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## **STUDYING THE RELATIONSHIP BETWEEN THE AUDIT FEES AND THE FINANCIAL ELEMENTS AND INDICES WITH APPLYING GMM METHOD**

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### **ABSTRACT**

*Audit fees are one of the controversial challenges of the audit profession which, on one hand, can lead to the auditor's economic dependence on the unit reviewed (non-independence) and, on the other hand, lead to a deterioration in the quality of the audit. Hence, several studies have been conducted to provide a clear pattern for determining the appropriate audit fees; however, so far, not any research has not been done using this dynamic data (GMM). In this regard, the subject of the present study is to study the relationship between audit fees and the financial indices and elements with applying the GMM method to companies listed to Tehran Stock Exchange. To estimate the research model, the financial information of 106 companies in Tehran Stock Exchange during the seven-year period in 2010-2016 was evaluated using the generalized method of moments (GMM). Excel, Eviews and Minitab software have been used to analyze the results of the research. Findings of the research indicate a direct and significant relationship between audit fees of the current year and audit fees of the last year, sales of the current year and the size of the company.*

**Keywords:** Audit Fees, Financial Indices, Generalized Method of Moments

### **INTRODUCTION**

For many years, the independent auditors have been providing the audit and reassurance services in exchange for the certain payment, however, the recent scandals have caused the auditor's economic behavior to be considered and monitored. This attention was to the extent that the researchers concluded to determine the factors influencing the audit fees and the specific model for the payment. Indeed, audit and accountability are in the supervisory aspect of any system and is broadly applicable from the highest level of the country's administration to the smallest business unit, since each system needs monitoring and feedback for its continuity (Derakhshi & Badavar, 2015). The main objective of accounting is to help the investors make good economic decisions. In fact, the separation of management from the ownership of a business unit causes the investors to not be able to access the information inside and outside of the company as they should. This has led to the creation of a financial reporting unit in the economic units. At the same time, the existence of a conflict of interests between the managers and owners in many cases leads management to use its authority to provide the manipulated financial information. This is one of the reasons for creating the audit. Indeed, audit through the professional review of financial reports provided by the management, provides the management with the necessary assurance for the use of the financial reports. At the same time, audit has faced many challenges during its not so long life. One of the most

important challenges is the determination of audit fees (Salehi et al., 2013). The purpose of this study was to investigate the relationship between the audit fees and some items and financial indices of listed companies in Tehran Stock Exchange.

## **THEORETICAL FUNDAMENTALS**

Familiarity with the factors affecting the audit fees is important for auditors, both employers and individuals who pursue the policy and regulatory in the audit profession. Establishing the models that adequately determine the audit fees (such as the Simon model in which the fee is a function of the cost of audit the operating hours multiplied by the charges rate and the risk that the auditor consider due to the risk of litigation and potential future losses by the employer), is one of the best tools that can help to analyze the audit market and continuing to work in the competitive conditions (Nikbakht and Tanani, 2010). The auditors can also value their services with informing from these factors. The importance of this issue has been particularly noticeable in recent years since the formation of the Iranian public accountant's community in our country; since after the formation of society, the monopoly of the audit market has been broken and there has been intense competition among the auditors (Rajabi and Mohammadi Khashavi, 2008) In such condition, the audit is successful who can best estimate his fee according to the unit's features in order to maintain the quality of work and does it at the lowest cost (Nikbakht and Tanni, 2010). In fact, the auditors informing of these factors will be able to obtain reliable and uniform standards. In this case, the damage to the audit profession will be reduced due to the market's view. Choi et.al. (2008), argues that with the growth of competition in the profession, the audit firms have found the need to provide better quality services and lower costs to the market. To compete on a basis other than the quality and differentiation of services, the audit firms attempts to optimize their fee and offer the best deals, in the way to maximize their income and do not lose their job in competitive conditions. To this end, knowing the factors affecting the audit fee can be very helpful (Tannai and Alavi, 2013).

According to the brokerage theory, the auditor is an independent representative of shareholders and other stakeholders which is responsible for the control of the accuracy, reliability and relevance of the information provided by the business unit management and to the stakeholders for any economic decision-making. However, since the process of executing the audit operations requires the close contact and the auditor's approach to the management of the business unit, it is assumed that the auditors may not maintain their independence in the performance of their regulatory and reporting tasks and do not do their job right which would lead to the moral hazards and the phenomenon of the comments selection. Simonick (1980), states that, since the issue of economic dependence and the benefits of audit are considered as failures in the performance of tasks, therefore, the professional firms and governments have made provisions for it. Considering the requirements and the researches carried out, the determination of the audit fees is considered as one of the challenges and conflicts of the audit profession. In fact, the price of any service or goods is the price the consumer is willing to pay for it to use; but in practice, this formula does not work in the countries that lack competitive markets and economies and the monopolizes or at least wage levels determines he price (Nikbakht et al., 2016).



The four concepts of conflict of interest, the consequence, complexity and lack of direct access are the factors justifying the audit demand. The conflict of interests between suppliers and users and the accounting information can have many economic consequences. Converting data to information and making sure about their desirability requires the use of specialized services. Most of users do not have direct access to information and the quality recognition. In addition to the above, the legal requirements are among the factors that create demand for audit services and assurance. In the US markets, the Securities and Exchange Commission made it mandatory to issue and certify the financial statements, which increased the demand for the audit market. The American Institute of Accountants led to the development of a set of financial reporting guidelines from 1930 to 1932. Securities law was approved in 1933 and the Securities Exchange Act was approved in 1934; the Securities and Exchange Commission got as a regulatory entity in the capital market. (159 Iran Audit Organizations Journal, 2011). With the emergence of large corporations, the separation of ownership from control and management was formed. This economic phenomenon has to be somehow controlled and continuously monitored for its activities, otherwise it may lead to bankruptcy of the company. Enron was one of the companies that were unexpectedly bankrupt. The company was selected as the Energy Company of the Year in 2000 by the Financial Times Newspaper. The collapse of Enron and the other companies, such as the World Commerce, Xerox, Parmalat, had the important outcomes for the shareholders, employees and the world of law and economics, and followed up by the countries with deterrent responses (Seyyed Ahmadi and Bagherian, 2015). In the supervised environments and competitive markets, there are three hypotheses about the demand for audit: information hypothesis, stewardship and insurance. The information hypothesis has led to demand for service by the owners of the economic units, the stewardship hypothesis has created the demand for audit services by the representatives of the economic unit, the insurance hypothesis has created a demand for financial coverage of potential losses. Combining the information hypothesis and the stewardship hypothesis of the final product characteristics is an audit process (159 Audit Organizations Journal, 2011).

### *Conceptual and Operational Definition of Research Variables*

#### *Return on Equity*

The above financial ratio examines the company's performance in creating net profit for shareholders. In fact, this ratio indicates that how much the business enterprise earns a net profit for each Rial invested by the stock shareholder. The higher the return on equity of a company, the greater is the net profit earned by the particular investment. The audit companies may ask for more fee in this regard. Therefore, there seems to be a significant relationship between the equity returns and the audit fees.

#### *Net Income*

Or net income in a business is the yield or profit of an entity in the course of an accounting period, calculated by deducting operating costs and corporate taxes (Brown & Abraham, 2012). Therefore, audit firm may apply for a higher fee with higher net profits. Therefore, there appears to be a significant relationship between net income and audit fees.

#### *Lever*

the existence of large debts in the capital context will lower the tax liability of the company and increase the post-tax cash flow, which will increase the market value of the company (Modigliani & Miller, 1958). Companies which have a high leverage are likely to have a



higher risk for auditors. Therefore, since a part of the audit fees relates to the risk borne by the auditor, it seems that there is a significant relationship between the audit fees and lever.

#### *Sales of the Company*

Each business has the certain products and services that need to be sold. In other words, sales can be referred to the process of introducing a product and its specifications to a customer or another company to choose the right one. Since the company's sales volume represents the volume of its operations and the audit budget is dependent on the volume of operations of the company. Therefore, there seems to be a significant relationship between the sales and audit fees.

#### *Size of the Company*

In large and small companies, the company size can be a risk factor. Unconscious investors are more confident about the large companies. In other words, the demand for these companies' shares is higher and this demand will increase the stock prices of large companies (Kheradyyar and Karimpour, 2015). The audit firms may determine their wages depending on the size of the company. Therefore, there seems to be a significant relationship between the company size and the audit fees.

#### *Operations Complexity*

Investigating the studies on the pricing of audit services indicates that the factors affecting the audit fees are determined by using the effective factors on the volume of audit as a stimulus to audit fees (Dechow et al., 1995). The complexity of the operation can affect the volume of auditor's activity and, as a result, the audit fees of audit services. In the present study, the complexity of operations includes the companies that export.

#### *Audit Opinions*

Includes unadjusted reports (unqualified opinion) and adjusted reports (Qualified Opinion, disclaimer opinion and Adverse Opinion). Since the auditor commented on the utility of preparing financial statements according to the accounting standards from all relevant aspects, the purpose of this is to report to the managers, companies, general assemblies and third parties. Acceptable comments give credibility and confidence in the company's financial operations and some companies may offer them a salary recommendation for an opinion from an audit institute. Therefore, there appears to be a significant relationship between the audit fees and the type of comment.

#### *Generalized Method of Moments*

One of the suitable econometric methods for solving or reducing the problem of endogenous indices and the correlation between the research variables and the other explanatory variables, the model estimate using the generalized method of moments (GMM) is the dynamic panel data. The econometric method used in most of the economic research to solve this problem is using the two-stage least squares econometric method (2SLS). The requirement of using this method is to find the appropriate tool for solving the problem of the intrinsic variables of the research, but this approach is limited by the difficulty of finding the appropriate tool variable and the limitation of these variables. Also, this method cannot solve the correlation between the explanatory variables and reduce or eliminate the linear in the model. Caselli et al. (1996), for the first time used the GMM estimate method for dynamic panel data in economic growth models. Applying the GMM Dynamic Data Panel has the advantages such as taking into account the individual discrepancies and more information, eliminates the bias in cross-



sectional regressions, resulting in more accurate estimates, with a higher and less linear performance in GMM. The GMM dynamic data panel method is used when the number of cutoff variables (N) is greater than the number of times and years (T) ( $N > T$ ). This is also the case in the paper, which means that the number of companies is greater than the number of times. In general, the dynamic GMM method has the following advantages over the other methods:

1. Solving the problem of the inherent variables: The main advantage of the dynamic GMM estimate is that all regression variables that are not correlated with the disruptive component (including the lagged variables and differential variables) can potentially be the tool variables.
2. Reducing or eliminating the linear in the model: Using the interrupted dependent variables causes the linear in the model to be eliminated. The probability that the discontinuous difference and the interrupted level of audit fees correlated with the discontinuous difference and the interrupted level of the other variables, is very small. It is expected that the discontinuous difference and the interrupted levels of fees will be more orthogonal on the discontinuous difference and interrupted levels of the other variables, and therefore the co-linear problem (which is in the second-stage equation in cross-sectional analysis) is reduced.
3. Deletion of constant variables over the time: The application of this method eliminates many variables that are constant over the time and have strong influence on the research variables and can lead to correlation. These deleted variables creates the bias in the model estimate. This method allows the effects of these factors to be eliminated with differentiating from statistics (Baltaji, 2008).

According to Hissao, (2003), the cross-sectional estimates may be able to obtain long-term relationship between variables, however these estimates do not have the advantage of time series statistics that increase the efficiency of estimates. Using the time aspect of statistics series allows the effects of all non-observable factors to be considered in the estimate (Nediri and Mohammadi, 2011).

## LITERATURE REVIEW

Bala et al. (2018) examined the relationship between audit fees and financial reporting quality of listed firms in Nigeria. They used 88 listed companies in Nigeria for the period of 2012 to 2016. The data were obtained from the annual reports of the listed firms and Thompson Reuters DataStream. Accruals model was used to represent financial reporting quality. A multiple regression was employed in the estimation model. The study reveals that higher audit fees are associated to lower level of discretionary accruals and thus imply higher financial reporting quality.

Climent-Serrano et al. (2017) Based on an application of fuzzy-set qualitative comparative analysis (fsQCA), analyzed the quality of audit services following a drop in the fees charged by auditors. The factors analyzed in the empirical study were audit fees, other fees charged by the auditor, and the inclusion of explanatory paragraphs, qualified opinions, and emphasis of matter in audit reports. The EBITDA of the audited firms was chosen as an indicator of the quality of the service. The results of the analysis reveal that the quality of the auditing service





has remained steady despite the fall in audit fees, as confirmed by the fact that the EBITDA has evolved positively without being affected by the fall in fees.

Mossa 2017 examined the determinants of auditing in a developing economy in Ghana. The purpose of this study is to determine the cost of audit with empirical evidence from the Ghana Stock Exchange. Specifically, his study examined audit fee determinant which included the client size, profitability measured by ROA, LOSS, client risk measured by debt ratio, YEAR (season) and MNC. Using the Simunic (1980) model, this study reveals that client's size of business, international recognition, affiliation of audit firms (Big four firms) and profitability are significant determinants of audit fee in Ghana.

Nikbakht et al. (2016), identified and ranked the effective factors on the pricing of audit services by applying a fuzzy hierarchical analysis method. For this purpose, 17 factors influencing the pricing were first identified with the study of the review and theoretical literature of audit. Then, using the paired comparison questionnaire, 30 auditors were selected and polled as purposeful sampling, then the verbal indices were converted to the fuzzy numbers. In the next step, decay was performed and nine factors out of 17 ones were identified as the most important factors affecting the pricing of audit services. These factors include the volume of operations, the complexity of the operation, the quality of the employer's internal control, the geographical distribution of operations, the size of the unit under review, the initial audit, the type of comments of last years, the years of the audit responsibility of a company. According to the Pareto chart, it was found that audit fees about 80% is dependent on the factors mentioned.

Balaqli et al. (2015), investigated and prioritized the factors affecting the determination of audit fees of companies listed in Tehran Stock Exchange. In this study, factors affecting audit fees from the viewpoint of audit firms' partners in Iran have been investigated. Their research is descriptive-applied and the data needed for statistical analysis of research hypotheses was gathered from 75 auditors from the Iranian public accountant's community and using questionnaires containing 24 questions. The results of the research show that the auditors consider the factors such as audit firm's reputation, size of audit firm, auditor's education and number of years listed in Tehran Stock Exchange to affect audit fees, and the factors as the number of clauses in the reporting condition audit, the risk of the employer's company and the employer's reputation not effective on the audit fees. Also, the most effective factor on the auditor fees from the auditor's opinion is the number of years listed in the stock exchange and the weakest factor in the number of clauses in the audit report condition.

Hassan, M., Hassan, S., Iqbal, A., & Khan, M. F. A. (2014) investigated the relationship between company governance and audit fees of companies listed in Pakistan Stock Exchange. For this purpose, they examined 37 companies listed in Karachi Stock Exchange from 2009 to 2011. The results showed that the company governance, company size and financial leverage had a positive relationship with the audit fees.

Delman et al. (2015), examined the relationship between excessive managerial trust and audit costs as well as the impact of a strong audit committee. They believe that the managers with a high confidence tend to overestimate their abilities, but the likelihood and impact of side events are underestimated. As a result, the auditors may require the premium of cost to compensate for additional audit efforts regarding the increased audit risk. Conversely, managers with excessive confidence may request fewer audits due to the pride in their companies' financial



reporting, or the willingness to reduce audit scrutiny during an offensive accounting. A strong audit committee can reduce the risks associated with the excessive management confidence or reduce the risk of reducing audit services as a result of reducing the relationship between audit fees and excessive managerial trust with the excessive trust managers. They found strong evidence of a negative relationship between excessive trust and management audit costs for companies without a strong audit committee. Nevertheless, in the presence of the strong audit committee, the negative relationship is reduced. In an additional analysis, they also found that the company is less likely to use an expert industry expert with having high-confidence managers.

## METHODOLOGY

In this research, library method and experimental data are used to collect the required hypothesis data as well as the theoretical foundations of the research. Also, one of the tools for collecting the research information was financial statements (balance sheet, profit and loss statement), accompanying notes and financial reports of the companies studied, which were published by Tehran Stock Exchange. This type of information is available on Codall site and RahavardNovin software has been archived. This kind of data is considered as the secondary data type and it is clearly validity and reliability.

### *Hypotheses*

Hypothesis 1: There is a significant relationship between the audit fees of the current year and the audit fees of the last year.

Hypothesis 2: There is a significant relationship between the audit fees and company sales price.

Hypothesis 3: There is a significant relationship between the audit fees and company lever.

Hypothesis 4: There is a significant relationship between the audit fees and net income.

Hypothesis 5: There is a significant relationship between the audit fees and the return on equity of the company.

Hypothesis 6: There is a significant relationship between the audit fees and the company size.

Hypothesis 7: There is a significant relationship between the audit fees and the company's operations complexity.

Hypothesis 8: There is a significant relationship between the audit fees and the type of comment.

### *Research Model*

(Model 1):  $Afee_{it} = \beta_0 + \beta_1 Afee_{i(t-1)} + \beta_2 Sale_{it} + \beta_3 Lever_{it} + \beta_4 Net\ Income_{it} + \beta_5 Return\ on\ Equity_{it} + \beta_6 Size_{it} + \beta_7 Operations\ Complexity_{it} + \beta_8 Adverse\ Opinion_{it} + \varepsilon$

### *Operational Definition of the Research Variables*

$Afee_{it}$ : audit fees of the current year which were extracted from the notes attached to the financial statements of the current year. Also, the logarithm of the data is used for better fitting around the regression line.

$Afee_{(t-1)}$ : audit fees of the last year which were extracted from the notes attached to the financial statements of the last year. Also, the logarithm of the data is used for better fitting around the regression line.



Sale<sub>it</sub>: the sales price of the current year of the company, which is extracted from the profit and loss of the companies studied. Also, the logarithm of the data is used for better fitting around the regression line.

Lever<sub>it</sub>: the financial lever for the current year was calculated from the current debts on the current assets of the company.

Net Income<sub>it</sub>: Net income for the current year that was extracted from the profit and loss account of the studied companies. Also, the logarithm of the data is used for better fitting around the regression line.

Return on Equity<sub>it</sub>: Return on equity of the current year, derived from net income on equity.

Size<sub>it</sub>: The size of the company for the current year, which is derived from the multiplication of the number of shares in stock prices at the end of the year and was extracted from the attached notes of the financial statements. Also, the logarithm of the data is used for better fitting around the regression line.

Operations Complexity<sub>it</sub>: operation complexity of the current year which is considered as an imaginary variable (zero and one). The company's exports and the attachment notes of financial statements are used to measure it, i.e. if the export company had the operation complexity, the number one is assigned to it, and if the company had no export, the number zero is assigned to it.

Adverse Opinion<sub>it</sub>: audit opinions that is considered as an imaginary variable (zero and one). The company's audit report information is used to measure it, i.e. if the type of comment is accepted, the number one and otherwise number zero is assigned.

### ***Population and Statistical Sample***

In this research, the statistical population includes all companies accepted in Tehran Stock Exchange considering the following conditions and limitations:

1. These companies will be active on the exchange during 2010-2016.
2. The company's fiscal year ends with the end of March each year.
3. The company has not changed the financial year during the period under study.
4. The study companies should not to be from the investment companies, banks, holding, financial intermediation and insurance.
5. The company has no interruption during the period under study.
6. The information and data are available.

The domain of this research is a seven-year period, from the beginning of 2010 to the end of 2016.

The research data were gathered from Rahnavand Novin software and Codall site and categorized using Excel software and analyzed using the Eviews and Minitab software.

### ***Descriptive Statistics of Research Variables***

The descriptive statistics merely describe the community or sample, and the purpose is to calculate the parameters of the population or sample of research (Khaki, 2010). In the descriptive statistics section, data analysis was performed using the central indices such as mean, median, and standard deviation scales, skewness and elasticities. Summary of the status of the descriptive statistics of the research variables are presented in the following graph.





Table 1. Descriptive statistics of research data

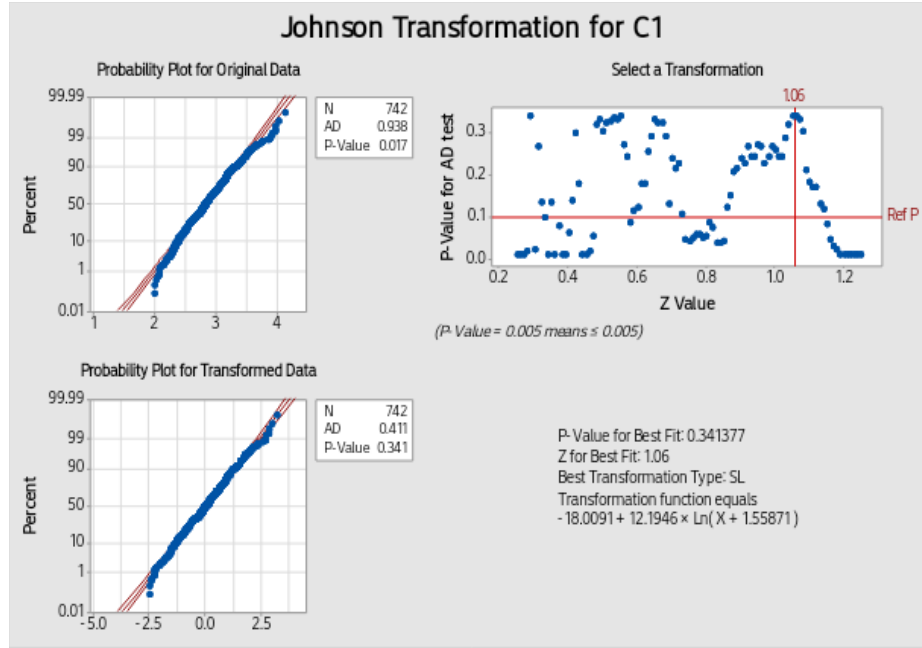
variable	Audit Fees	Audit Fees of the last year	Lever	Net Income	Return on Equity	Sales	Size	Audit Opinions	Operations Complexity
mean	2.88	2.8	0.56	4.56	0.32	5.72	12.002	0.5	0.69
median	2.87	2.79	0.56	4.98	0.27	5.91	11.89	1	1
Maximum	4.12	4.12	1.74	7.54	2.88	8.008	14.17	1	1
Minimum	0.84	0.47	0.01	0.00	-0.38	0.00	10.4	0.00	0.00
Standard deviation	0.37	0.39	0.21	1.8	0.29	1.23	0.71	0.5	0.46
skewness	-0.32	-0.55	0.29	-1.51	1.92	-3.15	0.77	-0.006	-0.83
elasticity	6.12	7.06	4.82	4.75	14.45	15.69	3.66	1	1.69
Jarque-Bera statistics	269.25	472.02	97.28	325.83	3871.11	5328.96	82.6	106	118.62
probability	0.00	0.00	0.000	0.00	0.00	0.00	0.00	0.00	0.00
observations	636	636	636	636	636	636	636	636	636
Number of companies	106	106	106	106	106	106	106	106	106

The mean is the main central index and represents the average of the data, so that if the data is rotated on a regular basis, the mean value is exactly the point of equilibrium or the distribution center gravity.

The median indicates that 50% of the data is less than the middle number of the set and 50% of the data is greater than the middle number of the set. The middle is used as the size of a tendency to the center of distributions whose shape are asymmetric. The proximity of the values of the central parameters (mean, median, and mode) shows the symmetric distribution of the data. The standard deviation is the dispersion parameter and shows the amount of data dispersion. The skewness is one of the parameters of determining the deviation of the symmetry and is the index of data symmetry. If the population has a symmetric distribution, the coefficient of skewing is equal to zero; if the population of skewing is chute to the left, the coefficient of skewness is negative and if it has a right tend, the coefficient of skewness will be positive. Descriptive analysis statistics provide useful information about the distribution of gathered data and calculated variables. The median is one of the central indices that shows the state of the population. As seen in table (1), the extensive curve elongation is called prominence or elongation in relation to the standard normal curve. If the elongation is about zero, the curve will have a balanced and normal position in terms of elongation, if this value is positive, the curve is prominent and if negative, the curve is broad. The elongation of all variables in this model is positive. The positive coefficients of elongation indicate that the normal distribution is taller and the data is centered on the mean.

Finally, the Jarque-Bera test indicates that the calculated level of error is less than 0.05 indicating an abnormal distribution for the research variables. The lack of normalization for independent variables is justified due to the large number of samples and the citation to the central limit theorem, but the dependent variable should be normal. In order to normalize the mentioned variable, Johnson's conversion and Box-Cox method were used by Minitab software. That data was normalized through Johnson's conversion.





Graph 1. Normalization of research variables in Minitab software



### *Non-Correlation Test between Research Variables*

Before model estimate, it is necessary to test the non-correlation between independent variables. Correlation analysis has been used to investigate the existence or non-correlation between independent variables of research. This is done by calculating the Pearson correlation coefficient. According to the results of Pearson correlation test between variables, it was found that the correlation coefficient is not very high or very low (nearly +1 or -1) that affects the results of the regression analysis. As a result, there is no correlation between the independent variables.

### *Maneuverability Test of the Variables*

In order to ensure the results of the research and the significance of the variables, it was conducted a maneuverability test and computed the root of the unit of the data variables related to the panel data. The existence of the unit root denotes the non- maneuverability of the variables. The zero hypothesis of these tests is the existence of a single root and, consequently, non- maneuverability of the variables; if the probability of the statistic is less than 0.05, then with probability of a 95%, zero hypothesis is not accepted which means the lack of a single root and hence the maneuverability of the variables. This test was performed using Eviews-10 software, Levine test, Lynn and Chou (2002), Fischer-Dickey Fuller unit root test, and Fisher - Phillips Peron unit root test (1994).

### *Panel Co-Integration Test Using the Cao Approach*

In order to investigate the long-term relationship between research variables, panel data co-integration was performed. Engle and Granger co-integration test is based on the maneuverability test for the remainders of a regression or integration of first order. Kao developed this test for panel data. The results of the co-integration of variables were presented using the Cao test in the following table. Given the probability level of computational statistics, the hypothesis of zero on the lack of co-integration between variables is rejected and co-

integration between is confirmed in the long time. Therefore, the results of the Cao test indicate the existence of the co-integration relationship between variables in the long time.

**Table 2. Co-integration test results**

Approach	Statistic	t-statistic	P-value
Kao	ADF*	-6.76	0.00

\*Augmented Dicky-Fuller test

H0: There is no co-integration between the research variable.

H1: There is co-integration between the research variables.

**Table 3. Estimate results of the research hypothesis model**

$Afee_{it} = \beta_0 + \beta_1 Afee_{it-1} + \beta_2 Sale_{it} + \beta_3 Lever_{it} + \beta_4 Net\ Income_{it} + \beta_5 Return\ on\ Equity_{it} + \beta_6 Size_{it} + \beta_7 Operations\ Complexity_{it} + \beta_8 Adverse\ Opinion_{it} + \varepsilon$			
Variables	Coefficient	Statistics t	P-Value
Audit fees of the last year	0.37	5.34	0.00
Sales	0.25	2.33	0.01
Lever	-0.54	-0.6	0.54
Net Income	0.05	0.98	0.32
Return on Equity	0.03	0.09	0.92
Company size	0.48	3.53	0.00
Adverse Opinion	0.19	1.15	0.24
Operations Complexity	0.11	0.3	0.76
Mean dependent var		-0.26	
S.D. dependent var	0.5	S.E. of regression	0.62
Sum squared resid	201.14	J-statistic	17.4
Instrument rank	22	Prob(J-statistic)	0.23

Since the GMM method requires the tool variable, the interruption of all the research variables (AFEE (-2), LEV (-1), NI (-1), ROE (-1), SALE (-1), AO (-1), OC (-1), SIZE (-1)) were used as the tool variable. As seen in the table above, the independent variable coefficient of last year audit fee is positive and p-value is less than five percent. Therefore, there is a significant and direct relationship between the audit fees of the last year and the audit fees of the current year. Independent sales coefficient is positive and p-value is less than 5%. Therefore, there is a significant and direct relationship between the sales and audit fees of the current year. The independent variable coefficient of the company size is positive and the p-value is less than 5%. Therefore, there is a significant and direct relationship between the size of the company and the audit fees of the current year. However, there is no significant relationship between the other independent variables and audit fees. In considering the significance of the model, considering that the probability of the J statistic is greater than 0.05 (0.23), with 95% confidence, the significance of the total model is confirmed.

## CONCLUSION

In this research, the generalized momentum model (GMM) was used to test the research model. Finally, the fitting of the model was carried out according to the classical regression hypotheses and the results of the hypothesis test of the research were interpreted. The empirical evidence obtained from testing the hypotheses at 95% confidence level is as follows:



The first hypothesis of the research "there is a significant relationship between the audit fees of the current year and audit fees of the last year" has been confirmed.

The second hypothesis of the research "there is a significant relationship between the audit fees and sales of the company" has been confirmed.

The third hypothesis of the research "there is no significant relationship between the audit fees and the financial lever" has not been confirmed.

The fourth hypothesis of the research "there is no significant relationship between the audit fees and net income" has not been confirmed.

The fifth hypothesis of the research "there is no significant relationship between the audit fees and return on equity" has not been confirmed.

The sixth hypothesis of the research "there is a significant relationship between the audit fees and the company size" has been confirmed.

The seventh hypothesis of the research "there is a significant relationship between the audit fees and the complexity of operations" has not been confirmed.

The eighth hypothesis of the research "there is a significant relationship between the audit fees and the type of comment" has not been confirmed.

Therefore, it can be concluded that there is a positive and significant relationship between the audit fees of the current year with the audit fees of the last year, company sales and company size.

Since the audit fees for the current year is significantly related to the company sales, company size and the last year audit fees, it is suggested to audit firms that in determining the audit fees of the current year, the companies investigate the company size, the company sale and the last year audit fees.



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