistic value of Jarkko-Bra test for both variables of Q and ROA has decreased greatly. Therefore, the normality of Tobin's Q ratio can be accepted at error level of 0.05 (JB=4.883, Sig.>0.05). Although the hypothesis is not accepted for return on assets (JB=39.740, Sig.<0.05), it can at least be accepted at error level of 0.0001 (Sig=0.0002).

Table 3: Results of Jarkko-Bra test for checking the normality of the dependent variables

Variable	Number of observations	Jarkko-Bra statistics - (JB)	Significance level (Sig.)	Coefficient of skewness (SK)	Prominence coefficient (KU)
Tobin's Q ratio	425	3317.907	0.000	2.834	15.117
Tobin's Q ratio (After amendments)	415	4.883	0.087	-0.102	2.522
Return on assets	425	39.740	0.000	0.392	4.237
Return on assets - And (After amendments)	407	16.696	0.000	0.483	2.926

2.2 Evaluation of Co-Linearity

Another basic assumption in regression models is the lack of co-linearity between explanatory variables. To check this point, different methods have been introduced in statistical sources. Here, Pearson correlation test is used. Statistical hypotheses in this test are expressed as follows:

H_0: There is no correlation between the two variables.

H_1: There is a correlation between the two variables.

The results of correlation between the explanatory variables are reported in Table (4). Significant correlation coefficients are specified by *. As can be seen, all correlation coefficients are small and the largest correlation coefficient is reported to be equal to 0.220 between firm size and audit quality. Therefore, it can be agreed that there is no serious co- linearity problem between the explanatory variables.

Table 4: Evaluation of co-linearity between variables

		Correlation			
X_AUDQ	C_SIZE	C_LEV	C_AGE	Probability	
			1.000000	C_AGE	

		1.000000	0.138320	C_LEV	
		-----	0.0035		
	1.000000	-0.002510	-0.004337	C_SIZE	
		----- 0.9579	0.9273		
1.000000	0.220409	0.032132	0.089278	X_AUDQ	
-----	0.0000	0.4990	0.0599		

2.3. Variance Consistency Test

Another basic assumption in regression models is the consistency of residual variance. To check this matter, the results of Bartlett and Brown-Forsythe tests are reported in Table (5). Statistical hypotheses in each test are expressed as follows:

H_0: Residual variances are consistent.

H_1: Residual variances are not consistent.

Since the two performance indices are studied and for each of them a separate model is estimated, the two groups have separate residuals and variance consistency test is done for each one separately. According to the results of Bartlett and Brown-Forsythe tests, the null hypothesis of consistency of residuals' variance in neither of the estimated models is rejected (Sig>0.05). The only exception Bartlett's test is for performance based on Tobin's Q with a significance level of less than 0.05 which of course can be accepted at the error level of 0.01 (Sig.> 0.01).

Table 5: Test results of the residuals' variance consistency

Model	Bartlett's test		Brown - Forsythe Test	
	Test statistic	Significance level	Test statistic	Significance level
Performance based on Tobin's Q	12.825	0.012	2.220	0.066
Performance based on the return on assets	86.691	0.519	0.617	0.996

A) Performance based on Tobin's Q ratio
In this section, Tobin's Q ratio is used to evaluate performance. First, Limer- Hausman test results are reported in Table (6) to identify appropriate methods of estimation. As mentioned before, one of the models of equal and unequal effects will be selected via Limer test. If the second model is selected (unequal effects), Haussmann test is used to judge whether it is fixed or random.

Table 6: Limer- Hausman test results to determine estimation method in Tobin's Q-based model

Test	Test	Significance level	Result
Limer (F)	8.893	0.000	Unequal effects
Hausman (X_2)	60.990	0.000	Fixed effects

According to the results of Limer test, the assumption of equal effects of the firms is rejected (F = 8.893, Sig. <0.05). On the other hand, according to Hausman test, it is presumed that these effects are fixed (X_2 = 60.990, Sig<0.05). Therefore, in order to estimate the following regression model for Tobin's Q index as the firm performance, the fixed effects model is used:

$FV = a_0 + b_1 Aud Q + b_2 + b Fsize 3 Age + b_4 + e$
Lev

Statistics of the estimation of above model based on fixed effects model are displayed in Table (7). According to F statistic, the estimated model is statistically significant (F = 8.9, Sig. <0.05) and almost 70 percent of the variance in the dependent variable is explained by the explanatory variables in the model (R_2 = 71.4%). According to Durbin – Watson statistic, it can be agreed that there is no serial correlation between the model residuals (1.5 <DW <2.5).

Table 7: Research model statistics for Tobin's Q ratio

F Statistic	Significance level F	Coefficient of determination (R_2)	Adjusted coefficient of determination ($R_{2 adj}$)	Durbin – Watson statistic (DW)
8.900	0.000	0.714	0.634	2.066

The results of testing research hypotheses are displayed separately in the following, for the case of Tobin's Q ratio as performance index.

Hypothesis 1
There is a positive relationship between audit quality and firm performance based on Tobin's Q ratio.
Statistical hypotheses corresponding to the first hypothesis are expressed as follows:
$H_0 : b_1 \leq 0$
$H_1 : b_1 > 0$

The results of testing the first hypothesis are displayed in Table (8). According to the results of the regression coefficient related to audit quality, there is no significant relationship between this variable and Tobin's Q ratio (t = -1.762, Sig.> 0.05). Therefore, the first hypothesis indicating a significant relationship between audit quality and firm performance is not confirmed.

Table 8: Hypothesis test result for Tobin's Q ratio

Variable	Regression coefficient	t Statistic	Significance level	Hypothesis	Result
audit quality	-0.063	-1.762	0.079	First	Rejected

As it can be seen, the relationship between audit quality and Tobin's Q ratio is not statistically significant. With regard to the discussion, there is not sufficient evidence to prove the research hypotheses based on Tobin's Q ratio as performance index.

B) Performance based on the return on assets
In this section, the return on assets is used to evaluate performance. First, Limer- Hausman test results are reported in Table (9) to identify appropriate methods of estimation. As mentioned before, one of the models of equal and unequal effects will be selected via Limer test. If the second

model is selected (unequal effects), Haussmann test is used to judge whether it is fixed or random.

Table 9: Limer- Hausman test results to determine estimation method in return on assets-based model

Test	Test statistic	Significance level	Result
Limer (F)	10.676	0.000	Unequal effects
Hausman (X_2)	14.317	0.046	Fixed effects

According to the results of Limer test, the assumption of equal effects of the firms is rejected (F = 10.676, Sig. <0.05). On the other hand, according to Hausman test, it is concluded that these effects are fixed (X_2 = 14.317, Sig<0.05). Therefore, in order to estimate the following regression model for return on assets as the firm performance, the fixed effects model is used:

FV = a0 + b1 AudQ+ b2 FSize + b3 Age + b4 Lev + e

Statistics of the estimation of above model based on fixed effects model are displayed in Table (10). According to F statistic, the estimated model is statistically significant (F = 11.231, Sig. <0.05) and almost 70 percent of the variance in the dependent variable is explained by the explanatory variables in the model (R_2 = 76.3%). According to Durbin – Watson statistic, it can be agreed that there is no serial correlation between the model residuals (1.5 <DW<2.5).

Table 10: Research model statistics for asset returns

F Statistic	Significance level F	Coefficient of determination (R_2)	Adjusted coefficient of determination ($R_{2\ adj}$)	Durbin – Watson statistic (DW)
11.231	0.000	0.763	0.695	1.939

The results of testing research hypotheses are displayed separately in the following, for the case of return on assets as performance index.

Hypothesis 2
There is a positive relationship between audit quality and firm performance based on return on assets.
Statistical hypotheses corresponding to the second hypothesis are expressed as follows:
H0 : b1 ≤ 0
H1 : b1 > 0

The results of testing the second hypothesis are displayed in Table (11). According to the results of the regression coefficient related to audit quality, there is a significant relationship between this variable and return on assets (t = 2.950, Sig.> 0.05). Moreover, the direction of the relationship between audit quality and return on assets corresponds with the direction of prediction in the second hypothesis. Therefore, the second hypothesis indicating a significant and positive relationship between audit quality and firm performance is confirmed.

Table 11: The second hypothesis test result for return on assets

Variable	Regression coefficient	t Statistic	Significance level	Hypothesis	Result
audit quality	0.045	2.950	0.003	Second	Confirmed

Conclusion
In this study the effect of audit quality on performance of firms listed on Tehran Stock Exchange was investigated. The audit quality is studied as an external corporate governance mechanism. To achieve this goal, the influence of other variables that may affect firm performance was controlled including firm size, firm age, and financial leverage. Moreover, in order to measure firms' performance, two criteria, i.e. return on assets and Tobin's Q ratio were used. The research was related to the period of 2010 to 2014. According to sample selection criteria, 85 firms listed on Tehran Stock Exchange were selected as the research

sample using systematic elimination method. Therefore, 425 observations (year-firm) were selected for each variable. In other words, the structure of the data used in the study is panel data which is a combination of cross sectional and time series data. The required data for calculating variables were collected from two major sources. Audit quality data were collected from the notes along with financial statements that are released in Codal network2 together with the financial statements of firms. Furthermore, the data related to performance and control variables were extracted from Modern Rahavard application. To calculate the firm age which required the

establishment year, the financial statements of the firms were directly referred to.

After collecting raw data from abovementioned sources, they were used in Excel 2007 environment to calculate the main variables of the research and Eviews 6 software was used to test the research hypotheses. Multiple regression models were used to test the hypotheses. - Limer and Hausman tests were applied to determine appropriate estimation method (equal effects, fixed effects, random effects). Moreover, to ensure the regression assumptions, basic tests including dependent variable normality test (Jarkko-Bra), linearity test between explanatory variables (Pearson correlation coefficient), residuals variance consistency test (Bartlett and Brown-Forsythe) were implemented.

The results of the research hypotheses testing are as the following:

In the first and second hypothesis, the relationship between audit quality and firm performance was investigated. Tobin's Q ratio and return on assets were used to evaluate firm performance. The results indicate that there is a positive and significant relationship between audit quality and firm performance in sample companies based on ROA criterion which is consistent with the findings of Fooladi and Zaleha (2012) in relation to Malaysian companies.

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