

The study of earnings management, audit quality, and cost of debts in listed firms in Tehran Stock Exchange

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ABSTRACT

The objective of this research is to study earnings management, audit quality, and cost of debts in listed firms in the Tehran Stock Exchange. Based on the objective, this research is applied and based on methodology, it is descriptive-correlational. 85 firms were selected out of the listed firms in Tehran Stock Exchange by systematic removal method based on research inclusion condition during 2011-2018. The results show the significant relationship between the cost of debt with earnings management, cost of debt with audit quality, earnings management, with audit quality in listed firms in Tehran Stock Exchange. In addition, there is a significant relationship between audit quality with earnings management and the cost of debt at listed firms in the Tehran Stock Exchange.

Keywords: earnings management, audit quality, cost of debt

Introduction

Earnings management is very important for companies because many users of financial statements use profits as a concise and useful measure of firm performance. Securities analysts, corporate executives, and investors significantly pay attention to the profits reported by companies. Therefore, lack of earnings manipulation (lack of earnings management) is considered as the aspects of high quality in the earnings in accounting literature. Moreover, the foreign literature shows the fact that income smoothing of bankrupt firms is lower than healthy companies because of earnings management. The cost of debt shows the pressure of the financial situation, the debt representative, and the representation conflict between managers and investors and creditors or between different groups of investors. When investors are deciding to invest in institutes and firms, the creditors evaluate the firm risk curve. This curve determines the expected risk of the ratio by creditors which equals the firm borrowing cost. Some articles defined audit quality as assurance from the financial statements with the probability that the financial statements have no important deviation. This definition emphasizes the result of auditing because the reliability of financial statements cannot be determined before the audit. Therefore, the real audit quality is not observable and cannot be evaluated unless the auditor concludes. Since the audit real quality is not observable before or while auditing, some variables are needed to evaluate the audit real quality. Audit service quality is one of the important issues in the audit field and capital market with a significant role in the first cost of debt. Therefore, the objective of this research is to study earnings management, audit quality, and cost of debt in listed firms in the Tehran Stock Exchange.

Problem statement

The financial statements provide a significant part of the needed data by creditors of a firm. The audits' role is vital based on such a reliability level to the financial statements. Auditing is a tool to reduce the informational risk for the users of financial statements (Stanley et al., 2011) because the audited financial statements can provide this assurance for the investors and creditors that access the valid and reliable information. Finding an effective technic to control the audio quality seems essential regarding the importance of auditing services and the impossibility of direct observation of audit quality (Banimahd, 2011). Developing the activity range of the business units makes a new financial needs which can be supplied from the internal and external resources. The internal resources include the accumulated profits and savings. The external resources include the beneficiaries' debt and equity, using the external resources has benefits and risk based on the capital cost, interest, or dividends. Subsequently, it influences the return, stock price, and accounting profit (Izadinia et al., 2009). One of the principal decisions of financial managers in the public joint-stock firms is the determination of the combination of debt and stock which should be along with the maximization of the stockholders' wealth (Pourzamani et al., 2010). Accounting profit is used in the fields of company valuation, management performance evaluation, and concluding contracts (Christensen et al., 2002). In terms of stock valuation, the models used are classified into two groups: profit-based models (such as residual earnings model) and non-profit-based models (such as discounted cash flow model). The conceptual framework is related to the accounting profit and the firm value that was presented by Ohlson (1995) and Feltam and Ohlson (1995, 1996). After that, many experimental studies have shown that the profit-based valuation models have better performance in stock market value estimation in comparison to the non-profit models. They attribute this issue to the higher level of information that was transferred by the accounting profit (in comparison to the cash flows) to the capital market (Courteau et al., 2015). Now it should be noticed that the personal judgments of managers and their motivation are involved in measuring accounting profit to achieve the expected amounts of profit. This matter reduces the profit quality and limited its ability to be used in the profit-based valuation model (Skinner and Sloan, 2002). In other word, it is expected that earnings management influence the performance of profit-based valuation models negatively (than the non-profit-based valuation models) (Cartio et al., 2015).

Financial supply by debt is a more desired solution for financial supply than the expected returns of shareholders for financial saving and its lower rate. However, what is important for the creditors about giving loans and credit is the ability to repay the loan and its interest by the borrower (Amiri et al., 2012). Many studies have been conducted about the financial decision-making of firms as well as the effective factors on the firms' capital structure. Many theoretical works and activities have described the selection between the financial supply by debt and capital stock by firms who select the desired debt ratio according to the principle of cost. Traditionally, tax savings have been offered as the first financing advantage through modeling accreditation. Other benefits of debt include management commitment is to act effectively and efficiently (Kraus, 1973), as well as to entertain and engage creditors in the care and oversight of the company (Jensen 1976). The auditor is a good credit and asymmetrical advantage of information depends on the committed auditor because finally, only the auditor can say how much effort is required to perform the professional work so that the standards are examined according to the characteristics of the audit (Knechel et al., 2016). Since the auditing services are costly, it can influence the firms' performance and financial supply them. According to the role of earnings management, cost of debt, and audit quality, the objective of this research is to study the earnings management, audit quality, and cost of debt in listed firms in the Tehran Stock Exchange.

Research background

Shahbazi (2019) studied the effect of audit quality and financial supply by debt on earnings management in the listed firms in Tehran Stock Exchange. The main objective of this research is to study the impact of audit quality and financial supply by debt on earnings management in the listed firms in the Tehran Stock Exchange. The model estimation method in this research is based on integrated data. This method is a combination of time-series information (2013-2017) and cross-sectional data of 139 listed firms in the stock exchange. The used software in this research was Eviews 8. The estimated models based on the presented hypotheses were the multivariate regression models. The testing results of research hypotheses show that the auditor tenure and the size of the auditor have a negative and significant relationship with earnings management. Moreover, the regression results show that the ratio of short-term debt has a negative and significant relationship with earnings management, while the long-term debts ratio has a positive and long-term relationship with earnings management. Akbari et al. (2019) studied the relationship between real earnings management with performance and cost of debt of firms. The dependent variables of this research include the performance and cost of debt of firms and the independent variables include real earnings management. The research was conducted in 2013-2017 for the listed firms in Tehran Stock Exchange. A regression model and EVIEWS version 8 statistical software were used to test three research hypotheses on

variables. The analysis results showed a significant relationship between real earnings management with the cost of debt of firms. In addition, the results showed there is no significant relationship between the financial performance and operational performance of firms. Orazalin et al. (2019) studied the earnings management, audit quality, and debt cost evidence from the Central Asian economy. The research sample includes state-owned listed firms on the Kazakhstan Stock Exchange (KASE) from 2011- 2016, and all data are taken from audited financial statements and annual reports downloaded from the KASE website. This research was studied using the cross-sectional least-squares technic to investigate the impact of audit quality and revenue and cost of debt management. Empirical evidence shows that revenue management has a negative relationship with the cost of debt. Furthermore, the findings showed that higher audit quality reduces debt costs. However, the results show that audit quality has no effect on earnings management, and the effect of earnings management on the cost of debt is not different for audited firms and the audited ones by other auditing firms.

Thu et al. (2018) studied the perceived audit quality, earnings management, debt capital expenditure, and evidence from energy companies in the Vietnamese stock market. The data set includes 29 energy companies in Vietnam stock markets (HNX and HOSE) from 2010 to 2016. FEM and REM testers were used to test the hypotheses. The results confirm that there is no statistically significant relationship between earnings management, cost-based liability, and debt. There is a negative relationship between audit quality, company size, return on asset, and cost of debt, while there is a positive relationship between company leverage and tangible assets. Moreover, the global financial crisis has no statistically significant effect on the cost of debt capital. The results of this research show that regulators and investors are concerned about the stability of the economy in emerging markets.

Li et al. (2016) studied the income smoothing and cost of debt. The obtained results from the research showed that firms with higher income smoothing have a lower cost of debt. Furthermore, the results showed the effect of income smoothing on the reduction of cost of debt in firms with more information ambiguities and stronger distress risk.

Hypotheses

Main hypothesis

- There is a significant relationship between the earnings management, audit quality, and cost of debt in the listed firms in Tehran Stock Exchange.

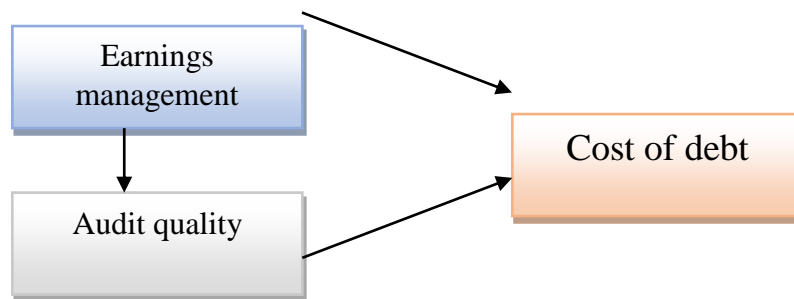
Secondary hypotheses

- There is a significant relationship between cost of debt and earnings management in listed firms in Tehran Stock Exchange.
- There is a significant relationship between cost of debt and audit quality in listed firms in Tehran Stock Exchange.
- Audit quality has a significant relationship with the relationship between the earnings management and cost of debt in the listed firms in Tehran Stock Exchange.

Methodology

This research is applied based on objective, and descriptive-correlational based on the data collection method. The descriptive research includes the methods with the aims of describing the studied conditions. This research is Ex-post Facto among the descriptive studies because of the independent and dependent variables that happened in the past. In ex-post-facto research, the researcher studies the relationships between specific factors and conditions that already exist or have occurred by studying their results. Therefore, the researcher studies the possibility of cause and effect relationships by observation and the existed present and past results with the hope to find the cause of occurrence of phenomenon or action. As a result, the researcher does not manipulate the data. In this research, data collection will be done by the archival method. Therefore, the library method, books, reputable journals, Internet resources, sites, related dissertations, and appropriate articles in this field will be used in the first step to formulate the theoretical foundations and concepts. The financial data will be collected from the financial statements at the end of the period of listed firms in the Tehran Stock Exchange by the new mortgage software, weighted securities, securities, and securities in the next step. The statistical population of this research is the listed firms in Tehran Stock Exchange in 2011-2018.

Conceptual model



Statistical model

First hypothesis model

$$COD_{i,t} = \beta_0 + \beta_1(EM_{i,t-1}) + \beta_2(IC_{i,t-1}) + \beta_3(LIQR_{i,t-1}) + \beta_4(COL_{i,t-1}) + \beta_5(LEV_{i,t-1}) + \beta_6(ROA_{i,t-1}) \\ + \beta_7(AGE_{i,t-1}) + \beta_8(SIZE_{i,t-1}) + \sum_{(K=1)}^8 \beta_i(INDK) + \sum_{n=1390}^{1397} \beta_j(YEARn) + \varepsilon_i$$

Second hypothesis model

$$COD_{i,t} = \beta_0 + \beta_1(AUDIT_{i,t-1}) + \beta_2(IC_{i,t-1}) + \beta_3(LIQR_{i,t-1}) + \beta_4(COL_{i,t-1}) + \beta_5(LEV_{i,t-1}) + \beta_6(ROA_{i,t-1}) \\ + \beta_7(AGE_{i,t-1}) + \beta_8(SIZE_{i,t-1}) + \sum_{(K=1)}^8 \beta_i(INDK) + \sum_{n=1390}^{1397} \beta_j(YEARn) + \varepsilon_i$$

Third hypothesis model

$$COD_{i,t} = \beta_0 + \beta_1(AUDIT_{i,t-1}) + \beta_2(EM_{i,t-1}) + \beta_3(AUDIT_{t-1} * EM_{i,t-1}) + \beta_4(IC_{i,t-1}) \\ + \beta_5(LIQR_{i,t-1}) + \beta_6(COL_{i,t-1}) + \beta_7(LEV_{i,t-1}) + \beta_8(ROA_{i,t-1}) + \beta_9(AGE_{i,t-1}) + \beta_{10}(SIZE_{i,t-1}) \\ + \sum_{(K=1)}^8 \beta_i(IND) + \sum_{n=1390}^{1397} \beta_j(YEAR) + \varepsilon_i$$

Table 1- The selection process of the studied sample

Characteristics	Number of firms with these characteristics
Total number of firms	620
Is deducted:	
The firm stock is transacted in stock exchange in 2011-2018	130
The end of financial year is the last day of winter	125
The firm's trading days in each fiscal year must be at least 80 days.	225
It should not be a financial or investment (holding) intermediating firm	55
Total accepted firms number	85

Since the sampling method is a systematic removal method, the number of the listed firms in the Tehran Stock Exchange is 85. Based on the mentioned conditions, Table 1 removed firms without the mentioned conditions, and the ones with these conditions were considered as the sample volume in this research. The presumptions are applied in a way that each firm placed in the first presumption is not included in the count of subsequent presumptions. Therefore, 85 out of 620 firms were selected as a sample by applying the mentioned restrictions.

Data collection method and tool

The objective of this research is the identification and prediction of a phenomenon in a statistical population. To know this phenomenon, a sample from a population is selected and analyzed. Then, the results are generalized to the whole population. Data is collected by the archival method in this research. Thus, library methods, books, reputable journals, Internet resources, sites, related dissertations, and relevant articles in this field were used to formulate theoretical foundations and concepts. In the next step, the financial data from the financial statements of the end period of listed firms in the Tehran Stock Exchange was collected using Rahavard-e Novin software, the Securities and Exchange database (Codal), related websites to the stock, and the World Bank website.

Table 2- Descriptive statistics of variables

Variable	Mean	Median	max	Min	St. dev	Skewness	kurtosis
Cost of debt	0/612992	0/718435	0/998231	0/012664	0/218764	-0/968668	2/777409
earnings management,	0/350946	0/337431	0/985252	0/004164	0/170435	0/427725	2/081397
interest coverage ratio	0/590115	0/655979	0/970914	0/031362	0/198111	-0/520268	2/196015
liquidity ratio	0/328652	0/308335	0/985252	0/03291	0/229160	0/749259	2/042553
Proxy for a firm's assets	0/411069	0/390815	0/958251	0/022669	0/118332	1/357404	2/178354
financial leverage	0/663629	0/690712	0/999418	0/012733	0/226304	-0/514977	2/465065
return on asset	0/569282	0/546855	0/978265	0/042458	0/248725	0/061285	1/631444
Firm age	5/017647	5	14	1	2/646527	0/686982	2/410391
Firm size	7/853224	7/874272	8/652062	6/991232	0/496740	-0/089322	1/732381
audit quality	0/491176	0	1	0	0/500290	0/035300	1/001246

As it is seen in Table 2, the mean cost of debt is 0.612992 which shows the moat values of the cost of debt are close to each other. The median of this variable is 0.718435. This figure shows that half of the values of the cost of debt are lower than this value and the rest half is higher than this value. The maximum and minimum of this variable are 0.998231 and 0.012664. The standard deviation is 0.218764 which shows the deviation of cost of debt (based on max and min). The mean earnings management is 0.350946. This figure shows that most values of earnings of management are close to this number. The median of this variable is 0.327431. This figure shows that half of the values of earnings management are lower than this value and the rest half is higher than it. The minimum and maximum of this variable are 0.985252 and 0.0004164. The standard deviation is 0.170435 which shows the deviation from earnings management (based on min and max). The mean interest coverage ratio is 0.590115. This figure shows that most values of interest coverage ratio are close to this number. The median of this variable is 0.655979. This figure shows that half of the values of interest coverage ratio are lower than this value and the rest half is higher than it. The minimum and maximum of this variable are 0.970914 and 0.031362. The standard deviation is 0.19811 which shows the deviation from the interest coverage ratio (based on min and max). The mean liquidity ratio is 0.328652. This figure shows that most values of liquidity ratio are close to this number. The median of this variable is 0.308335. This figure shows that half of the values of liquidity ratio are lower than this value and the rest half is higher than it. The minimum and maximum of this variable are 0.985252 and 0.03291. The standard deviation is 0.229160 which shows the deviation from the liquidity ratio (based on min and max). The mean proxy ratio for a firm's assets is 0.411069. This figure shows that most values of proxy ratio for a firm's assets are close to this number. The median of this variable is 0.390815. This figure shows that half of the values of proxy ratio for a firm's assets are lower than this value and the rest half is higher than it. The minimum and maximum of this variable are 0.958251 and 0.022669. The standard deviation is 0.118332 which shows the deviation from the proxy ratio for a firm's assets (based on min and max). The mean financial leverage is 0.663629. This figure shows that most financial leverage is close to this number. The median of this variable is 0.690712. This figure shows that half of the values of financial leverage are lower than this value and the rest half is higher than it. The minimum and maximum of this variable are 0.999418 and 0.012733. The standard deviation is 0.226304 which shows the deviation from financial leverage (based on min and max). The mean return on assets is 0.569282. This figure shows that most return on assets is close to this number. The median of this variable is 0.546855. This figure shows that half of the values of return on assets are lower than this value and the rest half is higher than it. The minimum and maximum of this variable are 0.978265 and 0.042458. The standard deviation is 0.248725 which shows the deviation from return on assets (based on min and max). The mean firm age is 5.017647. This figure shows that most firm age is close to this number. The median of this variable is 5. This figure shows that half of the values of firm age are lower than this value and the rest half is higher than it. The minimum and maximum of this variable are 14 and 1. The standard deviation is 2.646527, which shows the deviation from firm age (based on min and max). The mean firm size is 7.853224. This figure shows that most firm size is close to this number. The median of this variable is 7.874272. This figure shows that half of the values of firm size are lower than this value and the rest half is higher than it. The

minimum and maximum of this variable are 8.652062 and 6.991232. The standard deviation is 0.496740, which shows the deviation from firm size (based on min and max). The mean audit quality is 0.491176. This figure shows that most audit quality is close to this number. The median of this variable is 0. This figure shows that half of the values of audit quality are lower than this value and the rest half is higher than it. The minimum and maximum of this variable are 1 and 0. The standard deviation is 0.500290, which shows the deviation from audit quality (based on min and max).

Hypotheses

First hypothesis: there is a significant relationship between the cost of debt and the earnings management in the listed firms in Tehran Stock Exchange.

Table 3- Analysis results

Variable	Coefficient	St. dev	t-value	Sig. level
earnings management	0/137769	0/046429	2/967323	0/0031
interest coverage ratio	0/098702	0/040442	2/0440596	0/0149
liquidity ratio	0/012812	0/034029	0/376512	0/7067
proxy ratio for a firm's assets	0/652680	0/066003	9/888570	0/0000
Financial leverage	0/063462	0/035142	1/998799	0/0413
Return on asset	0/0682542	0/031396	2/217402	0/0280
Firms age	0/032888	0/002958	3/111982	0/0266
Firm size	0/058940	0/015694	2/375566	0/0474
Constant coefficient	0/795043	0/128950	6/165524	0/0000
coefficient of determination	0/557542	f-value	15/68495	
Modified coefficient of determination	0/547498	Sig. level	0/0000	
Durbin-Watson: 1.562736				

The sig. level to test this hypothesis is lower than 0.05 for the variable of earnings management. Therefore, H₀ is rejected in 95% sig. level. It means the cost of debt has a significant relationship with earnings management in the listed firms in Tehran Stock Exchange. The calculated t-value and p-values in the last column are low. Therefore, both coefficients are significantly different from zero. Alternatively, it is significant. The coefficient of determination, R², is 0.557542. It means that earnings management could determine 0.557542 units of changes in the cost of debt. F-value shows the significant effect of the variable which is 15.684. In other words, it shows the significant effect of the variable which is 15.684. It means it is needed to show regression equation power in prediction. Durbin-Watson statistics, 1.562736, was used to detect the independence of the error. This indicates the lack of correlation between the error elements. Thus, there is a significant relationship between the main independent and dependent variables.

Second hypothesis: there is a significant relationship between the cost of debt and audit quality in the listed firms in Tehran Stock Exchange.

Table 4- Analysis results

Variable	Coefficient	St. dev	t-value	Sig. level
earnings management	0/231763	0/015803	5/466586	0/0295
interest coverage ratio	0/120539	0/039976	3/015295	0/0027
liquidity ratio	0/104306	0/034561	1/124612	0/0634
proxy ratio for a firm's assets	0/654860	0/066353	9/869330	0/0000
Financial leverage	0/058333	0/035286	2/653126	0/0187
Return on asset	0/093234	0/031467	2/196295	0/0371
Firms age	0/316098	0/002974	2/062982	0/0288
Firm size	0/197824	0/015789	2/343614	0/0312
Constant coefficient	0/841307	0/128909	6/526341	0/0000
coefficient of determination	0/449219	f-value	14/71043	
Modified coefficient of determination	0/439071	Sig. level	0/0000	
Durbin-Watson: 1/560611				

The sig. level to test this hypothesis is lower than 0.05 for the variable of audit quality. Therefore, H₀ is rejected in 95% sig. level. It means the cost of debt has a significant relationship with audit quality in the listed firms in Tehran Stock Exchange. The calculated t-value and p-values in the last column are low. Therefore, both coefficients are significantly different from zero. Alternatively, it is significant. The coefficient of determination, R², is 0.449. It means that audit quality could determine 0.449 units of changes in the cost of debt. F-value shows the significant effect of the variable which is 14.710. In other words, it shows the significant effect of the variable which is 14.710. It means it is needed to show regression equation power in prediction. Durbin-Watson statistics, 1.560611, was used

to detect the independence of the error. This indicates the lack of correlation between the error elements. Thus, there is a significant relationship between the main independent and dependent variables. Third hypothesis: there is a significant relationship between audit quality with the relationship between the earnings management and cost of debt in the listed firms in Tehran Stock Exchange.

Table 5- Analysis results

Variable	Coefficient	St. dev	t-value	Sig. level
Audit quality	0/029443	0/035818	2/822016	0/0114
earnings management	0/147365	0/066967	2/200566	0/0281
audit quality *earnings management	0/041025	0/092241	2/011179	0/0119
interest coverage ratio	0/097387	0/040420	2/409364	0/0162
liquidity ratio	0/036994	0/034494	1/106945	0/1149
Proxy for a firm's assets	0/647138	0/066031	9/800470	0/0000
financial leverage	0/062919	0/035112	1/991978	0/0436
Return on asset	0/096149	0/031411	2/306103	0/0056
Firm age	0/359417	0/002964	2/212719	0/0225
Firm size	0/442259	0/015723	2/281287	0/0186
Constant coefficient	0/799371	0/130972	6/103388	0/0000
coefficient of determination	0/461778	f-value	12/91182	
Modified coefficient of determination	0/449248	Sig. level	0/0000	
Durbin-Watson: 1/573467				

The sig. level to test this hypothesis is lower than 0.05 for the variable of audit quality. Therefore, H0 is rejected in 95% sig. level. It means audit quality with the relationship between the earnings management and cost of debt in the listed firms in Tehran Stock Exchange. The calculated t-value and p-values in the last column are low. Therefore, both coefficients are significantly different from zero. Alternatively, it is significant. The coefficient of determination, R^2 , is 0.461. It means that audit quality could determine 0.461 units of changes in the cost of debt and earnings management. F-value shows the significant effect of the variable which is 12.91182. In other words, it shows the significant effect of the variable which is 12.91182. It means it is needed to show regression equation power in prediction. Durbin-Watson statistics, 1.573467, was used to detect the independence of the error. This indicates the lack of correlation between the error elements. Thus, there is a significant relationship between the main independent and dependent variables.

Conclusion

The obtained results from research showed that the first hypothesis is confirmed in sig. level<0.05 concerning the significant relationship between the cost of debt and earnings management in the listed firms in the Tehran Stock Exchange. Therefore, it can be claimed that this hypothesis is confirmed. The obtained results from similar studies are as follows: Afzalnia (2019) the research showed the positive and significant relationship between the internal control weakness and cost of debt of the listed firms in Tehran Stock Exchange. It means the cost of debt increases by increasing the internal control weakness. Finally, audit quality has reverse and significant relationship with the internal control weakness and cost of debt of the listed firms in Tehran Stock Exchange. Zolghi et al. (2019) in his research showed that 1- two variables of size and independence of auditing committee, out of the selected characteristics of auditing committee, has a significant effect on the cost of effect of firms, but the effect of financial expertise of audit committee members on cost of debt is not significant, 2- The variables of size and independence of the audit committee have a significant negative effect on investment efficiency. In addition, the financial expertise of the audit committee has a significant positive effect on investment efficiency. The obtained results from research showed that the second hypothesis is confirmed in sig. level<0.05 concerning the significant relationship between the cost of debt and audit quality in the listed firms in the Tehran Stock Exchange. Therefore, it can be claimed that this hypothesis is confirmed. The obtained results from similar studies are as follows: Shahbazi's (2019) research shows that auditor tenure and auditor size have a negative and significant relationship with earnings management. Moreover, the regression results show a negative and significant relationship between the short-term debt ratio and earnings management. Nakhostlotfi et al. (2019) showed in their research that the audit firm has a negative relationship with earnings management, but there is no negative relationship between the size of the audit firm and earnings management, and this hypothesis is rejected. The obtained results from the research showed that the third hypothesis is confirmed in sig. level<0.05 concerning the significant relationship between the audit quality and the relationship between the cost of debt and earnings management in the listed firms in the Tehran Stock Exchange. Therefore, it can be claimed that this hypothesis is confirmed. The obtained results from other similar studies are as follows: Talebnia et al. (2015) in the research showed the negative and significant relationship between the audit quality and quality of the accrual items on the cost of debt. It means the increased audit quality

and quality of the accrual items reduce the cost of debt. Noruzi et al. (2014) in their research showed that increased earnings quality of the listed firms in Tehran Stock Exchange reduces the debt of capital cost. This result shows that the earnings quality is a significant and effective factor in the reduction or increase of the debt of firms' capital cost.

Suggestions

- The obtained results from research showed the significant relationship between the costs of debt with earnings management in the listed firms in the Tehran Stock Exchange. Therefore it is suggested to invest in profitable projects to improve the investment procedure and profits of firms.
- The obtained results from research showed the significant relationship between the cost of debt and audit quality in the listed firms in the Tehran Stock Exchange. Therefore, it is suggested to increase the audit wages to improve the audit quality and improve it.
- The obtained results from research showed the significant relationship between the audit quality with earnings management and cost of debt in the listed firms in the Tehran Stock Exchange. Thus, it is suggested to identify the extra costs in firms to control it and improve the firms' performance.

References

- [1] Afzalnia S.H., (2019), The effect of audit quality on the relationship between internal control weakness and cost of debt listed firms in Tehran Stock Exchange, *Journal of Accounting and Management Perspectives*, Vol. 2, No. 12, pp. 32-44.
- [2] Amiri H., Mohammadi Kh. H., (2012), analysis of the relationship between debt financing and profit quality of the listed firms in Tehran Stock Exchange, *Journal of Financial Accounting*, No. 16, pp. 81-61.
- [3] Izadinia N, Rahimi Dastjerdi M., 2009, "The Impact of Capital Structure on Stock Returns and Per Share Earnings", *Journal of Accounting Research*, No. 25, 127-146.
- [4] Banimahd B., 2011, investigating the effective factors on auditor's accepted comment, Vol. 4, No. 13, Pp: 59-83
- [5] Pourzamani Z., Jahanshad A., Nemati A., Farhudi Z P., 2010, the effective factors on the capital structure in companies, *Journal of Financial Accounting and Auditing*, 26-46.
- [6] Zolghi H., Nouruzi M., Asadi Gh., Kozazi M., 2010, investigating the characteristics of the audit committee, cost of debt and investment efficiency, *Journal of Financial Accounting Research*, No. 39, pp. 101-117.
- [7] Shahbazi M., 2019, the Impact of Audit Quality and Debt Financing on Earnings Management in Listed Firms in Tehran Stock Exchange, the Third National Conference on New Management and Accounting Studies in Iran.
- [8] Talebnia Gh., Hamekhani S., 2015, the Impact of Audit Quality and Accruals on Cost of Debt in Listed Firms in Tehran Stock Exchange, 2nd International Conference on Futurology, Management and Economic Development.
- [9] Nakhostlotfi S. and Momeni S., 2019, Investigating the Relationship between Audit Quality, Debt Financing and Earnings Management, 3rd International Conference on New Developments in Management, Economics and Accounting
- [10] Noruzi M., Khoshmohammadi M., Ansari H., 2014, Relationship between debt capital cost and profit quality of the listed firms in Tehran Stock Exchange, *International Conference on Economics, Accounting, Management and Social Sciences*.
- [11] Abbott, L. J., Daugherty, B., Parker, S., & Peters, G. F. (2016). Internal audit quality and financial reporting quality: The joint importance of independence and competence. *Journal of Accounting Research*, 54(1), 3-40.
- [12] Christensen, J., and Demski, J. (2002). "Accounting Theory: An Information Content Perspective". McGraw-Hill, Irwin
- [13] Courteau, L., Kao, J.L., and Tian, Y. (2015). "Does accrual management impair the performance of earnings-based valuation models?". *Journal of Business Finance & Accounting*, 42 (1-2): 101-137
- [14] Knechel, W. Robert. "Audit quality and regulation." *International Journal of Auditing* 20.3 (2016): 215-223.
- [15] Orazalin, N., & Akhmetzhanov, R. (2019). Earnings management, audit quality, and cost of debt: evidence from a Central Asian economy. *Managerial Auditing Journal*, 34(6), 696-721
- [16] Stefana A ,and Talaverab ,and T.andriy :2011 :Corporate Dabt Maturity Choice in Emerging Financial Markets .The Quarterly Review of Economics and Finance ,(51).141-151 .
- [17] Thu, P. A., Khanh, T. H. T., Ha, N. T. T., & Khuong, N. V. (2018). Perceived audit quality, earnings management and cost of debt capital: Evidence from the energy listed firms on vietnam's stock market. *International Journal of Energy Economics and Policy*, 8(6), 120-127.