INVESTIGATING COMPANY INCOME AND GENDER DIVERSITY ON AUDIT FEES IN CO-OPERATIVES

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Abstract

Auditing is an effective solution to limit the managers' powers in contractual relations. Audit fees reflect the quality of audits for external users of financial statements. The fee amount is responsible for the number of audit efforts or estimate of the total audit risk of the client unit. This study aims to analyze the factors affecting the audit fee in co-operative companies from 2009 to 2019 by using the information of 70 selected companies. This study results showed that the auditor's amount of sales (company revenue) gender diversity increases the audit fee. In other words, if the auditor receives more fees, he makes more effort and has a better quality of work. In addition, auditing firms that benefit from female managers and auditors have higher auditing fees because women are more risk-averse, more conservative, more accurate, and more sensitive to complex issues.

Keywords: auditor size, auditor expertise, auditor gender diversity, auditor fee.

INTRODUCTION

In the supervisory dimension of accounting and auditing, each system has a special place and is widely used from the highest level of government to the smallest business unit (Nam, N. H., et. al., 2021; Malik, M., et. al., 2019; Khosravi, M., et. al., 2019). In other words, every system needs monitoring and feedback to survive. Due to the necessity of the scope of audit work, determining the fee for this service in our country is not based on a scientific model. It is impossible to predict the needed cost according to the unit's characteristics under consideration logically and defensibly (Lobo 2012). The auditing market has a significant increase in the number of auditing firms in the private sector and co-operatives licensed to perform auditing services due to the Iranian Society of Certified Public Accountants. Each company has started implementing its policies in a competitive market to gain more influence and attract customers and clients with the

increasing demand for auditing services in Iran. Legislators, researchers, and investors consider pricing and market competition important for auditing services because the auditors' economic benefits are provided through auditing fees and contracts with employers. Determining the minimum auditing fee rate and the breaking rate of some auditing firms are some of the main disputes of the auditing profession. The independence and quality of auditing services are jeopardized due to the auditing point of view as a homogeneous product and its non-competitive pricing (Vahedi and Amiri 2020). Before starting the audit work, the fee is fixed in a contract between the auditor and the client. There are some "escape" points in the contract in the unseen situation, such as the problem of continuing operations or factors influencing the audit risk, which allows the auditor to perform additional work and get overtime pay. Ordinary audit contracts are not only considered the

possible events that result in a reduction in audit fees in co-operatives. (Hibar 2010). Nowadays, most companies and co-operatives use auditing services. Independent auditing is a fundamental basis for economic transparency, public and community trust in the capital market, internal and external creditors, and government accountability to the public. Therefore, they should not be treated as ordinary goods and services. (Alavi and Badr Afshan 2013). In this field, low fees and unsatisfying services endanger the foundations of auditing. The auditor's mission is to validate financial reporting and make the users of financial statements confident. In this case, the auditing fee has to be paid in proportion to the operation to maintain the high value of auditing.

In this research, we try to answer the following questions:

1. Is there a significant relationship between the company's revenue and the audit fee?

2. Does the gender diversity of the audit affect the audit fee?

Background and theoretical foundations:

The auditor economically benefits by signing a contract with the owners through a fee. Auditors consider various factors to price audit services, so much research has been conducted to identify and evaluate these factors. In most transactions, risk factors, volume, and complexity of unit operations are th descriptive factors. Audit fees have been the subject of much audit research. Many researchers have studied audit fees and the factors affecting audit fees in the auditing field.

Eatonen and Penny (2009) conducted research that studied the effect of gender differences on audit fees. According to the results, the companies with a female audit partner have higher audit fees. The obtained result is consistent with another theory which indicates that gender differences lead to differences in risk-taking and accuracy in decision-making.

In 2019, Jian et al. conducted a study investigating the impact of stock price risk fall on audit fees, auditor changes, auditor reporting delays, and the type of audit report in Chinese companies. This study was conducted using data from 1,300 companies from 2003 to 2013. The results showed that the risk of falling stock prices increases audit fees by using both negative stock skewness measures and weekly fluctuations in specific returns. There is the possibility of the auditor change, delays in issuing auditor reports, and adjusting audit reports in companies with the high risk of falling stock prices, and this relationship is reinforced due to restating the financial statements.

Shan et al. (2019) conducted research that studied the relationship between managerial ownership with the size of the audit firm and audit fees in Australian listed companies between 2005 and 2015. Based on the results, the relationship between managerial ownership with the size of the audit firm and the audit fee is negative when the levels of managerial ownership are in line with the shareholders' interests (the hypothesis of alignment of interests). On the contrary, this relationship seems positive when the levels of managerial ownership are not in line with the shareholders' interests (the hypothesis of stabilizing the position of managers).

Jalan et al. (2020) conducted a study that examined the effect of gender diversity of the audit committee and transactions with persons dependent on audit fees. The study was conducted using data from 180 Egyptian companies between 1998 and 2005. The results showed that companies with female managers on the audit committee have higher audit fees. According to the transaction hypothesis that increases audit fees, companies trade with dependent people.

Kaleemullah et al. (2020) conducted a study investigating the audit committee's effect and the gender diversity of company managers on auditing fees in UK stock companies. For this purpose, they used the 770 companies' information from 2009 to 2017. Therefore, they concluded that an effective audit committee

with gender diversity and financial expertise could increase the audit quality and increase the audit fee.

Akbarkhani et al. (2017) conducted a study examining the relationship between gender diversity of managers, auditor's fees, and auditor selection in 165 companies from co-operatives from 2009 to 2017. According to the results, there is a significant relationship between the presence of women in the board of directors and the audit fee, and there is no significant difference between the presence of a woman on the board and the presence of a woman on the board the audit committee. In addition, the results did not show a significant relationship between the presence of women in board members and the selection of industry-specific auditors.

Abdolrahimian et al. (2016) conducted a study that examined the effect of gender diversity of board members on the relationship between the audit committee's effectiveness and auditing fees in co-operatives. For this purpose, they used 105 companies' information among co-operatives in Tehran from 2012 to 2017. Multivariate regression model and ordinary least squares method were used to test the research hypotheses. According to the study results, there is a positive and significant relationship between the effectiveness of the audit committee and the audit fee. In addition, the gender diversity of board members showed a negative and significant effect on the relationship between the effectiveness of the audit committee and the audit fee.

METHOD:

Based on the deductive reasoning method, the research was correlational in terms of method and also applied in terms of purpose. This statistical research population included co-operatives of Khuzestan province and all over the country from 2009 to 2019. This statistical population was selected until 2009 because the financial statements of the sample companies were fully available until 2010. In addition, due to the lack of access to all financial statements of the sample companies in 2011, it

was impossible to review the possibility of re-submitting the sample companies in the following year. Therefore, the Chavo or F-Limer test has been used for the years 2009 to 2019 to estimate the research models, and a total of 70 companies (770 years-company) were also used for 11 years based on combined data. The library method and documentary studies have been used, including new application software and financial statements of companies accepted in the Tehran Cooperative Organization (extracted from rdis. ir) to obtain the information needed to process the research hypotheses. In this case, the companies' audit reports have been used to extract the control variables from the available financial statements and the information of the main variables. Rahavard Novin software was also used to retrieve information about the stock market value of companies. Eviews econometric software version 10 analyzed and tested the hypotheses using generalized least squares regression (EGLS) integrated data approach at 5% significance levels.

The regression model of the research is as follows

$$lnAUDF_{it} = \alpha + \beta_1 LNrevenue_{it} \\ + \beta_2 SEX_{it} + \beta_4 SIZE_{it} \\ + \beta_5 REC_{it} + \beta_6 CR_{it} \\ + \beta_7 EMOLS_{it} \\ + \beta_8 GLIENT_{it} \\ + \beta_9 BM_{it} + \beta_{10} BINV_{it} \\ + \beta_{11} LEVE_{it} \\ + \beta_{12} ROA_{it} + \beta_{13} FGN_{it} \\ + \varepsilon_{it}$$

Each Parameter is defined as follows:

lnAUDF: auditor fee logarithm (dependent), LNrevenue: corporate income logarithm (independent), SEX: auditor gender (independent), AUDSIZE: auditor size (independent), AISP: auditor expertise (independent) and control variables including SIZE: size Company, REC: Claims Ratio, CR: Current Ratio, EMOLS: Company Employees, GLIENT: Auditor Client Year, BM: Book Value to Market Ratio, BINV: Inventory Ratio, LEVE: Financial Leverage, ROA: Return on Assets Company, FGN: export sales to total company sales and ε: error component.

The dependent variable:

Income of the company under review: The amount of owner income is one of the affecting factors on the audit fee. For example, those companies with more than $ 5 billion a year are involved in Article 272 of the Direct Taxes Act and required audit requirements. Article 272 of the Law on Direct Taxes determines a 3 months deadline for submitting an audit report after submitting the tax return. The end of June is the deadline for submitting tax returns of private individuals, and the end of July is the deadline for juridical individuals. Companies with less than an annual revenue of $ 5 billion annually are not obedient to 272 Article.

RESULTS:

Descriptive statistics:

Table (1) shows that the average variable of the auditor's logarithm was 7.34, and the

companies' sales revenue logarithm was 11.03. The receivables and inventory average ratio to total assets was 0.4 and 0.33. In addition, the average current ratio was 0.40, representing that the company can repay its short-term debts because this ratio is responsible for measuring the ability of the company to repay short-term liabilities. The average financial leverage was 0.24. This number shows that 0.24 corporate assets can balance the debts, and 0.76 remain as shareholders' equity. Their average profitability was 0.46, the highest return on assets was 0.75, and the lowest was 0.13. The average ratio of the company's book value to its market value is 0.71. It shows a high difference between the daily value of the stock price of the sample companies and their book value. The average export sales to the total sales of the company were 0.07, indicating that 0.07 of the company's total sales on average are dedicated to exports.

Table (1): Descriptive statistics of the research

Variables	Average	Middle	Maximum	Minimum	Standard deviation	Skewness
Logarithm of the auditor's fee	7.34	7.74	7.92	6	0.78	0.10
Company income logarithm	11.03	11.02	11.96	9.69	0.44	-0.36
size of the company	10.23	9.54	11.56	7.53	0.40	-0.28
Claims ratio	0.40	0.36	0.88	0.12	0.14	0.37
Inventory ratio	0.33	0.35	0.69	0.05	0.14	0.47
Current ratio	0.40	0.43	1.36	0.11	0.19	0.30
Employee logarithm	5.01	5.2	45	1.5	0.65	0.54
Book value to market ratio	0.71	0.78	0.88	0.44	0.11	-0.25
Return	0.64	0.44	0.75	0.13	0.16	0.53

on assets					
Financial Leverage	0.4	0.25	0.77	0.008	0.12	0.30
Export sales to total sales	0.07	0.08	0.09	0.000	0.07	0.06
observations	770	770	770	770	770	770

Descriptive statistics of qualitative variables (codes 0 and 1)

Qualitative variables	Code 1 frequency	Code 0 frequency	Percentage of code 1frequency	Percentage of code 0 frequency
The sex of the auditor	30	740	0.04	0.96
Customer audit years	766	4	0.99	0.01

Source: Researcher

Descriptive statistics of variables are limited to two values of zero. They do not work on average, and the middle does not have a concept. These variables need to be examined in terms of frequency and frequency percentage. Therefore, the frequency of companies with female auditors was 30 observations out of 770 observations. They were given number one, and their frequency percentage was 0.04. Other companies also had a male auditor with a frequency of 740 and a percentage frequency of 0.96. There are companies with 766 observations out of 770 that have been auditing for at least 1 year as clients with a percentage frequency of 0.99. One of the other central indicators is the middle which shows the state of society. The middle of the auditor's fee and expertise variables is 7.74 and 0.09. It shows that half of the data is less and the other half is more than this amount. Compared to the normal distribution, the export sales variable (0.07) has the least asymmetry, and the logarithm variable of the auditor's fee (0.78) has the most asymmetry.

Correlation analysis:

Table (2) shows that the correlation between audit income and the fee is 0.04, with an error level of less than 5%. It also shows a positive correlation between audit income and fees with 95% confidence. In addition, the gender of the auditor and the audit fee correlate 0.07 and with 95% confidence. The correlation between company size and audit fee is 0.06, with less than a 5% error level. It shows a positive correlation between company size and audit fee with 95% confidence. There is a correlation of 0.05 between book value to market value and audit fee with an error level of less than 5%. It shows a positive correlation between book value to market value and audit fee with 95% confidence. The correlation between the current ratio and the auditor's size is 0.03 with an error level of less than 5%, indicating a positive correlation between the current ratio and the auditor's size with 95% confidence. The correlation between the ratio of receivables and the auditor's expertise in the industry is 0.08, with an error level of less than 5%. It shows a positive correlation between the ratio of receivables and the auditor's expertise in the industry with 95% confidence. The correlation between inventory and auditor gender diversity is 0.07, with less than a 5% error level. Therefore, it shows a positive correlation between inventory and auditor gender diversity with 95% confidence. The correlation between financial leverage and the receivables ratio is -0.08, with an error level of less than 5%. Therefore, it shows a negative correlation between financial leverage and the receivables ratio with 95% confidence. In other words, the severity of the correlation between financial leverage and the ratio of receivables is -0.08, confirmed at the 95% confidence level. The correlation between inventory and auditor's fee is 0.04 and less than a 5% error level. Therefore, it shows a positive correlation

between inventory and auditor's fee with 95% confidence. The correlation between the ratio of claims and the gender diversity of the auditor is 0.05, with an error level of less than 5%. Therefore, it shows a positive correlation between the ratio of claims and the gender diversity of the auditor with 95% confidence.

The correlation between export sales and the auditor's fee is 0.05, with less than a 5% error level. Therefore, it shows a positive correlation between export sales and the auditor's fee with 95% confidence. In other words, the auditing fees increase by increasing the company's export sales percentage. It is possible to interpret other variables in this way. There is also no correlation between variables because the amount and intensity of correlation between variables is less than 50%.

Table (2): Results of Pearson correlation coefficients between research variables

LOGREVENUE	0.04	1											
p.v	0.00	-----											
SEX_WIN	0.07	0.06											
p.v	0.00	0.00											
SIZE_WIN	0.06	0.02	1										
p.v	0.00	0.04	-----										
REC_WIN	0.03	0.06	0.07	1									
p.v	0.00	0.00	0.00	-----									
CR_WIN	0.03	0.06	0.08	0.07	1								
p.v	0.00	0.07	0.09	0.04	-----								
EMOLS_WIN	0.02	0.03	0.06	-0.04	-0.05-	1							
p.v	0.00	0.04	0.04	0.09	0.07	-----							
GLIENT_WIN	0.04	0.03	0.05	0.08	0.06	0.03	0.02	1					
p.v	0.00	0.02	0.05	0.06	0.00	0.00	0.00	-----					
BM_WIN	0.05	0.04	0.04	0.03	0.04	0.04	0.06	0.08	1				
p.v	0.02	0.00	0.03	0.00	0.02	0.00	0.05	0.00	-----				
BINV_WIN	0.04	0.06	0.04	0.02	0.03	0.05	0.06	0.04	0.02	1			
p.v	0.00	0.02	.0.03	0.06	0.00	0.07	0.08	0.00	0.03	-----			
LEVE_WIN	0.02	-0.04	-0.03	-0.04	-0.08	-0.06	-0.04	0.09	0.04	0.02	1		
p.v	0.00	0.00	0.07	0.00	0.00	0.08	0.07	0.03	0.00	0.00	-----		
ROA_WIN	0.06	0.04	0.02	0.09	0.07	0.03	0.06	0.11	0.06	0.07	0.06	1	
p.v	0.00	0.08	0.03	0.02	0.00	0.05	0.06	0.04	0.07	0.00	0.02	-----	
FGN_WIN	0.05	0.09	0.04	0.07	0.05	0.06	0.07	0.04	0.02	0.08	0.04	0.03	1
p.v	0.00	0.07	0.02	0.00	0.03	0.05	0.00	0.07	0.11	0.00	0.00	0.00	-----

The necessary statistical tests for multivariate regression analysis:

This research used regression analysis (multivariate regression) and combined data method (data panel) to test the hypotheses and research models.

Variables reliability test results:

The reliability of the dependent variable means the auditor's fee. It is shown through four Levin, Lane, and Chow tests, the Fisher unit's root test, the generalized Dickey-Fuller, the IM boys and Sheen test, and the Phillips Pro Fisher unit root test. These tests' error level for the mentioned variable is less than 5%. Therefore, the auditor's fees variable is stable, does not turn to false regression, and distorts the regression model. The reliability of the independent variables of company income, auditor size, and auditor expertise have been performed through the mentioned four tests with an error level of less than 5%. Therefore, the mentioned independent variables do not lead to false regression and distort the model. In terms of reliability, control variables are also studied. The table results show that the error level is less than 5% in all tests indicating the stability of the research's control variables, and they do not lead to false regression. These interpretations are valid even for a thousand other variables with an error level of less than 5% (Table 3).

Table (3): Results of the reliability test of variables

1. Variables	LEVIN, LANE, AND CHO		IM BOYS AND SHEEN		THE GENERALIZED DICKEY-FULLER		FISHER, PHILLIPS PRO	
2.	Statistics	p.v	Statistics	p.v	Statistics	p.v	Statistics	p.v
3. Logarithm of the auditor's fee	-22.58	0.000	-13.31	0.000	453.1	0.000	988.4	0.000
4. Company income logarithm	-13.9	0.000	-9.04	0.000	312.7	0.000	387.2	0.000
5. size of the company	-20.7	0.000	-14.38	0.000	444.3	0.000	551.3	0.000
6. Claims ratio	-25.7	0.000	-14.05	0.000	398.3	0.000	465.8	0.000
7. Inventory ratio	-17.71	0.000	-11.18	0.000	378.3	0.000	455.8	0.000
8. Current ratio	-23.7	0.000	-5.11	0.000	59.06	0.000	59.7	0.000
9. Employee logarithm	-26.13	0.000	-14.91	0.000	411.4	0.000	488.20	0.000
10. Book value to market ratio	-10.52	0.000	-9.65	0.000	245.3	0.000	154.3	0.000
11. Return on assets	-19.36	0.000	-13.29	0.000	419.7	0.000	537.1	0.000
12. Financial Leverage	-27.70	0.000	-20.21	0.000	543.6	0.000	716.6	0.000
13. Export sales to total sales	-4.67	0.000	-2.83	0.000	28.25	0.000	37.15	0.000

Results of estimating research models:

F- Limer (Chow) test choose between panel data methods and integrated data. In Chow's test, the H_0 the hypothesis is that the width of origin is the same (integrated data), which is against the H_1 hypothesis indicating the inequality of width of origin (panel data method). The panel data model has confirmed if the error rate of the Chow test is less than 5%. Otherwise, the combined data method is used to test the hypotheses due to the appropriateness of the research data. Table (4) presents the results of the Chow test.

Table 4 - Results of F-Limer or Chow test (width homogeneity of cross-sectional origins)

The Chow test	F Statistics	Error level	Test result	Type of method
H_0: The width homogeneity of cross-sectional origins	0.08	0.43	H_0 is not rejected	Integrated data

Table (4) indicates that the model F statistic is insignificant at the 5% error level (greater than 5%). The Chow test strongly affirmed the similarity of the origin's width in all periods. In this model. Therefore, this method accepted the combined effects.

Classical assumptions of linear regression:

Model residuals normality

The Jarque-Bera test investigates whether the waste distribution is normal or not using the elongation and skewness of the distribution residuals. In this test, the H_0 hypothesis defines that disturbance terms are normally distributed, and the opposite assumption also defines that the disturbance terms are not normally distributed. The H_1 the hypothesis is confirmed in this test if the error level is less than 5%. H_0 the hypothesis is confirmed if the error level is greater than 5%. Therefore, it is concluded that the disturbance term in the regression is normally distributed associated with each variable. Table (5) shows the results of the Jarque-Bera test.

Table (5): The test results for the normality of the dependent variable of the research and error term.

Variable name / Test	Residual Model	The dependent variable
Jarque-Bera statistics test	0.48	1.53
Error level	0.75	0.39

Table (5) indicates the test statistics of the normality of the dependent and residual variables of the model. Their significance level showed that the hypothesis H_0 is confirmed, and the hypothesis H_1 is rejected. On the other hand, the dependent and residual variables of the research regression model do not have an abnormal distribution.

Residual variance homogeneity:

Table (6) describes the research models' residual variance homogeneity results using the Arch, Golsar, and Harvey tests.

Table (6): Results of variance homogeneity test of the residuals of the regression model

Model description		Breusch–Pagan	Arch	Harvey	Result	**Selected method**
Model	Statistics F	2.94	72.92	10.23	Variance inequality	GLS
	p.v	0.00	0.00	0.00		

The ordinary least squares (OLS) method estimates linear regression patterns.

Having the best linear estimator without bias is the desirable statistical feature of this method. The generalized least squares (GLS) method is also used to solve problems such as variance heterogeneity. Table (6) shows that the error level of the mentioned tests is less than 5%. Therefore, the test statistics show variance heterogeneity. Their significance level also did not confirm the null hypothesis of this test based on variance homogeneity. In other words, the residues obtained from the estimation of the research model did not have a constant variance. The generalized least squares (GLS) method usually estimates regression in these cases.

No specification error (cryptographic reset test):

The absence of specification error in the model is another classic regression assumption that indicates if the model's functional form is correctly selected or not? A cryptographic reset test has been used to test if the model has a linear or nonlinear relationship and if the model is correctly explained in terms of linearity or nonlinearity. Table (7) shows that the error level of the F-statistic of the cryptographic reset test calculated for the research regression model is greater than 5%. Therefore, it shows that the regression model is a linear function, and the null hypothesis is confirmed considering the model linear.

Table 7- Results of cryptographic reset test of regression model

Model	Cryptographic reset test statistics	Error level
Model	0.15	0.69

Analysis of hypotheses using combined data:

Practically, there are two criteria to confirm or reject the research hypotheses.

1. The test's significance (p-value) is less than 0.05.

2. The absolute value of the Student t-test at 95% confidence level is greater than 1.96. The obtained value of the test statistic in each of the

above cases rejects the hypothesis H_0 and confirms hypothesis H_1.

Research model test result:

Table (8) describes the results of the research model.

Table (8): Research Model Test Results - Random Effects (GLS)

Description	Coefficients	T-Student	Error level	VIF
Width of origin	7.30	3.05	0.00	
Company income logarithm	0.04	6.07	0.00	1.16
Gender of the auditor	0.03	3.39	0.00	1.09
size of the company	0.07	2.14	0.03	1.02
Claims ratio	0.007	1.28	0.19	1.11
Current ratio	0.03	1.98	0.04	1.21
Company staff	0.005	1.33	0.18	1.02
Audit client	0.04	3.35	0.00	1.01
Book value to market ratio	0.01	4.52	0.00	1.50
Inventory	0.05	2.27	0.02	1.05
Financial Leverage	0.03	1.98	0.04	1.10
Return on assets	0.03	2.75	0.00	1.04
Export sales	0.05	3.98	0.00	1.24
Modified coefficient of determination R2	0.51			
F regression (error level)	(0.000)	198.52		
Watson Camera	2.05			

Source: Researcher

According to the Table, the significance of Fisher statistic (198.52) at the level of 5% indicates that the overall estimated model is significant. Therefore, the research model is generally significant, and the independent and control variables explain the dependent variable. In addition, the adjusted coefficient of determination (R2) is 0.510. This number indicates that approximately 0.510 of the dependent variable changes are related to the independent and control variables. Another 0.49 is not in the researchers' control because it is related to other factors. The scatter of points around the regression line becomes more if the value of this index is greater. The value of Watson's camera statistic (2.05) shows the absence of the first-order serial autocorrelation problem in the model error terms. Therefore, the results of the estimated model are true, and it is possible to rely on the model estimation (normal should be between 1.5 and 2.5). The variance inflation index (VIF) value does not show a strong correlation problem between the independent variables of the first model.

Hypothesis 1: Company income has a significant effect on auditing fees.

The results of Table (8) show that T-Student Statistics associated with the independent variable of company income and its significance level (p.v) are 6.07 and 0.00, with the coefficient of 0.04. In other words, there is an increase of 0.04 in audit fees with a 0.01 increase in the company's revenue. For this study, the level of error was 0.05. Therefore,

the company's revenue variable significantly affects audit fees. The first research hypothesis is confirmed at a 95% confidence level, and the variable coefficient of the company's income is positive. The firm's revenue is obviously responsible for increasing audit fees.

Hypothesis 2: The gender diversity of the firm auditor significantly affects the audit fee.

The results of Table (8) show that T-Student Statistics is associated with the independent variable of gender diversity of the company's auditor, and its significance level (p.v) is 3.39 and 0.00 with the coefficient of 0.03. In other words, there is an increase of 0.03 in audit fees with a 0.01 increase in the auditor's gender diversity. For this study, the level of error was 0.05. Therefore, the auditor gender variability variable significantly affects the audit fee. The second research hypothesis is confirmed at the 95% confidence level. In addition, the auditor variable coefficient of gender diversity is positive. The auditor's gender diversity is obviously responsible for increasing the audit fee. In other words, the audit fee is higher in companies with a female auditor.

DISCUSSION AND CONCLUSION:

The first hypothesis examined the firm income effect on audit fees. Based on the combined data, the research results indicated that the company's income positively and significantly affects the audit fee, and the first hypothesis was confirmed at a 95% confidence level. On the other hand, companies with more sales or revenue have more audit fees due to processing time and increased audit risk. These hypothesis findings are consistent with the results of shan research et al. (2019).

The second hypothesis examined the effect of gender diversity of the company auditor on the audit fee. Based on the combined data, the study results showed that the gender diversity of the company auditor positively and significantly affects the audit fee, and the second hypothesis was confirmed at a 95% confidence level. In addition, auditing firms that benefit from female managers and auditors have

higher auditing fees because women are more risk-averse, more conservative, more accurate, and more sensitive to complex issues. This hypothesis's findings are consistent with the results of Eatonen and Penny (2009) Jalan et al. (2020).

Due to their high reputation, large auditing firms are privileged more experienced and trained auditors and stronger quality control. Those companies with more reputable and large auditing firms have more fees. Companies that offer more sales and revenue have more auditing fees due to their high level of processing, costs incurred, increasing the volume of processing, and spending more time. In addition, industry-expert auditors allocate more time for corporate accounts to maintain their professional credibility and reputation and avoid lawsuits. They are hired in that company or industry as experts to increase audit quality and demand more audit fees. Auditing firms that benefit from female managers and auditors also have higher auditing fees because women are more risk-averse, more conservative, more accurate, and more sensitive to complex issues. As a result, gender differences lead to differences in risk-taking and accuracy in decision-making.

The shareholders, the members of the co-operative companies, and the public accountants are suggested to consider the issue of the auditor's fee and the factors affecting it in reviewing and supervising the audit report of auditing firms to improve the quality of the audit.

Many researchers conducted outside of Iran test a large number of companies. The present study only examined the co-operatives, and the statistical community was faced with limitations. Therefore, the generalization of results to all economic units should be done with caution due to the similarity of companies.

The information of prepared financial statements is used based on the historical cost to calculate the research variables. Therefore, different results may be obtained from the current results if the above information is adjusted for inflation.

References

[1] Akbarkhani, Mohammad Ali; Naghshbandi, Nader and Murid Ahmadi, Zahra, (2019), A Study of the Relationship between Gender Diversity of Managers, Auditors Remuneration and Auditor Selection, Accounting and Management Perspectives, Volume 2, Issue 19, pp. 1-26.

[2] Abdolrahimian, Mohammad Hossein and Atefeh Mahdavi, Meymand, (2016), The effect of gender diversity of board members on the relationship between the effectiveness of the audit committee and auditing fees in Tehran co-operatives, the Third International Conference on Modern Management, Accounting, Economics and Banking Tricks with Approach Business Growth, Tehran, Arvin Alborz Conference Company

[3] Vahedi, Abdolrahim and Ali Amiri. (2020), Investigating the Relationship between Board Size and Board Independence with Quality and Audit Fees in Medium and Small Companies Accepted in Tehran Cooperatives, First Accounting, and Management Conference, Istanbul, Turkey, Permanent Secretariat Conference.

[4] Alavi Tabari, Hussein and Badrafshan, Amene. (2013). "Profit Quality: Evidence of the Role of the Auditor's tenure and Expertise in the Industry." Journal of Management Accounting and Auditing Knowledge, No. 7, pp. 10-8

[5] Lobo, G. and. Zhao, Y. (2012). "Relation between Audit Effort and Financial Report Misstatements." The Accounting Review, In-Press.

[6] Hribar, P. Kravet, T., and Wilson, R. (2010). "A New Measure of Accounting Quality Working paper. the University of Iowa and the University of Texas at Dallas".

[7] Ittonen, K. & Peni, E., (2009), "Auditor's Gender& Audit Fees," Working paper presented at the 32nd Annual Congress of the European Accounting Association ", May 12-15, Tampere.

[8] Jian Chu, Junxiong Fang, Jeong-Bon Kim & Yi Zhou (2019): Stock price crash risk and auditor-client contracting, China Journal of Accounting Studies, Journal homepage: tps://www.tandfonline.com/loi/rcja20

[9] Shan, Y.G., Troshani, I., & Tarca, A. (2019). Managerial ownership, audit firm size, and audit fees: Australian evidence, Journal of International Accounting, Auditing and Taxation 35: 18–36

[10] Jalan, Akanksha, S. G. Badrinath, Bakr Al-Gamrh, (2020)" Women on audit committees and the relationship between related party transactions and earnings management' Microfinance and Financial Inclusion: Challenges and Opportunities, Volume29, Issue3, Pages 389-406.

[11] Kaleemullah, Abbasi; Ashraful Alama, Md. Borhan, (2020)' Audit committees, female directors and the types of female and male financial experts: Further evidence, Journal of Business Research 114 pp 186–197

[12] Khosravi, M., & Kasaeiyan, R. (2019). The predictive role of socio-demographic characteristics, job stress and psychological hardiness in job satisfaction of nurses. Journal of Advanced Pharmacy Education & Research, 9, pp. 174-178.

[13] Malik, M., Haider, Z., & Hussain, A. (2019). Perceived emotional intelligence, work life balance and job satisfaction among healthcare professionals in Pakistan. International Journal of Pharmaceutical Research & Allied Sciences, 8(2), pp. 80-86

[14] Nam, N. H., Hung, L. M., Quynh, N. T. T., Dung, B. V., & Ly, L. D. (2021). The Impact of Trust and Opportunistic Behavior of Employees on Business Performance: Case Study in Vietnam. Journal of Organizational Behavior Research, 6(1), pp. 233-242