

The Evaluation of Auditor Expertise on the Relationship between the Accounting Information Quality and Investment Efficiency

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Abstract: *The firms need to make punctual and appropriate investments in order to survive and develop their activities. The financial statements of firms should provide information that is beneficial to actual and potential investors, debtholders, other users of logical investments, credit, and similar decisions. This study aimed to evaluate the effect of auditor expertise on the relationship between accounting information quality and investment efficiency. In the current research, the systematic elimination has been used to select the sample, which 128 listed firms of Tehran stock exchange in 2011 to 2016 were selected as the statistical sample. In the present study, the econometric method was the multiple linear regression model by using panel data. The results of the research show that the independent variable of financial reporting quality positively and significantly impact on investment efficiency, indicating that the increase in the financial reporting quality leads to high investment efficiency. Moreover, the results demonstrate that the use of auditor industry expertise will intensify the positive effect of financial reporting quality on investment efficiency.*

Key words: *Auditor Expertise, Financial Reporting Quality, Investment Efficiency*

INTRODUCTION

In the process of firm's value-creation, one of the important issues is the investment which has a strong relationship with the information asymmetry and agency's problem (Xu et al., 2012). It is believed that information asymmetry increases the friction of market and investment inefficiency for the firms which encounters with the liquidity limitations (Chen, 2007). On the other hand, the limitations of financing and a serious lack of investments are associated with the information asymmetry (Zheng et al., 2001). Therefore, both over- and underinvestment are a type of inefficiency, causing the investors loss and the waste of social resources. Thus, information quality is important to establish efficiency.

As a part of supervision and executive system of the firm, auditors facilitate decreasing of the agency costs (Watts & Zimmerman, 1983). Moreover, as one of the strategic mechanisms of a firm, the importance of accounting has been drawn the researches' attention to itself. The problem of conflict of interest among managers and shareholders led to hiring the auditors to give a certificate to the shareholders of the firm by adaption of financial statements with the accepted accounting principles in terms of importance. Furthermore, accounting plays a significant role in the maintenance of shareholders' right (Newman et al., 2005)

Statement of the Problem

Business entities always encounter a lot of investments opportunities and need to be wisely decided in order to invest optimally. The information asymmetry and conflict of interest prevent from making an optimum investment (Yang & Jiang, 2008). Therefore, in order to invest in various projects, business entities should account for the limitation or amount of investments regarding resource constraints (Saghafi et al., 2011). In principle, when a firm invests in all projects with positive net present value, investment efficiency is acquired. Indeed, this scenario would have a consequence only if the market is

complete and there are none of the issues of the incomplete market such as inappropriate choice and agency costs (Biddle et al. 2009). Additionally, on the one hand, investment efficiency or optimum investment should prevent the use of resource in the activities that investment is more than optimum, and on the other hand, the resource should be led into the activities that need more investment. (Saghafi et al., 2011)

One of the major factors that causes the promotion of information quality and decreased information risk of published reports from the firms is to provide higher quality audit services. The research conducted demonstrates that higher quality audits improve the reliability of information obtained and allow users, especially investors, analyze the financial position and the result of the firm's performance (Hasas Yeganeh et al., 2012).

Theoretical Framework

Investment Efficiency

Theoretically, when a firm invests in all projects with positive net present value, investment efficiency is acquired. Indeed, this scenario would have a consequence only if the market is complete and none of the issues of the incomplete market such as incorrect selection and agency costs (Verdi, 2006) and (Biddle et al. 2009). Additionally, on the one hand, investment efficiency or optimum investment should prevent the use of resource in the activities that investment is more than optimum, and on the other hand, the resource should be led into the activities that need more investment. (Modares & Hesarzadeh, 2008). When a firm invests in all projects with positive net present value, investment efficiency is acquired. Then, investment efficiency is taken into account as the asymmetry of the deviation amount of expected investment; because if the deviation amount is lower, the investment efficiency will be considered efficient (Verdi, 2006).

At least there are two criteria to determine investment efficiency. First, a firm need to be collected resources in order to provide the finances of investment opportunities. In an efficient market, all projects with positive net present value should be founded; although, a major part of available literature in finance area has been shown that financial constraint the managers' capabilities for financing.

Accounting Information Quality

Primary financial statements are the main tool of data transfer to parties, considering as the product of the accounting process and financial reporting. As an information system, accounting should efficiently provide accurate and timely information for users so that they can use them as a basis of their decisions. One of the functions that have been defined for accounting is to provide useful and appropriate information for the investors to determine the valuation of stock changes and help them to make sensible decisions. The literature of financial reporting quality has been indicated that accounting information quality can impact the information asymmetry, thereby it affects the financial variables of firms. Accounting information is a part of the data set which investors use them to forecast the forthcoming cash flow for achieving the estimated value of the stock (Cullen et al., 2013).

Some theorists consider accounting information quality from the two aspects. First, the reflection of information content: accounting should provide information associated with the prediction of expected earnings and forthcoming cash flow (relevant). Second, providing symbol about earnings persistence: accounting information should be fair and provide the full image of firm's function, position, and its risk (reliability) (Robotmili et al., 2014). If information quality improves in financial reporting, information asymmetry, capital cost, and agency costs decrease, too. Therefore, accounting information is considered as an important and useful resource for deciding on the contracting parties and the main resource for evaluating the duty of supervision of managers. High quality of accounting information can lead to the increase in the investment efficiency by decreasing the information asymmetry, which if so, it can result in the economic problems such as moral hazards and inappropriate choice (Nikoomaram et al., 2013).

The Relationship between Accounting Information Quality and Investment Efficiency

Principally, when a firm invests in all projects with positive net present value, investment efficiency is acquired. Indeed, this scenario would have a consequence only if the market is complete and none of the

issues of the incomplete market such as incorrect selection and agency costs. Additionally, on the one hand, investment efficiency or optimum investment need to prevent from the use of resource in the activities that investment is more than optimum, and on the other hand, the resource should be led into the activities that need more investment. (Modares & Hesarzadeh, 2008).

Accounting information quality is one of the effective factors on the optimum investment, considering as one of the most significant information resources. Accordingly, accounting information quality can decrease the overinvestment resulting from the free cash flow of the firms. This research can cause an increase in the awareness of investors and other users of accounting information and help investors to choose their investment projects (Saghafi et al., 2011).

Auditor Expertise and Investment Efficiency

Investment is one of the important issues in the process of value-creation of a firm that has a strong relationship with information asymmetry and agency problems. It is believed that information asymmetry increases the market friction and investment inefficiency for the firms that encounter with the limitation of liquidity. Sometimes agency problem results from the over-investment of managers who pursue self-interest and misuse of free cash flow in the projects with negative net present value (Zheng et al., 2001).

Therefore, both over- and under investments are types of inefficiency which cause the investors loss and waste of social resources. According to the issues such as conflict of interest, the auditor is expected to adhere to the standards such as autonomy, objectivity, and fidelity. Ernes, Elder, and Yang (2008) and Mosayer, Glaver, and privit (2007) believe that a duty of the auditor is to decrease the information asymmetry and the conflict of interest between shareholders and managers. Previous studies (Bae & Choi, 2012) have reported that accounting quality can have important economic consequences such as increasing investment efficiency. According to the theoretical background of this issue, less empirical evidence has been collected about this claim, particularly in Iran.

The Effect of Auditor Expertise on the Relationship of Accounting Information Quality and Investment Efficiency

According to the agency theory, information managers have superiority over the expected earnings and scheduling payment for projects and plans. Nevertheless, managers can make a potential decision that would not be in accordance with stakeholder interests. Dependent auditors and accounting process play a role of certified developers and verifiers for the business entities and they act as a mediator between managers and shareholders. (Lambert, 2001).

Accounting and disclosure quality potentially decrease the over- and underinvestment so that they cause an increase in investment efficiency. Several mechanisms show that accounting quality can play such a role. First, the high quality of financial statements can decrease information asymmetry among investors and increase the liquidity of the capital market. Particularly, accounting quality can decrease the financing costs arisen from the inappropriate choice and facilitate the financing of long-term projects and high efficient projects (Li & Wang, 2010).

Literature Review

In 2017, Kolsi and Chakib conducted research to investigate “the Effect of Financial Reporting Quality on the Firms’ Investment Efficiency: The Case of Stock Market of Tunisia”. The empirical findings demonstrate that some features of financial information, namely, reliability and simplicity, seem to increase financial inefficiency, but other cases such as conservatism and relevant do not remarkably impact on the investment decisions.

In an investigation into “How does Analysts’ Forecast Quality Relate to Corporate Investment Efficiency?”, Chen et al. (2017) have investigated this issue. The findings of the research show that these effects are lower for the firms with more information asymmetry and institutional shares of ownership.

In a study that set out to examine “Auditor Expertise, Accounting Information Quality and Investment Efficiency”, Elaoud and Jarboui (2017) found out that accounting information quality helps to increase the problem of overinvestment.

A study of “Accounting Information Quality, Governance Efficiency and Capital Investment Choice” by Zhai and Wang (2016) reports that accounting information quality can improve selecting capital investment which promotes the performance of corporate governance.

In another research on “The Financial Expertise of Audit Committee and Earnings Management”, Badolatho et al. (2014) looked into the effect of accounting on the earnings management. In this study, findings indicate that there is a positive and weak relationship between the criteria of auditor size (auditor reputation), auditor tenure, and earnings management, but it is not statistically significant.

In 2013, Gomariz et al. investigated the current issue in research on "Financial Reporting Quality, Debt Maturity, and Investment Efficiency". The findings of this study indicate that financial reporting quality and debt maturity mechanisms play a role of substitution in the increase of investment efficiency so that the firms that use the short-term debts (long-term) show the higher effectiveness of financial reporting quality (lower) over investment efficiency.

Bae and Choi (2012) carry out research to investigate “The Relation between Financial Reporting Quality an Investment Efficiency of Private Corporations in Emerging Markets”. The results show that auditor expertise has a positive and significant relationship with investment efficiency, and if the auditor industry expertise increases, the investment efficiency will increase.

In 2011, Chen et al. surveyed “Financial Reporting Quality and Investment Efficiency of Private Firms in Emerging Markets” The results indicate that financial reporting quality positively impacts on the investment efficiency.

To study the combined effect of risk of cash and cash maintenance, Das and Pandit (2010) carried out a research on “Examining the relation between Accounting Quality and Investment Efficiency by Emphasizing on the Life-Cycle of Firm”. In this study, the results demonstrate that moderate effect of accounting quality and life-cycle on investment is more important for the firms with high risk and cash-rich, resulting in the overinvestment.

In another research on “Auditor Industry Expertise, Free Cash Flow, and Earnings Management by Related Party Transactions, Tavakolnia (2017) reports that there is a negative relationship between auditor industry expertise and earnings management by related party transactions.

In “Investigating the Effect of Auditor Specialization in Industry on the Relationship between Accounting Conservatism and the Risk of Future Stock Price in the Companies Listed on the Tehran Stock Exchange”, Vaez and Dorseh (2016) found that auditor expertise has a negative significant effect on the accounting conservatism, and then auditor industry expertise and accounting conservatism negatively impact the upcoming risk of stock price.

In 2016, Asemani and Abaszadeh set out research of "Examining the Relationship between Agency Cost, Free Cash Flow, and Investment Efficiency" discussed the relationship between agency cost, free cash flow, and investment efficiency in the listed firms in Tehran stock exchange. At the level of 5% error, the results indicated that firms with high agency cost show more sensitivity of overinvestment to free cash flow.

A survey such as that conducted by Robatmeili et al. (2014) on the” Accounting Information Quality and Stock Price Adjustment” demonstrated that poor quality of accounting information is associated with the amount of delay in the stock price adjustment. Therefore, the poor quality of accruals typically leads to the 3% increase in the delay of stock price adjustment.

In their study on “Examining the relation between accounting quality and investment efficiency”, Badavar Nahandi and Taghizadeh Khanqah (2013) identified that there is generally a positive and significant relation between accounting quality and investment efficiency.

In *Examining the Relation between Accounting Information Quality, Overinvestment, and Free Cash Flow in Tehran Stock Exchange*, Saghafi et al. (2012) found that if the accounting information quality of firms increases, the overinvestment issue will decrease, and this incident mostly occurs in the firms with high free cash flow, and the effect of low overinvestment through accounting information quality is very high in this firms.

In 2011, Saghafi et al. conduct research to discuss "The Relation between Accounting Quality and Investment Efficiency in the Corporations with high Investment Facilities". The result of this research showed that if corporations with high investment facilities use high-qualified auditors, the investment efficiency would be experienced at a higher level; however, unexpectedly, higher accounting quality has no effect on the decreasing of manipulation in accruals.

Research Hypotheses

First hypothesis: Accounting information quality has a positive effect on investment efficiency.

Second hypothesis: The simultaneous interaction of auditor expertise and accounting information quality is positively associated with investment efficiency.

Methodology

As a descriptive study, the present research is a type of causal-comparative research and the correlation type. Moreover, this study is a type of applied research in terms of purpose because its results can be used for deciding process.

In the current research, the library method has been used to study the theoretical foundation and examine the review of the study. The data required is manually extracted from the available financial statements of Comprehensive Database of All Listed network (Codal) and compact discs (CDs) of the stock exchange.

Furthermore, other information required in accordance with financial statements of the firms has been collected in the database of the stock exchange and from Rahavard Novin software. Econometric View (EViews) software was used to estimate the models of the research. In this study, the multiple linear regression model has been used for the hypotheses of the tests. The statistical method used is the method of panel data. The statistics community includes all the listed firms in the Tehran stock exchange. Therefore, in this study, all the participants accepted in the Tehran stock exchange are in 6 years' intervals from 2011 to 2016. Elimination method has been used to obtain the statistics community.

The model of this research according to Elaoud and Jarboui research (2017) is as following:

$$InvEf_{i,t} = \beta_0 + \beta_1 AIQ_{i,t} + \beta_2 LnSales_{i,t} + \beta_3 LnAge_{i,t} + \beta_4 Tang_{i,t} + \varepsilon_{i,t} \quad (1)$$

$$InvEf_{i,t} = \beta_0 + \beta_1 AIQ_{i,t} + \beta_2 Spau_{i,t} + \beta_3 AIQ * Spau_{i,t} + \beta_4 LnSales_{i,t} + \beta_5 LnAge_{i,t} + \beta_6 Tang_{i,t} + \varepsilon_{i,t} \quad (2)$$

In which dependent variables are:

InvEF: Investment efficiency

INV_{it} : Sum of the property, plant, and equipment of firm j in year t on the whole assets of the firm

$\Delta Sales_{it-1}$: The growth rate of annual sales revenue of firm j in year t-1

AIQ: Accounting Information Quality

ACC_{it} : Working capital accruals for firm i in year t

CA_{it} : Changes in the current assets of the firm i at the end of financial year t

C_{it} : Change in the cash and cash equivalents of firm i at the end of financial year t

CL_{it} : changes in the current debts of firm i at the end of financial year t

$\Delta STDEBT_{it}$: Changes in the short-term financing facility received of firm i at the end of financial year t

CFO_{it} : Cash resultant from operations of firm i at the end of financial year t

ΔREV_{it} : Changes in the revenue of firm i at the end of financial year t

PPE_{it} : Tangible fixed assets of firm i at the end of financial year t

$Spau_{i,t}$: Auditor expertise

And the control variables are as following:

$LnSales_{it}$: Natural logarithm of sales for firm i in year t

$LnAge_{it}$: Age of firm for firm i in year t

$Tang_{it}$: The proportion of tangible assets for firm i in year t

Findings

Descriptive Statistics

The descriptive statistics of the variables of the research are presented in Table 1.

Table 1. The Descriptive Statistics of the Variables

Variable	Symbol	Mean	Medium	Maximum	Minimum	Standard Deviation
Investment Efficiency	INVEF	0.65	0.091	0.752	0.000	0.771
Financial Reporting Quality	AIQ	-0.213	0.343	0.049	-3.705	0.663
Firm Size	SIZE	14.236	14.089	19.170	11.035	1.449
Financial Leverage	LEV	0.588	0.588	0.861	0.000	0.270
Sales	LNSALES	13.849	13.717	18.440	9.614	1.436
Age	LNAGE	3.646	3.784	4.158	2.564	0.349
Tangible Asset	TANG	0.305	0.176	0.405	0.003	1.736

Source: the findings of the research

The Tests of Selecting the Types of Panel Data (F-Limer and Hausman)

According to the panel data, F-Limer test was used to select either panel or pooled data for estimating the model. Table 2 provides the results of the tests regarding this model.

Table 2. The Results of F-Limer Test and Hausman Test of the Research's Models

F-Limer Test				Hausman Test		
Model	Statistic	Probability	Result	Statistic	Probability	Result
First	2.345	0.000	Panel Data	39.091	0.000	Fixed Effects
Second	2.345	0.000	Panel Data	39.441	0.000	Fixed Effects

Source: the findings of the research

As it is observed in Table 2, the method of panel data is accepted for both models. Therefore, the Hausman Test needs to be done for selecting among the panel data methods with fixed effects and random effects model. According to Table 2, the fixed effects has been approved for both models. Finally, based on the results of F-Limer and Hausman Tests, the research models will be estimated by using a panel data model with fixed effects.

The Test of Assumptions of the Regression Model

The Test of Residual Autocorrelation

Breusch–Pagan test has been used for the test of autocorrelation among error terms. In order to carry out this test, null and alternative hypotheses are shown in Table 3.

Table 3. The Test of the autocorrelation of the residuals

Model	The Test's Result	F Statistics	P-value	Null and Alternative Hypothesis
First	Accepting null hypothesis (Lack of Autocorrelation)	0.4511	0.85	(H0): Lack of Autocorrelation
				(H1): Autocorrelation
Second	Accepting null hypothesis (Lack of Autocorrelation)	0.3938	0.89	(H0): Lack of Autocorrelation
				(H1): Autocorrelation

Source: the findings of the research

According to the output data of this test and the probability amount or p-value, it is observed that the probability amount has been more than 0.5 so that the null hypothesis is approved and autocorrelation is rejected between the error amounts in both models.

The Test of Heteroscedasticity of Error Terms

In this section, heteroscedasticity test of residual amounts of the model has been investigated by using the likelihood ratio test.

Table 4 illustrates the null and alternative hypotheses in this test.

Table 4. The Results of the Test of Heteroscedasticity of Error Terms

Model	The Test's Result	F Statistics	P-value	Null and Alternative Hypothesis
First	Accepting the null hypothesis (Homoscedasticity)	0.888	0.019	(H0): Homoscedasticity
				(H1): Heteroscedasticity
Second	Accepting the null hypothesis (Homoscedasticity)	0.906	0.013	(H0): Homoscedasticity
				(H1): Heteroscedasticity

Source: the findings of the research

According to the p-value obtained from the output of this test, it is represented that this amount is more than 0.5, therefore, the null hypotheses are not rejected and error terms have homoscedasticity in both models.

Collinearity Test

According to the results of Table 5, there is no collinearity problem in the model because VIF is lower than 10.

Table 5. The Results of Collinearity Test

Variable	Symbol	Coefficients	VIF
Quality of Accounting Information	AIQ	0.002	0.966
Auditor Industry Expertise	SPAU	0.276	0.589
Multiplicative Variable	AIQ*SPAU	0.002	0.574
Sales	SALES	0.004	3.580
Age	AGE	0.010	0.548
Fixed Asset	TANG	0.003	1.977

Source: the findings of the research

The Results of the Research's Hypotheses

The Analysis of the Results of the Fitness of the Research's Model

The first hypothesis of the research is used to investigate the effect of accounting information quality. Model 1 has been fitted for the test of this hypothesis and its result is summarized in Table 6.

Table 6. The Results of the Estimation of the Regression Model (1)

Variables' Name	Symbol	Coefficient	Standard Deviation	T-statistics	Probability
Y-intercept	C	-6.598	3.235	-2.039	0.042
Quality of Accounting Information	AIQ	0.045	0.011	4.067	0.000
Sales	SALES	-0.053	0.143	-0.376	0.707
Age	AGES	0.289	1.132	0.255	0.798
Fixed Asset	TANG	2.155	0.103	2.155	0.031
P-value: 0.850		F-statistics: 10.689		Probability: 0.000	
Coefficient of Determination:0.690		Adjusted Coefficient of Determination:0.625			

Source: the findings of the research

If F-statistics is lower than 0.05, H_0 will not be accepted, and the model is significant. The results of Table 5 show that F-statistics is probably lower than 0.05 so that the regression model estimated is significant at the confidence level of 95%. Furthermore, according to the P-value of Breusch–Pagan test, it is observed that the probability amount has been more than 0.5, therefore, the null hypothesis is approved and homoscedasticity of error test is rejected. The adjusted coefficient of determination of the model is 0.62. This number indicates that 62% of the changes in the dependent variable (investment efficiency) is explained by control and independent variables.

The results of the research demonstrate that the effect of the independent variable of quality of accounting information on the variable of investment efficiency is 0.04, positive and significant. This shows that the increase in the quality of accounting information and decrease in the earnings management cause increasing of the investment efficiency. Therefore, it can be claimed that the first hypothesis is not rejected.

The control variables of sales and age of the firm significantly affect the investment efficiency, and the fixed asset has a positive and significant effect on the investment efficiency.

The second hypothesis of the research examines the role of auditor industry expertise on the relationship between accounting information quality and investment efficiency. Model (2) has been fitted for this test and the results have been set out in Table 7.

Table 7. The Results of the Estimation of the Regression Model (2)

Variables' Name	Symbol	Coefficient	Standard Deviation	T-statistics	Probability
Y-intercept	C	-6.495	3.260	-1.991	0.047

Quality of Accounting Information	AIQ	0.054	0.0134	4.065	0.000
Auditor Industry Expertise	SPAU	0.148	0.023	6.264	0.000
Multiplicative Variable	AIQ*SPAU	0.016	0.005	2.808	0.008
Sales	SALES	-0.052	0.143	-0.362	0.717
Age	AGES	0.305	1.135	0.268	0.788
Fixed Asset	TANG	2.222	0.104	2.133	0.033
P-value: 0.890		F-statistics: 10.430		Probability: 0.000	
Coefficient of Determination:0.680		Adjusted Coefficient of Determination:0.613			

The results indicate that the dependent variable of auditor industry expertise has a positive and significant effect on the investment efficiency, showing that increased presence of auditor industry expertise will lead to the high investment efficiency. The probability of F-statistics is lower than 0.05, and therefore, the estimated regression model is significant at the confidence level of 95%. Furthermore, the amount of F-statistics of Durbin-Watson test shows that there is no autocorrelation disorder among the components because, according to the test and the probability of P-value, it is observed that the probability level is more than 0.5%. Therefore, the null hypothesis is approved and the existence of autocorrelation is rejected between error amounts. The adjusted coefficient of determination of the model is 0.62. This amount indicates that 62% of the changes in the dependent variable (investment efficiency) are explained by the set of mentioned independent and control variables.

Moreover, the results show that the independent variable of accounting information quality has a positive and significant effect on the variable of investment efficiency and its amount is 0.054. This indicates that the increased accounting information quality and decreased earnings management will cause an increase in investment efficiency. The effect of the independent variable of auditor industry expertise (Spau) is 0.148, positive and significant on the investment efficiency, showing that the increased presence of auditor industry expertise leads to the high investment efficiency. The effect of multiplicative variable of auditor expertise and information quality (AIQ*SPAU) is 0.016, positive and significant on the investment efficiency. Therefore, it can be stated that the second hypothesis is not rejected.

The control variables of sales and age of firm do not significantly affect the investment efficiency, and the fixed asset has a positive and significant effect on the investment efficiency.

The results obtained from the research’s hypotheses have been illustrated in Table 8.

Table 8. The Test’s Results of the Research’s Hypotheses

First Hypothesis: The quality of accounting information has a significant effect on investment efficiency.	It is not rejected
Second Hypothesis: The simultaneous interaction effect of the auditor expertise and quality of accounting information is significant on investment efficiency.	It is not rejected

Discussion and Conclusion

In this research, the first hypothesis suggests that accounting information quality has a positive impact on investment efficiency.

According to this hypothesis, it is expected that the increase in accounting information quality cause an increase in investment efficiency. The results indicate that the significant level of accounting information quality is lower than 5%, and thus, it can be concluded that there is a significant relationship between accounting information quality and investment efficiency. More to the point, the positive coefficient shows that accounting information quality positively affects the investment efficiency, and this shows that the increase of the accounting information quality and decrease of earnings management result in the increase of the investment efficiency. Moreover, the availability of useful information and the use of high-quality accounting information lead to the decrease in the information asymmetry and solving problems such as agency conflicts and consequently improving an optimum investment. According to what was mentioned, at 95% confidence level, the first hypothesis will not be rejected.

This finding corroborates the ideas of Asaver and Anis (2017) Kolsi and Chakib (2017) in other countries and Asemani and Abaszadeh (2016) and Mahmoodabadi and Rajaie (2014) in other firms of Iran.

The second hypothesis of the research puts forward that the simultaneous interaction of the auditor expertise and accounting information quality is positive over the investment efficiency. Regarding this hypothesis, it is expected that the increase in accounting information quality and auditor industry expertise cause an increase in investment efficiency. The results show that the significant level of the multiplicative variable is lower than 5%, and consequently, there is a significant relationship between accounting information quality and investment efficiency in the presence of auditor industry expertise. In addition, the presence of positive coefficient indicates that the multiplicative variable of accounting information quality and auditor expertise has a positive effect on the investment efficiency, showing that high accounting information quality with auditor industry expertise leads to the increase of investment efficiency. Indeed, this can decrease the costs of inappropriate choice, also facilitates the financing of long-term and high efficient projects, and leads to the high investment efficiency. On the other hand, the increased accounting information quality and auditor expertise with decreased problems of agency between managers and shareholders and high supervision ability of shareholders can decrease the financing costs and accordingly, lead to the increased in the investment efficiency. At 95% of confidence level, the second hypothesis will not be rejected.

These results agree with the findings of Asaver and Anis (2017) Kolsi and Chakib (2017) in other countries and Asemani and Abaszadeh (2016) and Mahmoodabadi and Rajaie (2014) in other firms of Iran.

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