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The Effect of Working Capital Adjustment Speed on Reducing the Risk of Bankruptcy by Considering the Entity Risk Management Effectiveness

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Abstract

Objective: The current research is willing to trace the effect of the speed of adjustment of working capital in reducing the risk of bankruptcy with emphasis on the effectiveness of the Entity Risk Management (ERM)
Methodology:: In this regard, a sample of 124 companies listed in Tehran Stock Exchange during the years 2013-2022 which selected on the pattern of systematic elimination and finally the research hypothesis tested with aid of multiple linear regression based on panel data.
Results: The results of the hypothesis test showed there is revers relation between the speed of adjustment of working capital and the risk of bankruptcy and the company's risk management also intensifies this relationship.
Innovation: The current research provides useful evidence for company managers and capital market agents that with better management Short-term working capital and achieving optimal working capital can control financial crises and the risk of bankruptcy reduction and the formation of a good risk committees in the companies play an important role in this regard by implying company risk management

Keywords: Bankruptcy Risk, Entity Risk Management, Liquidity Conversion Cycle, Working Capital Adjustment Speed.

JEL Classification: M41 ،H42

1. Introduction

Due to the rapid progress in science and new technologies, companies and economic enterprises are always facing new competitors in the competition market. And has been trying to create competitive advantages for itself in order to reduce the risks ahead and maintain its position in the competition market, therefore in this situation, companies should act in such a way that by increasing the efficiency in the cash conversion cycle, they bring maximum value along with bring the least risk to investors) Garikai and Sibindi, 2022). On the other hand, companies throughout their life always have been faced with various internal and external risks, and failure to control them led to increasing of the risk of bankruptcy. Investors always in investing seek to ensure the return of their capital, and in fact, they consider that mentioning the principal investing is more important than making a profit. Therefore, collecting information about the level of financial inability of companies which may lead to the failure of the company are the main approaches for shareholders, creditors, etc. in the capital market (Habib and Kayani, 2022.) Gordon (1971) Bankruptcy refers to a situation where the company has faced a decrease in profitability, and finally, in the future, the possibility of not repaying the interest and principal. It increases the debt or it is stated in theoretical literature that bankruptcy is a situation in which the cash flow operating activates of the company is less than its interest costs obligated to pay to long-term debt providers (Surata, 2019). Fluctuations in cash flow are important factors in debts paying abilities which leads companies to increases the risk of their bankruptcy. Therefore, proper management of cash conversion cycle and short working capital duration of the company is the important factors for the company not to be involved in the financial crisis) (Fernandez and Sanchez, 2023.).

Wen et al (2019) in their research entitled optimal working capital management and company performance stated achieving optimal working capital will improve the financial performance and get out of the financial limit of the company. The role of working capital efficiency is very important in manufacturing company's performance in order to increase its value, because most of the assets of these companies consist of current assets. Most activities are a trade-off between risk and return. Working capital, in fact, short-term investment needed for financing are investment activities and optimal working capital management will lead to higher performance of companies (Nastitti et al., 2019). The distance between the cost of purchasing materials and receiving the amounts of sold goods is actually a kind of liquidity conversion cycle. If this distance in companies gets longer, it means that more investment should be made in working capital. As a result, the company will suffer from inadequate liquidity. On the other hand, the cycle of converting liquidity with increasing sales leads to more profitability (Baros et al, 2021). Therefore, every organization, regardless of the level of profitability, the size and nature of the business it has, has an optimal amount of its requires working capital (Filback and Kruger, 2005).

Regarding the determination of effective and optimal working capital, management should be able and allowed to invest in future opportunity growth, repay short-term obligation and reduce financing costs. With However, optimizing the use of working capital is not easy. The company cannot reduce its operation and without minimizing future growth and sales the invested resource cannot be reduced. The optimal level of working capital gets to balancing between risk and return (Soruta, 2019). So Companies should determine their optimal working capital according to the context and business situation. In other words, the longer cash conversion cycle may increase sales and subsequently increase profitability due to high investment in inventory of materials and goods and the use of granting trade credit to buyers (credit sales). But if the company abandons profitable operation, having longer cash conversion cycle has an opportunity cost to the company; Due to the benefits and costs of working capital management and It is expected there was planned an optimal level of cash conversion cycle which maximizes the value of the company (Garikai and Sibandi, 2022) The aim of working capital management is to optimize the cash conversion cycle and subsequently increase the efficiency of working capital. On the other hand, inefficient management of working capital not only reduces profitability, but also ultimately leads to an increase in the possibility of financial crisis. Therefore, achieving the optimal level of working capital is one of the necessities of the operating cycle of companies and is closely related to reduction The financial bankruptcy of the company and vice versa the success of the companies (Fernandez and Sanchez, 2023). Therefore, the question comes to mind whether the speed of adjustment of working capital has an effect on reducing the risk of bankruptcy of companies? One of the main and important duties of managers is to deal with the risks facing the company and its management (Aghaei et al., 2017). With management Comprehensive risk, the risks can be minimized and the value of the investors' and beneficiaries' shares can be maximized and in line with those advantages increased competitiveness (Rostami et al., 2022).

Risk management is the process of identifying, evaluating and taking action to control and correct risks .It is possible that the specific consequences are damage or lack of change in the current situation, which can be minimized with risk management (Gordon et al., 2009). Therefore, when managers have documented risk and crisis management plans in their companies and Forming risk committees to prevent critical situations, the company will not face complete failure and increase the risk of bankruptcy sometimes it is the lack of attention to the benefits of risk management that makes companies involved in financial crises.

Since so far in Researches conducted in the country and abroad on the effects of the speed of adjustment of working capital on reducing the risk of bankruptcy has not been discussed and there are no definite findings in this field, the present research is innovative in combining the subject and adding the subject In this context, the company's comprehensive risk management aims to answer the general question of whether the interaction of risk management and the speed of achieving optimal working capital can reduce the risk of bankruptcy of a business? In the continuation of the structure of the research, first, the development of theoretical foundations, hypotheses and current empirical finding of the research has been presented and then the research method and operational definitions of the research variables provided and finally the findings and conclusions of the research presented.

2. Literature Review and Theoretical Background

Investment decisions play a key role in maximizing the wealth and value of a company. Along managing the business there is two things of great importance which includes handling capital structure and current cash management (working capital management) and using the optimal level of these two items. If financial managers do not pay attention to these two important items, they will have to pay an extensive cost. Working capital management provides a delicate balance between working capital components and vital support for future earnings or cash flows of companies provided different times (Fernandez and Sanchez, 2023). Dadashzadeh and Hejazi (2019) in a research titled the relationship between financial flexible value, investment efficiency and capital adjustment speed in such cases state there is a meaningful relation between financial flexible value and with the efficiency of investment in net working capital and the speed of adjustment of working capital, and companies in decisions related to optimizing investment and circulation policy around working capital, it has paid to having sufitionet flexible condition which can be used in the long term to empower financial valuation and make profitable investment opportunities for companies. Companies can reduce their financing costs while by innesesery use of cash resource in the operating cycle of the company they will cause the company's investments to be wasted due to the lack of sufficient liquidity, instead it will equip the company for higher production and sales and thus the company can achieve the optimal level of commercial credits. Hence, to balance and make decisions in this context, basic management efforts are needed to achieve optimal working capital by speeding up the achievement it can create a balance between risk and efficiency and maximize the value of the company (Wan et al., 2019). So, despite as there is an optimal level of working capital, companies are always actively trying to reach it faster. Entity's liquidity problems can leads to serious consequences for go on of a business in the short term. Short-term assets and liabilities should be given more attention. Because of the key role of them in generating profitability and wealth. Every company which have tendency to reach for high level of optimum working capital should try to effectively balance liquidity and profitability condition (Azizi and Jokar, 2020). Platonic Et al. (2022) in a research entitled access to external financial resources, bargaining power and speed of adjustment of working capital, stated when the amount of working capital is optimal, the value of the company will be maximized. This issue causes companies should adjust their working capital ratio towards the optimal ratio (target). In companies that have more access to resources they have external finance and have more bargaining power in commercial negotiations, the speed of adjustment of working capital is higher. Regarding the standard level of working capital, there are two opposing views, while one view states that in condition with more moistening cash; the company has more ability to get discounts through early payment of its obligation. In addition, companies can increase their sales volume by offering generous credit terms to their customers (Mandipa and Sibindi, 2022).

However, the other group ofr researchers argue that higher levels of working capital can increase the risk of bankruptcy because the short-term assets have the lowest productivity and it is not appropriate to involve the entire resource of the company in this area. Considering these views, there is a possibility that the speed of moving to optimal working capital for each company not only increases profitability but also lead to going far from the financial crisis (Habib and Kayani, 2022).

Azizi and Jokar (2020) in a research titled investigating the existence of the optimal level of working capital management and the critical point of inflation and its impact on The level of cash mentioning stated that with the increase in inflation, the amount of cash held by companies increases at first; But When inflation reaches a certain level, the amount of cash held by companies decreases with the increase in inflation. Effective working capital management can be a useful tool for managers that if managed well can play an important role in inflationary conditions for the level to maintain the cash of commercial entities and earn a lot of benefits for them.

A financial crisis is a situation where the company is in a situation in terms of its liquidity cannot meet its obligations and the situation becomes dire. Therefore, it can be assumed that there is an inverse relation between working capital and the fundamentals of the company's performance, and working capital can increase the profitability of the company up to a certain level, but after that level, the increase in working capital can increase the bankruptcy and Reduce the value of the company, and here the discussion of optimal working capital will become very important) (Alavi and Memarian, 2020).

Norouzi and Afaltooni (2019) in a research titled investigating the optimal level of working capital management and the effect of financial restrictions on the optimum level, stated that nowadays in all commercial units, the working capital consist the majority of the company's assets and working capital management is one of the important duties of the financial manager and plays an important role in achieving the goals, policies and successes of the company and there is an optimal level of working capital management which is related to the company value. The results also showed Financial restrictions have a significant and direct effect on the optimal level of working capital management. Working capital consists of the upper part of the companies' balance sheet which includes current assets of the companies. But the net working capital can be calculated by reducing current debt from current assets. The optimal level of working capital for the operating of each business unit may be different. Because of the different condition and also companies have different financial constraints which affect the optimal level of their working capital (Harris, 2005).

Ashrafi Shahri et al., (2015) in a research titled optimizing of working capital management using intelligent systems in pharmaceutical companies stated that the optimal values of accounts receivable circulation period show that to reach for the best profitability in the pharmaceutical industry, credit sales should be collected in short-term periods (up to 45 days) and credit sales is a good way to attract customers. Purchases from raw material sellers should be done on credit, rather than early withdrawal of resources be prevented, but the payment period should not exceed 54 days. Chauhan and Banerjee (2018) in a research entitled financial restrictions and optimal working capital stated that the empirical results show that there is no evidence about systematic behavior following of target working capital among Indian manufacturing companies. The further results also showed a reluctance to follow target working capital is not completely affected by the different characteristics of the firm and therefore appears to be a systematic characteristic among Indian companies. Even if optimal working capital exists, emerging market lead companies may not actively pursue it due to several financial constraints and management considerations. Making decisions about the company's investment in working capital is important for managers and determining the optimal level for them is a difficult task (Wan et al., 2019).

Working capital is an important factor for the success of any commercial entity and it requires sufficient control and handling. Mandipa and Sibindi (2022) in a research with title of working capital management methods and financial performance stated that if companies have optimal capital management methods to follow the circulation, these measures will affect their financial performance. Working capital management seeks to achieve conditions that the company does not face surplus or shortage of liquidity. If the company faces a lack of liquidity and Failure to maintain the surface desirable liquidity for a company makes that company not to be successful in using short-term investment opportunities. It is possible that the business unit will face problems in fulfilling its obligations on timely and it will have a bad effect on its reputation. Such a company due to shortage Resources will not be able to take advantage of favorable market conditions and accept profitable projects. This company is able to provide all the facilities would not be necessary to use cash discounts. The continuation of this situation may increase the company's financial risk (Dianati Deilami et al., 2013).

Khan et al (2016) in a research entitled is there an optimal working capital? The role of restrictions financially, stated that companies with more (less) financial constraints have a shorter (longer) business operation cycle. Hence financial managers should try to maintain an optimal level of working capital to optimize the company's profit performance, as investing in capital work above the optimal point has a negative effect on the profitability of the company. Fernandez and Sanchez (2023) in their research with title of bankruptcy risk and financial policies, conclude companies with a closer level to the optimal working capital, performing positively for years, and in turn, companies with excess working capital have faced the more risk of bankruptcy. Working capital management decisions include difficult decisions in various aspects, such as managing accounts receivable and accounts Payable and maintaining an optimal level of inventory. According to these issues, working capital management as one of the most important issues of every entity are discussed (Chohan and Banerjee, 2018). Soruta (2019) in a research titled working capital management during the global financial crisis has shown that the adjustment of working capital is weaker during the crisis. In addition, the negative relation between working capital surplus and company performance during the crisis is more significant, especially for larger companies. However, it does not seem that this situation remain for a long run, because to finance recourse in surplus circulation one, companies borrow from banks and reduce their internal liquidity both in crisis periods and outside of it. Effective management of working capital increases the free cash flow of the company, and as a result, the company's growth opportunities and shareholders' returns increase.

Therefore, companies try to have an optimal level of working capital that maximizes the value of the company. On the other hand, ineffective management of working capital not only reduces profitability, but ultimately leads to an increase in risk Bankruptcy will occur (Fernandez and Sanchez, 2023). Zahedi et al (2019) in a research entitled working capital policies and the risk of the company stated the reason for the failure of most of the bankrupt companies is the unfavorable situation and management Inadequate working capital, although these companies have a good financial situation in the long term, but due to insufficient capital in circulation, they lose their ability to compete and go on. Business entities using different policies in relation by handling working capital, they can affect the company's liquidity. These strategies can be based on the amount of risk and return they are effective. The research results indicate that there is a positive and significant relationship between working capital policy and company risk. The way of managing working capital has an important effect on the liquidity, profitability and operating efficiency of the company and managing working capital is an important part of the company's business strategy in order to create value for shareholders (Afaltooni et al., 2019). Habib and Kayani (2022) also in their research by considering the effect of working capital management on company's financial distress showed efficiently working capital handling has negative and significant effect of on the possibility of financial distress of companies. But maintaining a high amount in working capital where there is a profitable investment opportunity may impose an opportunity cost to company; in a way The main reason is that the longer cash conversion cycle and its inefficiency may be the main reason when the company is financially constrained Bankruptcy of companies (Fernandez and Sanchez, 2023). According to the stated contents, the first hypothesis of the research is proposed as follows:

H1: The speed of working capital adjustment has a negative effect on the company's bankruptcy risk.

On the other hand, major environmental changes with technological rapid progress get more difficult to good handling of the companies. The most important factor that companies always they face in the business environment is more related to how to well deal with encontrage risks, so that these factors play a fundamental role in achieving the company goals including increasing shareholders' gains and obtaining high stock returns (Jiang et al, 2023). One of the main and important tasks of the managers comes back to way of handling the company facing risks. The goal of every activity in every commercial unit is to achieve the highest level effectiveness and efficiency from its operation. To achieve this goal, all efforts must be made, and one of these solutions is business unit risk management (Gordon et al., 2009) Risk management consist of some related process of risk assessment and designing strategies for risk identification. Researchers believe that comprehensive risk management creates a broader approach to risk management compared to its traditional aspect (Aghaei et al., 2017). Along that Jiang et al., 2023 showed in their research that Risk management improves the efficiency of the company's investment by limiting over-investment as well as under-investment of they perform.

Subsequent analyzes show that the positive effect of risk management on investment efficiency due to the reduction information asymmetry and free cash flow problems and these companies experience less financial constraints. By accepting the systematic management approach of overall facing risks by an organization, it could be seen reducing the overall risk which leads companies to bankruptcy besides increasing result of the performance and in the last providing high value of the organization (Rostami et al., 2022) .Companies are always looking for ways to deal with the lack certainties are the condition they operate and upon that take step to handle them and risk management has been introduced as an efficient tool for managers of organizations. Rostami et al., (2022) stated that risk management is able to accelerate the achievement to optimal financial leverage, to reduce the risks faced by the company during the life cycle. Surveys also show that one of the main that cause to the downfall and bankruptcy of large companies such as Enron and WorldCom come back to them lack of efficient and effective risk management unit. Creating a Comprehensive and effective risk management system is one of the important and main duties of managers and it is very important to be aware of the risks ahead and how to control them in one's position (Soleimani Amiri and Gerveie, 2016).

Aref Menesh et al (2021) in a research by investigating whether performance an organization will be affected by risk management, shows the in such a way that the executive management is able to improve the performance of the company upgrade if risk management is done correctly, possible risks can be prevented by controlling future events. At another definition from the Association of Chartered Accountants of Iran, risk management means responding and investigating the crises and threats of a project. In this way, it will be a controlled way to overcome the crisis, which will ultimately lead to the least damage or unpleasant consequences had Besides, the correct management of possible risks can reduce the costs of overcoming crises and obstacles (Ghaderi et al., 2019).

According to the above mentioned content, the speed of adjustment of working capital and achieving optimal working capital can be according to the theoretical literature by achieving the optimal cash liquidity cycle, it reduces the financial crisis and the risk of bankruptcy of the company, as well as the nature of risk management it aims to reduce and deal with the company's risk in order to prevent the company from failing. Therefore, the second hypothesis of the current research is as follows has been mentioned:

H2: Enterprise Risk Management can intensify the decrease effect of the adjustment speed of working capital over bankruptcy risk of the Companies.

3. Research Methodology, Model and Variables, Population and Sample:

The current research is classified as applied one from research objective viewpoint and also from a methodological point of view as descriptive because it investigates an event after it has occurred It Is of the type of causal and post-event correlation. The statistical population studied in this research is all listed companies in Tehran Stock Exchange along period for ten years from 2013 to 2022.Companies in the systematic elimination were selected as the final sample that the conditions which they have had the following terms of comparability, the financial year chosen by the company is at the end of March and they have not changed the financial year during the period (10 years) that has been reviewed, and second the required information disclosed by those companies and its information get be available. Also, the companies don't include banks, insurances and investment companies because of the deferent way of financial statement format. Finally By applying the above conditions, 124 companies was included in the final screening of the statistical population as the final sample.

Analyze The information of the sample companies using the combined panel data method and using Eviews12 software and using the error tool The powerful standard for the final test of the hypotheses has been carried out, combined data with the application of time and place dimensions in different periods provides more complete and reliable results to the researcher and regression by applying the powerful standard error tool can be the best outcome to examine relationships in the present study.

Operational definitions of variables:

Independent variable: working capital adjustment speed (SLCCC)

In many studies regarding the calculation of the adjustment speed of financial factors, the partial adjustment model has been applied (Flnneri and Rangan, 2015). In partial adjustment model, the actual and optimal working capital should be estimated first, but the effect of capital in the optimal circulation cannot be calculated directly (Eztekin T., 2006). Therefore, by placing multiple factors of each company on working capital companies have been shown to be effective according to theoretical foundations and previous researches, the optimal working capital has been calculated. However, there are some factors outside of the company that influence this way, which cannot be brought under control, so finally this factors are included as the estimator's error.

Estimated calculation of optimal working capital according to Baños- Caballero et al. (2010), Ahangar (2020) and Aflatooni et al. (2022) is estimated using the following model and it is assumed that more or less investment in working capital, indicates a longer or shorter cash conversion cycle, and this cycle is a function of company level and macroeconomic variables (Aflatooni et al., 2022).

$$LCCC^*{}_{it} = \beta' x_{it} + u_{it}$$

Where in; ، $LCCC^*{}_{it}$ is the optimal cash conversion cycle length x_{it}; is characteristic vector that explains the length of the optimal cash conversion cycle and β' is a coefficient of the estimated and u_{it} also the residual value is the pattern (Dung et al, 2014).

The characteristics of the company as stated in accordance with the researches of Banus Caballero et al. (2010) and Ahangar (2020) and Aflatooni et al. (2022) has been selected and used.

$$LCCC^*{}_{it} = \beta_1 CFO_{it} + \beta_2 FCOST_{it} + \beta_3 MTB_{it} + \beta_4 SIZE_{it} + \beta_5 TANG_{it} + \beta_6 Z - SCORE_{it} + \beta_7 ROA_{it} + \beta_8 LEV_{it} + \beta_9 GDPG_{it} + u_{it}$$

This there is:

1) **Operating cash flow (CFO):** is equivalent to the ratio of operating cash flow to total assets.
2) **Financial Costs (FCOST):** It is equivalent to financial ratios on interest-bearing debts.
3) **Growth opportunities (MTB):** is equal to the Q - Tobin ratio and equal to the ratio of the total market value of the company's shares and the book value of liabilities to its assets book value of company.
4) **Size of the company (Size):** is equal to the natural logarithm of total assets.
5) **The ratio of tangible fixed assets (TANG):** is equivalent to the ratio of fixed assets to total assets.
6) **Profitability (ROA):** is equivalent to the ratio of net profit to total assets.
7) **Financial leverage (LEV):** is equal to the ratio of total debt to total assets.
8) **Growth GDP (GDPG):** is equivalent to the percentage of annual changes in gross domestic product.
9) **Risk of financial crisis (Z-SCORE):** the equivalent score obtained from the Altman model modified by Kurdistan et al (2013) (Its model is presented below in the company bankruptcy section).

The length of the cash conversion cycle (LCCC): equal to the length of the receivables collection period (the ratio of accounts receivable to sales, multiplied by 365) and in addition, the length of the inventory conversion period (the ratio of the inventory of materials and goods to the cost of goods sold, multiplied by 365 (minus The length of the repayment period of accounts payable (the ratio of accounts payable to sales, multiplied by 365) is (Aflatooni et al 2022) By placing the characteristics of the company in the first model, the optimal working capital can be calculated with the second model.

Where; $LCCC^*{}_{it}$ the rest is the pattern and u_{it} other factors are introduced in detail in the previous paragraph, optimal cash conversion cycle length and has been introduced.

The partial adjustment model that was mentioned in the above and used in the current research to calculate the adjustment speed, the partial adjustment model is Fama and French (2002) which will be combined with the following model and its theory model is as follows. And its mathematical model is presented:

$$\Delta LCCC_{it} = \lambda(LCCC^*{}_{it} - LCCC_{it-1}) + v_{it}$$

Where in; $\Delta \mathrm{LCCC}_{it}$ length of real cash conversion cycle of period t, adjustment speed and optimal cash conversion cycle t-1 length; where in; $\Delta \mathrm{LCCC}_{it}$ it is the result of subtracting the length of the real cash conversion cycle of period t from the length of the real cash conversion cycle of period t-1; $\mathrm{LCCC}^*{}_{it}$ it, optimal cash conversion cycle length; L_{it-1}, the length of the real cash conversion cycle of period t-1; λ, the speed of adjustment and v_{it}, the specification of one-way residuals, which is subject to the fixed effects of the characteristics of each company and is actually (u_{it}it model 2).

In fact, this allows the company to reduce the gaps between the actual and target cash conversion cycle lengths by one unit per year. A value close to one indicates a higher adjustment speed. In order to obtain the final adjustment speed, the following model was used, which was obtained from the combination of the above two models.

$$LCCC^*{}_{it} = \emptyset_1 CFO_{it} + \emptyset_2 FCOST_{it} + \emptyset_3 MTB_{it} + \emptyset_4 SIZE_{it} + \emptyset_5 TANG_{it} + \beta\emptyset_6 Z - SCORE_{it} + \emptyset_7 ROA_{it} + \emptyset_8 LEV_{it} + \emptyset_9 GDPG_{it} + (1 - \lambda)LCCC_{it-1} + v_{it}$$

Where in; ∅_1 to ∅_9 is equal to $\lambda\,\beta'$ ‹λ ‹is the rate of adjustment and $LCCC_{it-1}$ ‹is the real cash conversion cycle of period t-1. The rest of the components are according to the above model, which was previously introduced to the characteristics of each company.

The presented model generally shows that companies always seek to make decisions that the distance between two cycle lengths reduce the actual and target cash conversion and achieve the optimal cash conversion cycle, which is the primary hypothesis that all companies are moving towards the optimal cash conversion cycle at the same speed) (Fama and French, 2002); Finally, by subtracting the estimation coefficient LCCC_{it-1} from the number 1, the adjustment speed has been calculated.

The speed of adjustment of working capital= $1 - (1 - \lambda)$

Independent variable: risk management (ERM)

In order to operationalize risk management in the present research, taking a model from Ghaderi and Tari Verdi’s (2019) and Rostami et al. (2022) from the model of Gordon et al (2009) and using the following comprehensive model.

$$ERMI_{i,t} = \beta_0 + \beta_1 EU_{it} + \beta_2 CI_{it} + \beta_3 FS_{it} + \beta_4 FC_{it} + \beta_5 MBD_{it} + \varepsilon_{it}$$

ERMI (risk management components according to the Coso model), EU (environmental uncertainty factor), CI (level of competition in industries), FS (Firm Size), FC (Firm Complexity) and MBD (supervisory role of the board of directors of companies). In the introduced model, the residual (ε) is the model and the lower the remaining component of the model is, it indicates the high risk management of the company and the lower the remaining component of the model Increase, indicates less risk management in the company. Therefore, the absolute value of the remainder obtained by multiplying by negative one, the sign the provider of risk management in the present study.

Risk management components (ERMI)

In 2006, to measure risk management, it is as follows:

$$ERM_I = \sum_{k=1}^{2} Strategy + \sum_{k=1}^{2} Operation + \sum_{k=1}^{2} reporting + \sum_{k=1}^{2} Compliance$$

Strategy

Strategy refers to the solutions that companies adopt to maintain competition in the market. To maintain the competitive situation, companies Who are active in a specific industry, try to make the most of the sales opportunities that have arisen and sell higher Compared to the average of this factor in the industry, it shows a successful competitive strategy and maintaining the company's position, and on the other hand, with measurement The company's ability to contain and control risk can be used to test the effectiveness of risk management. Therefore, to measure the strategy competitively, the following two relationships can be used) (Ghaderi and Tari Verdi, 2019 and Rostami et al, 2022).

$$Strategy_1 = \frac{Sales_{it} - \mu Sales}{\sigma Sales}$$

In the above model, the items are as follows, Sales (company sales), μSales (average industry sales) and σSales (standard deviation of sales of companies in the industry) are.

$$Strategy_2 = \frac{\Delta\beta - \mu\Delta\beta}{\sigma\Delta\beta}$$

In the above model, the items are as follows, Δβ (company beta in year t minus company beta in year t-1), μΔβ (average beta of industries) and σΔβ (standard deviation of beta Δβ in all companies in industry)

Productivity (Operation)

Productivity is actually operationalized by connecting business inputs and outputs in the process of setting up a business. If the output of the company surpasses the inputs, it shows the high performance and productivity of the company. To operationalize the productivity of two models to the following description can be used:

$$Operation_1 = \frac{Sales}{Total\ Assets}$$

In the above model, the items are as follows, Sales (Total Assets), $Total\ Assets$(Total assets of the company).

$$Operation_2 = \frac{Sales}{Number\ of\ Employees}$$

In the above model, the items are as follows, Sales (Total Assets),
$Number\ of\ Employees$(Number of company personnel)

Financial reporting risk management

Reporting at this stage is the degree of reliability of the company's financial reports, the disclosure of fraud-free and transparent reports in a way of survival it can guarantee the company and reduces the risk of the company. To operationalize this factor from the adjusted Jones model according to the model the following is used, which shows the weakness in financial reporting and because both cases are voluntary and non-voluntary commitment factors. Usually it can be negative, both factors were used, because their relative strength is more reliable) (Rostami et al, 2022 and Gordon et al., 2009).

$$Reportin = \frac{|\text{Non} - \text{discretionary accruals}|}{|\text{Non} - \text{discretionary accruals}| + |\text{Optional accrual items}|}$$

In this model, first, the total items are calculated to be obtained (net profit minus operating cash) (Mashaikhi et al., 2002) Also, all non-optional method items are obtained from the following model:

$TA_{i,t}$ /$A_{i,t-1}$ = $\alpha_1(1/A_{i,t-1})+\alpha_2(\Delta REV_{i,t}$ - $\Delta REC_{i,t})$ /$A_{i,t-1}+\alpha_3$ ($PPE_{i,t}/A_{i,t-1}$) +$\varepsilon_{i,t}$

In the extreme model, TA (total income items), $\Delta REV_{i,t}$ period (t) changes relative to t-1, ($\Delta REC_{i,t}$) changes that accounts receive Period t is relative to 1-t, (t,PPE_i) (fixed asset), $A_{i,t-1}$ (is the book value of the assets of period $_{1-t}$) and εi,t (residual of the model). The calculation of alpha coefficients in the above model is calculated with the following model of non-discretionary benefit items (NDA):

$NDA_{i,t}$ = $\alpha_1(1/A_{i,t-1})+\alpha_2(\Delta REV_{i,t}$ - $\Delta REC_{i,t})$ /$A_{i,t-1}$ +$\alpha_3(PPE_{i,t}/A_{i,t-1})+\varepsilon_{i,t}$

The discretionary accrual items (DA) after the NDA has been specified have been operationalized with the following model, which is actually equal to the rest of the model:

$DA_{i,t} = (DA_{i,t}/A_{i,t-1}) - NDA_{i,t}$

In the second model, which actually shows the health of financial reports from the point of view of a reference called the auditor:

Reporting2= (Material Weakness) + (Auditor Opinion) + (Restatement)

Material Weakness (the number of paragraphs in the auditor's report), Opinion Auditor (two-valued qualitative variable based on the opinion). Auditor Opinion (if it is declared acceptable, the code will be 1, otherwise it will be 0). Restatement (If the updated financial statements are presented, the code will be 1, otherwise 0 will be considered).

Compliance

Compliance and alignment with regulations can reduce risk. In order to operationalize compliance, the following two models can be used (Rostami et al, 2022and Gordon et al., 2009.)

$$\text{Compliance1} = \frac{\text{Audit fees}}{\text{Net assets}}$$

$$\text{Compliance2} = \frac{\text{Net profit (loss).}}{\text{Net assets}}$$

Environmental uncertainty (EU)

Environmental uncertainty is defined as an increase in unpredictable future events (Rostami et al, 2022). Therefore, Environmental uncertainty is an influential factor in risk management. This uncertainty is due to the large fluctuations in companies it can disrupt their performance and create complex conditions; it affects risk management (Gordon et al., 2009 and Rostami et al, 2022). Therefore, in order to operationalize this factor, the following three declared factors have been used:

(a)Coefficients of Income changes (CN (Sit), (b) Coefficients of capital cost changes (C) Coefficients of changes in net profit before tax(CV)) (Iit) and lit is the net profit before tax of the company in the current period.

$$EU = Log\ (\sum_{k=1}^{3} CV(X_k))$$

$$CV(X_k) = \frac{\sqrt{\frac{\sum_{t=1}^{11}(Z_{k,t} - \bar{Z}_k)}{n}}}{|\bar{Z}_k|}$$

In the above model CV (X_k) (uncertainty change coefficient), t (periods under study), X_{kt} (uncertainty k in the current period) and Zk (the average change of uncertainty k during n years).

K= (1, 2, 3) for uncertainty: 1) the coefficient of changes in sales of companies, 2) the coefficient of

changes in the cost of capital of companies and, 3) the coefficient Changes in pre-tax profits of companies.
The cost of capital is derived from the following model:

$$WACC = \left(\left(\frac{E_M}{E_M + D_M}\right)K_S + \left(\frac{D_M}{E_M + D_M}\right)K_D\right)$$

In the above model, D_M (book amount of debt), EM (market value of capital owners), and K_D (minimum rate announced by the central bank) K_S (shareholders' cost rate) is used to implement the expected cost rate of ordinary shares from Gordon's model in the following way has been:

$$K_S = \frac{D_0(1 + g)}{P_0} + g$$

In the presented model, D0 (is the cash dividend of the stock for period t), P_0 (is the first stock price of the period), and g (is the dividend growth rate). g The following pattern has been calculated:

gt = ROE * [(1-(DPS_t / EPS_t)]

In the above relation:
DPS_t (cash dividend distribution) and 1-Pt (stock price of the first period), gt (profit growth rate) ROE (return on equity) and EPS (earnings per Shares are Industry Competition).

Industry competition: (CI)

Shows concentration in industries, where low concentration means high competition, which is operated by the following model has been:

$$CI = 1 - \sum_{i=1}^{n}\left(\frac{S_{it}}{TotalS_{st}}\right)^2$$

In the presented model, CI (the share of each company in the desired industry), Sit (the amount of sales of companies during the current period) and Sst (the amount The total sales of the industry during the current period is (Rostami et al, 2022 and Gordon et al., 2009).

Firm size (FS)

Firm size is the natural logarithm of total assets.

Complexity of the company (FC)

The complexity of the company will provide non-integrated information and weakness in the internal control of the employer, so In order to reduce the complexity, strong management of organizational risks is necessary, as the correlation coefficient of income and profit is negative one, according to the following relationship was obtained (Ghaderi and Tari Vardi, 2019)

FC =-1* CORREL(revenues & earnings)

Supervision of the Board of Directors (MBD)

Considering the minimum number of members of the board of directors of companies which is 5 people, managers with experience and Different specializations and thoughts can be beneficial to increase the performance of the company because the number of managers affects the value of the company Its risk-taking has an impact, and the size of the board of directors has an impact on the decision-making process and the effectiveness of the board of directors. Some Research on group decision-making in the fields of economics and social psychology has shown that more effort is needed for a large group to reach a consensus. Therefore, according to Qadri and Tari Verdi (2019) to measure the supervision of the board of directors from the ratio the number of people in the board of directors is based on the logarithm of the company's sales revenue.

The second independent variable: bankruptcy risk (RISK)

In the current research, in order to adapt the financial crisis models to the local environment of Iran, from the adjusted model of Kurdestani et al. (2013) and According to the research of Afaltouni et al. (2022) and Memarian and Mustafa Alavi (2019) it is used that the final model Is below:
In this model, Score-T represents the score related to financial ability as follows:

$$\mathrm{T-score}_{it} = 0.291(X1) + 2.458(X2) - 0.301(X3) - 0.079(X4) - 0.05(X5)$$

X_1: Ratio of working capital to total assets
X_2: The ratio of accumulated profit and loss to total assets
X_3: Operating profit (loss) ratio to total assets
X_4: the ratio of book value to the total value of debts
X_5: The ratio of income to total assets.

In the above relationship, the indicators are the same as the indicators in the above relationship, and the lower the index obtained for a company, the lower the financial status It is more unfavorable so that if the company is T<-0.14, the possibility of financial crisis of the company is very high.

Control variables of the research:

Company size (SIZE): natural logarithm of total assets.
Return on assets (ROA): ratio of net profit to total assets.
Institutional ownership (INST): from the percentage of shares held by institutional owners such as banks, insurance companies, etc. and persons who have at least 5% of shares
The company is at their disposal. It has been used.
Family Ownership (Family): Family owners try their best to preserve their heritage for future generations. Family owned It Is recognized that the real shareholder is the owner of at least 20% of the company's ordinary shares or one of the members of its board of directors. The sole owner of at least 5% of ordinary shares or the total shares of the real member of the board of directors and his family members, at least 5 The percentage of the total ordinary shares of the company, finally, the year-companies that are included in the above definition are coded as 1 (otherwise) 0) (Mehrazin and Colleagues, 2013.
Independence of directors (IND): the ratio of non-executive directors of the board of directors to all members.
Sales growth (growth): Sales revenue minus the previous period's sales divided by the previous period's sales.
Liquidity (Cash): the ratio of operating cash to total assets.
Financial leverage (LEV): ratio of total debt to total assets.

Introduction of regression models to test research hypotheses

Based on the theoretical and experimental literature, such as Afaltouni et al.'s research (2022), Ghaderi and Tari Vardi (2019) and Rostami et al. (2022). A model consisting of Introduced variables to test research hypotheses has been designed and introduced as follows:

$$\begin{aligned}\mathrm{RISK}_{it} = \beta_0 + \beta_1\mathrm{SLCCC}_{it} + \beta_2\,\mathrm{ERM}_{it} \\ + \beta_3(\mathrm{SLCCC}_{it} \times \mathrm{ERM}_{it}) \\ + \beta_4\,\mathrm{SIZE}_{it} + \beta_5\mathrm{ROA}_{it} \\ + \beta_6\,\mathrm{LEV}_{it} + \beta_7\,\mathrm{INST}_{it} \\ + \beta_8\,\mathrm{growth}_{it} + \beta_9\mathrm{Family}_{it} \\ + \beta_{10}\mathrm{Cash}_{it} + \beta_{11}\,\mathrm{IND}_{it} + \varepsilon_{it}\end{aligned}$$

4. Findings

Descriptive statistics of research variables

First, descriptive statistics are presented in the table below to show the distribution of data.

Table (1) it shows statistics. In general, the most important criteria are the average value and the standard deviation of the data distribution. For example, average the speed of adjusting the working capital of the companies is 62%, which shows that the companies dynamically cover 62% of the gap annually. They reduce the actual working capital towards the optimal working capital. The average financial leverage of companies is 55% which shows that on average, half of the company's assets are made up of debt. The highest standard deviation belongs to the ownership of institutional investors (30.6) and the lowest is owned by the company's liquidity (0.13).

As can be seen in table (2), the total number of companies under investigation is equal to 1240.

1088 years – companies equivalent to 87.74 percent of the years – companies have no risk of bankruptcy and the number of 152 years – companies equivalent to 12.26 Percentage of the year – companies have bankruptcy risk. Also, the number of 1052 years – the company is equivalent to 84.84 percent of the year Companies, non-family and the number of 188 years-companies equal to 15.16 percent of the year-companies have family ownership.

According to the results obtained in table (3), it can be seen that the significance level of the variables in the Manani test was less than 5%. And it indicates the significance of the variables.

Table 1) Descriptive statistics of quantitative research variables

Variable	Mean	Max.	Min.	S. dev.	Skewness	Kurtosis
SLCCC	0.62	0.97	0.12	0.24	-0.36	2.01
ERM	-0.61	-0.014	-1.76	0.45	-0.72	2.71
SIZE	14.71	19.2	11.3	1.51	0.73	3.65
ROA	0.14	0.55	-0.20	0.15	0.60	3.25
LEV	0.55	0.97	0.13	0.20	-0.12	2.37
INST	58.8	94.9	0.0000	30.6	-0.81	2.34
growth	0.34	1.65	-0.34	0.42	0.87	3.85
CASH	0.11	0.52	-0.18	0.13	0.66	3.54
IND	0.65	1.00	0.20	0.17	-0.069	2.83

Table 2) Frequency distribution of bankruptcy risk variables and family ownership

Description	Value	Frequency	Frequency percentage
There is a high risk of bankruptcy	1	152	12.26
There is no risk of bankruptcy	0	1088	87.74
Family Companies	1	188	15.16
Non-family Companies	0	1052	84.84
total	-	1240	100

Table 3). Levin, Lin $ Chu Unit root test of Variables

Variable	Mean	Maximum	Results
SLCCC	-8.53892	0.0000	Stationary
ERM	-16.8280	0.0000	Stationary
SIZE	-12.3134	0.0000	Stationary
ROA	-9.52959	0.0000	Stationary
LEV	-13.0833	0.0000	Stationary
INST	-5.16742	0.0000	Stationary
growth	-2.57699	0.0000	Stationary
CASH	-17.7677	0.0000	Stationary
IND	-4.23755	0.0000	Stationary

Table 4). The results of the test of research hypotheses

$$RISK_{it} = \beta_0 + \beta_1 SLCCC_{it} + \beta_2 ERM_{it} + \beta_3 (SLCCC_{it} \times ERM_{it}) + \beta_4 SIZE_{it} + \beta_5 ROA_{it} + \beta_6 LEV_{it} + \beta_7 INST_{it} + \beta_8 growth_{it} + \beta_9 Family_{it} + \beta_{10} Cash_{it} + \beta_{11} Board\ ind_{it} + \varepsilon_{it}$$

Variable	Coefficient	S. D	z statistic	Sig.
SLCCC	-0.58	0.28	-2.04	0.040
ERM	-0.11	0.13	-0.81	0.41
SLCCC ×ERM	-0.62	0.18	-3.31	0.0009
SIZE	-0.12	0.054	-2.19	0.027
ROA	-9.69	0.95	10.15	0.0000
LEV	2.44	0.46	5.29	0.0000
INST	-0.002	0.002	-0.84	0.39
growth	0.74	0.15	4.69	0.0000
Family	-0.017	0.006	-2.70	0.006
CASH	0.47	0.65	0.71	0.47
IND	-0.63	0.34	-1.82	0.064
C	-0.14	0.86	-0.16	0.86
LR statistics	441.077			
LR significance level	0.0000			
McFadden coefficient	0.47			

The results of table (4) show that the speed of adjustment of working capital with a negative coefficient (-0.58) and a significance level of less than 5 percent. (0.040) has the opposite effect on the company's bankruptcy risk, and the first hypothesis of the research is confirmed at the 5% error level. Also The interaction of risk management and the speed of adjustment of working capital with a negative coefficient (-0.62) and a significance level below 5% (0.0009) It has an inverse effect on the risk of bankruptcy and since the absolute value of the adjustment coefficient of risk management (0.62) is more than the absolute value of the coefficient The speed of adjustment of working capital is (0.58), so risk management has an inverse relationship between the speed of adjustment of working capital and risk Intensifies bankruptcy.

The control variables are company size, return on assets, financial leverage, sales growth, and family ownership with the level A significance level of less than 5% has a significant effect on the dependent variable of the research, as well as the independence of managers with a significance level of less than 10%. It affects the dependent variable of the research. McFadden's coefficient is equal to 47%, which shows that 47% of the variable changes Dependent are most likely a number between zero and one. The LR statistic is equal to 441.07 and its significance level is less than 5%, therefore it can be said that the fitted model has sufficient validity.

Table 5). The accuracy percentages of the prediction of the research model

Name of the test	The value of the test statistic	Total forecast
The accuracy percentage of the prediction of the research model	-	92.34
research Suitability of the model	7.500	0.48

Among the criteria of goodness of fit, which is also only used for logistic regression models, the percentage of prediction accuracy and optimal fit? It is a regression model. According to the results of table (5), it can be seen that the accuracy percentage of the model prediction in the research model is more than 50 Percentage (92.34) which shows the desirability and correctness of the model. Also, the significance level of the Hosmer-Lemshow test for the research model they are more than 5 percent (0.48) and indicate the optimal fit of the regression model.

5. Conclusion and suggestions

In today's challenging economic conditions in the world and inside the country, considering various risks and increasing environmental pressure in affairs and the management of companies has caused companies to face increasing financial crises that sometimes if this factor is not properly managed and eliminated, will increase the risk of bankruptcy and default of companies. Therefore, due to the high cost of financing and the risk of discussion regarding it, it is very important to pay attention to working capital and liquidity conversion cycle. Within mind obtaining optimal working capital, as a rule, companies continually seek to achieve this amount of optimal working capital and avoid excessive and excesses in this prevention factor will be implemented. Working capital is vital for the survival of the company. In this case, while working capital management is considered as a competitive advantage for a unit, it affects financial performance, profitability and liquidity. In real world, working capital management is providing the short-term capital required to finance activities it is an investment and an important part of a company's balance sheet items in various industries. Better management of working capital leads to high financial performance and it will reduce the company's financial crises. In fact, the optimal liquidity conversion cycle shows financial power in short-term payments and dealing with crises, as well as the criteria for analysts' evaluation of the company's financial strength in paying their obligations. In Iran, because companies do not have strong financial capacity for long-term capital markets, Therefore, the production of internal resources is very important in the continuation and survival of companies. According to the results, the speed of achievement to determined optimum working capital will reduced the risk of company bankruptcy. In fact, when the company can soon move closely with optimal working capital level along its short-term needs can earn better financial outcome in payments and company affairs, and to incapacity manner which finally, lead to the risk of bankruptcy, will not be caught. The results obtained are in accordance with past finding of research results of Fernandez and Sanchez (2023). Who stated that achieving optimal working capital will prevent the company from facing a financial crisis? Factor risk management, in fact, all companies should consider it in order to identify and eliminate possible risks facing the company. Internal risks is the main cause of the bankruptcy of large and contending companies in the world, which is not tolerated by any group and team with any kind of facilities and abilities, unless they operate from the beginning with written plans and the creation of risk committees and charters and written plans to avoid these risks, took action, which is known as comprehensive risk management. According to the obtained results, it was observed that management interaction the risk of the company can reduce the risk of bankruptcy with the speed of obtaining optimal working capital. In fact, when companies operate in line with optimal liquidity conversion cycle and reduce the risks facing the company with predetermine plans, thus to an excellent level Financial performance will be achieved, so that the company will not face severe financial crisis. By considering the limits and constraint imposed to our capital market, it is suggested that the managers as soon as possible engage in determined the optimal working capital level of the company so that they can go through financial crises with ease. Meanwhile, by having determinate program to managing Risk and providing meetings and the formation of a risk committee and having written plans can solve the problems of companies. Because Many problems are faced by companies at the level of various industries, small and large, it is suggested that future researchers with follow the separation of various industries and compare the results with the obtained results. In addition, due to being high the costs of financing through debt, the use of commercial credits are of great importance for the short-term financing of companies achieving optimal working capital, so it is also suggested that researchers investigate the effects of working capital management strategies on the speed of achieving optimal commercial credit.

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CEO Characteristics and Audit Market Competition on Disclosure Quality and Financial Comparability

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Abstract

Objective: Nowadays, considering the competitive environment and changing business conditions, the most important issue for companies is their credibility and level of acceptance. One of the important tools to show this is the ranking of companies. In fact, the company's ranking can be a sign of its creditworthiness. Regarding this, most countries have ranked companies listed on their stock exchanges. The study examines whether the CEO's characteristics are associated with financial information's disclosure quality and comparability.
Methodology: The research data was obtained from 119 listed companies on the Tehran Stock Exchange during 2014-2019. In this study, panel data and regression model of the data panel were used and data were analyzed using EViews.
Results: The results indicate a positive significant relationship between the tenure and disclosure quality of financial information. There is a negative significant relationship between the CEO's financial information and the quality of information disclosure, and also, no significant relationship exists between the competition in the audit market and the disclosure quality of financial information.
Innovation: Considering that the characteristics of the CEO, especially his tenure and financial information, have not been examined with important variables such as disclosure quality and financial comparability, we felt it necessary to present an article on this topic.

Keywords: CEO's characteristics, CEO's tenure, CEO's financial expertise, information disclosure quality, timeliness of information, reliability of information, information comparability

1. Introduction

Accounting is an information system that helps investors, managers and the government better decide on economic issues by providing the necessary information. Accounting has been developed to meet human needs. Accordingly, over time and along with the expansion of economic activities and increasing complexity, the goals and methods of accounting have been developed to meet the information needs since individuals require timely, reliable and comparable information to decide about suitable financial resource distribution that can be obtained through accounting.

Prasad and Green (2015) state that the output of any flexible accounting information system contains timely, reliable and comparable information when it can promote the competitive position and managers' quality of decision making in designing, implementing and evaluating the organizational strategies. Therefore, one of the most important processes run by accounting information systems is the accounting process, which consists of three stages of collection, processing, and reporting of financial information for decision-making and management of the control environment (Romney and Steinbart, 2015).

The success of any organization in reaching its goals depends on its managers. The organisation will achieve its goals if the managers do their job properly. Therefore, managers encounter problems in performing their tasks and should identify different solutions and choose the best among them. They need timely, reliable information that can be compared with other information in this field.

Information is a key element in economic decisions. In capital markets, investors use information in their decisions that is expected to be credible, timely, reliable, and highly comparable. The report provided by the company's executives is the most reliable source of information for investors, creditors and other users of corporate information. Following some financial scandals for a number of big and famous companies around the world that have reduced public confidence in corporate financial information and reporting, the need for more and better information has increased, resulting in more demand for improving disclosure quality. Information disclosure plays an essential role in investment decisions and market performance. Investors are often faced with information issues before investing and agency issues after investing, as most decisions, including investment decisions in the capital market, are carried out in conditions of uncertainty (Healy and Palepu, 2001).

Companies disclose information by publishing financial statements, explanatory notes, general assembly reports, and the media. Disclosure of information has significant differences in different companies. Various factors influence the decision-making methods for presenting or not presenting certain information by management. Research in this area suggests that disclosure is a function of two main factors: 1. internal factors related to the company's characteristics, such as the CEO characteristics and the composition of shareholders. 2. Influential external factors include product market competition, legal regulations, and industry type (Sassi and Toumi, 2018).

Given the market's competitive conditions, managers face many financial reporting challenges. On the one hand, information should be disclosed to the standard level since financial reporting, while being able to help the company's competitiveness, may also compromise its competitors by providing strategic information to its competitors. On the other hand, managers need to decide on the quality of the information they want to provide to create more competitive advantages for the company and prevent undermining its competitive position. In other words, companies active in the markets and the exclusive industries have a vague and imprecise information environment. Under such circumstances, investors cannot assess the company's performance (Daliwal and Huang, 2008). Hence, market competition is considered an effective tool for solving the representative problems and improved corporate governance, to the point where it is a stronger internal and even external governance mechanism.

Nevertheless, little attention is paid to the issue of CEO characteristics and market competitiveness as an important mechanism for accounting information and financial reporting.

According to the explanations presented in this research, we are seeking to answer whether the CEO's characteristics include tenure and financial expertise, as well as competition in the audit market, which are internal and external factors affecting the disclosure of information, resulting in the improved quality of disclosure and comparability of financial information.

Nowadays, considering the competitive environment and changing business conditions, the most important issue for companies is their credibility and level of acceptance. One of the important tools to show this is the ranking of companies. In fact, the company's ranking can be a sign of its creditworthiness. Regarding this, most countries have ranked companies listed on their stock exchanges. In Iran, the stock exchange has also ranked companies based on timely and reliable disclosure of information. According to the Financial Accounting Standards Board, disclosure is a widespread term that roughly includes the entire financial reporting process. One of the basics of accounting is the principle of disclosing relevant facts about business units' financial events and activities. The principle requires that financial statements be prepared and presented in a timely, relevant, reliable, comparable, and understandable manner for reporting purposes; that is, users can use financial statements to make informed decisions.

The importance of competition in the audit market in Iran is further felt after the adoption of Article 44 of the Constitution, i.e. the privatization and relative change in the government's approach to the economy because by implementing the process of privatization, conditions will be provided for the competitiveness of industries in government monopoly. Therefore, this can be considered one of the important mechanisms for the decision-making process of corporate executives. On the one hand, market competition requires companies in the industry to maintain critical and strategic information to the public, especially competitors for survival in the market and to increase their market share while seeking required information to decide on their rivals. On the other hand, high competition increases the likelihood of bankruptcy and is considered a serious threat to the professional security of managers and investors, which leads managers to work more towards corporate affairs (Tang and Li, 2011).

2. Theoretical background and expansion of hypotheses

2.1. Quality of financial information

Providing financial information for users inside and outside the organization in the form of financial reports is the final product of the financial accounting process. The financial reporting relates to the firm being accountable for its resources. Therefore, it provides a basis for making economic decisions. An important part of the financial reporting process in evaluating the financial position, financial performance, and financial flexibility of the firm is a financial statement that investors provide based on such financial information. Therefore, it is necessary to consider certain qualitative features in its preparation to obtain such financial information. Regarding the content presented on the qualitative characteristics of the information, as the characteristics associated with the qualitative characteristics of the information are extensive, this study tries to provide some qualitative characteristics of the information, including timeliness and reliability, which in total are considered an indicator of the quality of disclosure; we also examine comparativeness of financial information.

The users of financial information, especially investors, understand the importance of transparency of financial information of companies because they require transparent and comparable financial information to make the right decisions for investment in firms and the optimal allocation of scarce resources in the community. So, a principle of accountability and informed economic decision making. The essential requirement for developing the economy and achieving an efficient capital market is the presence of transparent and comparable financial information (Accounting Standards Committees, 2006).

Since the transparency of financial information improves resource allocation and is one of the most important factors in creating the conditions for full competition as well as equal opportunities in this market, it is also important from the economic point of view that the lack of transparency is considered one of the most influential factors in the recent failures in the capital market.

Iatridis (2011) reviewed the disclosure quality and concluded that companies with higher liquidity and profitability tend to offer high quality disclosures.

Compulsory and optional disclosure of information can have many economic implications, such as the improvement of stock liquidity in the capital market, the reduction of corporate capital costs, and increased use of information by the user, ultimately leading to an increase in the company's value.

Alzehar et al. (2015) concluded that with the increase in the quality of disclosure, the economic consequence of accounting information decreases, and the economic consequences of accounting information increase by decreasing disclosure quality.

In relation to signalling theory, Habib and Hossain (2013) state that firms in the markets lacking information symmetry propagate credible signals to maintain credibility. In a competitive market, companies that perform well have a strong incentive to report their operational results. Consequently, competitive pressures lead companies with ordinary news to report. Failure to disclose information is considered as bad news. In the meantime, companies with bad news are reporting to maintain their credibility.

Balakrishnan et al. (2014) concluded that companies do higher quality disclosure to increase their firm's value and reduce financing costs.

The timely and reliable release of financial reports is a key factor in reducing information asymmetry and improving the performance of capital markets. The delays associated with releasing financial statements increase the unreliability of investment decisions. In addition, in developing countries, disclosure of high-quality information is one of the main means to reduce the abuse of first-hand information by in-company people (Owusu-Ansah, 2000).

Kubota & Takahara (2016) concluded that companies with less information asymmetry were more inclined to disclose financial information.

Agency theory mainly refers to the conflict of interests between the manager and the owner. As companies develop, owners entrust the company administration to managers. The separation of ownership from management leads to agency problems.

Binti Hashimi and Binti Abdol Rahman (2011) found that proper corporate governance would ensure the quality of financial reporting. The information is considered high quality, relevant and timely and is associated with promoting the quality of reporting by the agent, along with the reduction of reporting breaks and eliminating the obstacles and complexity of the audit, and ultimately reduced delay in the issuance of the audit report.

2.2. Accounting comparability

According to theoretical concepts of financial reporting, financial reporting is the final product of an accounting system. The financial statement is its main part. Financial statements provide useful and reliable information for intra-organizational and external users to make wise economic decisions (Accounting Standard Development Board, 2009). This information will be useful in making decisions when they are of good quality.

According to the Financial Accounting Standards Board theory, it is necessary to provide a model to increase the information benefits and compare the performance of the firms with each other. So, the Financial Accounting Standards Board defines comparability as: "the qualitative feature of information which enables users to identify similarities and differences between two sets of economic phenomena." Therefore, it is important to measure and present the effects of transactions and other similar events within the business unit over time; for that business unit, the coordination of procedures for measuring and presenting similar issues should be observed between different business units.

De Franco (2011) concluded that the level of analysis and accuracy of predictions would improve if the financial statements presented were more comparable, and they found that more comparable financial statements increased the quantity and quality of information and based on comparable financial statements, the analysts can better explain the company's historical performance.

Choi et al. (2019) concluded that if financial information provided by companies were more comparable, they could have affected the reactions of future earnings, which resulted in increased disclosure quality.

2.3. CEO characteristics

CEOs, as representatives of individuals and groups of stakeholders, are responsible for using their financial resources, and it is expected that capable managers will reduce information asymmetry and agency costs to provide stakeholder interests and accountability by disclosing the quality of information. Therefore, powerful CEOs have a better understanding of technology and more appropriate investments in valuable projects. Increasing managerial capabilities reduces managers' opportunistic behaviors, thereby improving the quality of and increasing the level of information disclosure and comparability of information provided (Demerjan, ۲۰۱۲).

Corporate executives regarded as human capital in companies, play an important role in creating shareholder wealth. Information related to the ability of managers to use investment opportunities as well as their knowledge and experience are important and valuable aspects of companies.

Golden et al. (2018) argued that CEOs with political ideology have fewer obligations to income discretions and irregularities, show more analysis, and pay less audit fees compared to managers with no political ideology. So they concluded that the political ideology of executives had a significant effect on the financial reporting quality of companies.

Ettredge et al. (2018) concluded that executives with accounting experience and knowledge use this experience and knowledge to reduce information asymmetry in the initial public offering, resulting in lower pricing at the time of the initial public offering. The results also showed that accounting-based executives operate with long-term performance after the initial public offering.

The CEO's tenure can have an important effect on the type of decision of the CEO or senior management team. The management literature transforms the organizations for joining the high-level management team because it is familiar with the team's cohesion and the company's internal commerce (Smith et al., 2010). Therefore, a long period of employment in a position will enhance one's knowledge and experience. Both knowledge and experience significantly enhance the efficiency and effectiveness of the work.

Francis et al. (2008) concluded that an increase in the CEO's tenure created a reputation for the CEO and the reputation pushed the CEO to provide financial information with higher disclosure quality (Zhang and Werisma, 2009).

Managers in firms with more comparable financial statements have less incentive for earnings management based on accruals and are more inclined to do real earnings management since real-earnings management has a judicious nature and is far more difficult to detect. Therefore, the comparability of financial statements increases the real management of earningss and reduces earnings management based on accruals (Sohn, 2016).

Saleh et al. (2017) examined the relationship between the CEO's characteristics and the quality of financial disclosure and concluded a positive significant relationship between the disclosure quality and the CEO's tenure.

Cucculelli et al. (2018) concluded that more innovative activities were due to the product life cycle and CEO's time of execution. So, the longer the CEO's tenure, he can do more innovative activities.

Therefore, according to the presentations about the CEO's tenure, the hypotheses are as follows:

H1: There is a significant relationship between the CEO's tenure and the disclosure quality of financial information.

H2: There is a significant relationship between the CEO's tenure and financial information comparability.

2.4. CEO's financial expertise and its relation to the qualitative characteristics of financial information

The literature suggests when CEOs enter the organization, they are more focused on their own requirements and priorities and pay attention to dimensions that are in line with their own orientations and priorities, which suggests that CEOs with financial expertise pay more attention to the internal accounting and auditing sectors through monitoring the performed work, and this can make their job easy to identify and limit unusual accounting practices by other managers (Batwah et al., 2015).

Ali Kia et al. (2017) argued that information provided by corporate executives is more comparable, in which case executives replace real earnings management methods with manipulating accruals.

Salleh and Stewart (2012) concluded that CEOs with high financial expertise could easily convince an independent auditor in the annual audit negotiation process. Therefore, the faster the negotiation process is, the more timely and reliable the audit report will be (Salterio, 2012).

As management affects audit performance, a CEO with financial expertise is expected to positively affect the disclosure quality and comparability of financial reporting because financial expertise increases the value of the work of executives, particularly their role in financial reporting and internal control. Batwah et al. (2015) argued the ability of financial expertise in CEOs reduces the time of client's preparation and also reduces the time of audit, as the time needed to hide fraud or correct mistakes in the financial statements is eliminated, which assesses audit risk related to the quality of financial reporting and internal control system positive.

Batwah et al. (2015) concluded that CEOs with financial expertise are always more able to deal with financial issues and provide less incorrect reporting and uncertain estimates, so the CEO's financial expertise can improve the quality of disclosure of financial reports.

Lee et al. (2015) argued that having a master's degree and management level significantly negatively affects real earnings management, but having a CPA degree directly affects accrual management.

Engelberg et al. (2018) concluded that the more comparable the accounting information provided by companies is, the costs associated with collecting and processing information for users of financial information and legal entities will be reduced and enable them to better identify manipulation of auditing figures of the company by managers by comparing the information provided by the company with other similar companies.

Zalata et al. (2018) concluded that female CEOs with financial expertise were less related to earnings management, and male managers with financial expertise had no significant relationship with earnings management.

Therefore, according to the material presented in relation to the financial expertise of the CEO, the hypotheses are as follows:

H3: There is a significant relationship between the CEO's financial expertise and the disclosure quality of financial information.

H4: There is a significant relationship between CEO's financial expertise and financial information comparability.

2.5. Competition in the audit market and its relation to the qualitative characteristics of financial information

Studies on disclosure quality indicate that the state of competition and competitors' activity also affect the management characteristics and disclosure quality.

The environment, in which companies operate, is rapidly growing and competitive excessively. So companies face a lot of financial reporting challenges. On the one hand, lack of information disclosure and balancing reporting transparency is a must because, as it helps the company's competitiveness, it can also hurt its competitiveness by providing strategic information to its competitors. Hence, according to the competitive conditions, managers decide on the quality of information disclosure in order to create competitive advantages for the company (Daliwal and Huang, 2008).

Ghorbani et al. (2013) showed that competition in the market has a strategic effect and has a significant relationship with the quality of information disclosure, but regarding the effect of governance, the results indicate that the percentage of members of the board does not have a significant relationship with disclosure quality and competition in the market also does not improve the relationship between these two variables.

Mansourfer et al. (2017) concluded that competition results in the disclosure of the quality of accounting information, which itself results in improved information content of stock prices and the information environment. Companies with major state-owned shareholders have a lower quality of information than companies with major private shareholders due to government rents and weaknesses in evaluation and monitoring mechanisms.

Cheng (2013) concluded that there was a positive significant relationship between market competition and the comparability of financial information. Therefore, competition in the audit market is an effective mechanism for increasing the quality of information.

Lee et al. (2015) argue that market competition reduces disclosure of information through equity costs and capital market pressure and increases the costs of equity due to the presence of competitors, which reduces discretionary disclosure.

Kim (2017) concluded that competition in the audit market reduced the effectiveness of internal controls over financial reporting and impeded the improvement of corporate information quality.

Burks et al. (2018) found that increased competition in the audit market is accompanied by an increase in press releases, which in turn increases the disclosure of information voluntarily. Therefore, with regard to the content presented in relation to competition in the audit market, the following hypotheses are raised:

H5: There is a significant relationship between competition in the audit market and the quality of disclosure of financial information.

H6: There is a significant relationship between audit market competition and financial information comparability.

3. Methodology

The data required by the companies are obtained through the official websites of the Stock Exchange. In addition to these resources, Google search, the corporate website, and Codal are also used.

- The research population includes companies listed on the Tehran Stock Exchange for 6 years, from 2014 to 2019. The following conditions were considered for the companies' selection:
- They did not change their fiscal year during the return period.
- Their stock trades have not been stopped at the Tehran Stock Exchange for more than six months.
- All available data for existing companies should be available.
- It is not part of financial intermediation companies (banks, investments, and leasing).
- The financial information required for this research was fully submitted from 2014 to 2019.
- Applying the above conditions, 119 companies listed on the Tehran Stock Exchange were selected as the statistical sample.

In this study, panel data and regression model of the data panel were used and data were analyzed using EViews.

3.1. Describing the variables

Dependent variable

De Franco et al. (2011) have defined the accounting system as a system that displays economic events in financial statements and structured this idea. So, it can be shown as follows:

Financial statement = fi (Economic Events)

In the above equation, fi (Economic Events) represents the economic event of the company i. The two companies are comparable when they display the same economic events.

Relation (1) states that a company's financial statements are a function of the economic events and accounting of these events. According to this logic, we define the notion of comparability of financial statements as follows: "The two companies are comparable if they generate similar financial statements for a batch of certain economic events." Thus, with accounting comparability, two companies i, j should have the same representation of fi (Economic Events) so that for a set of certain economic events X, the company i produces financial statements similar to company j.

To put the conceptual definition of comparability in action, a simple empirical model for the accounting system of companies is provided by De Franco et al. (2011). According to Equation 1, the return on equity has been used to represent the net effect of economic events on financial statements. These economic events can be unique to companies but can shock the industry or the entire economy. Representative of the financial statements is the accounting earnings. At the same time, earnings are definitely one of the major dimensions of earnings and losses. De Franco et al. (2011) acknowledged that the only use of earnings to enclose accounting comparability is a limitation in their analysis. For each company-year, the following equation is estimated using 16 periods of previous data:

$$Earnings_{it} = \propto_i + \beta_i Return_{it} + \varepsilon_{it}$$

In the above equation, the earning represents the ratio of the six-month net earnings of the extraordinary items to the stock market value of the first period and returns represent a rate of return over six months. According to the framework of Equation 1, α_i and β_i are a representative of the fi (Economic Eventsi) for the companies i. Similarly, α_j and β_j is a representatives of the accounting function for the company j. (Estimated using earnings and return of company j)

The "proximity" of the function between the two companies reflects the accounting comparability. In order to estimate the distance between functions, for example, measurement of proximity or comparability, one of the meanings of accounting comparability is cited: if the two companies experience the same set of economic events, the more the accounting between the two companies is comparable, their financial statements are more similar. Using the estimated accounting function of the company i and j, their earningss can be predicted, assuming they have the same returns (for example, if they experienced the same economic events). Specifically, De Franco et al. (2011) have used the two accounting functions estimated for each company with a company's economic events. Their calculation is as follows:

$$E(Earnings)_{iit} = \hat{\propto}_i + \hat{\beta}_i Return_{it}$$
$$E(Earnings)_{ijt} = \hat{\propto}_i + \hat{\beta}_i Return_{it}$$

E (Earnings) iit is the expected earnings of company i, which is determined by the function of the company i in period t and E (Earnings) ijt is the expected earnings of the company j, which is determined by the function of company j and return of company i in period t. Using the company i's returns in both predictions, the economic events have been explicitly kept constant.

The comparability of companies i and j (CompAcctijt) is defined as the negative mean value of the absolute value of the difference between the expected income of companies i and j:

CompAcctijt = $-|\mathrm{E}(Earningsi.t\ i\ ) - \mathrm{E}(Earningsj.t\ i\ |$

In order to facilitate the interpretation, the mean absolute value of the difference between the expected earnings of the two companies is multiplied by -1, so larger (less negative) values represent a higher comparability of the accounting system of the two companies j and i. After estimating the comparability level for each i company and its j counterpart company, the mean company i's comparability is calculated with all j companies, which is used as a measure of the comparability of a particular company i during the period t in the tested hypotheses.

Disclosure quality

According to Setayesh et al. (2011), this study uses the rankings assigned to each company in the "Appropriate disclosure quality and information" issued by the Securities and Exchange Organization for measuring information transparency. The rating of disclosure quality and proper information is calculated based on the status of the publisher's notice in terms of reliability and timeliness of sending information. Providing timely information to the Stock Exchange and providing the required high quality information is an important criterion for determining the transparency of companies in the Tehran Stock Exchange. In addition to the 3, 6, 9 and 12 month reports, the interim and annual financial statements, as well as the boards' reports to the assembly, the timing of dividend payments, and providing important information to the Stock Exchange and Securities are required as soon as it occurs. Accordingly, in a specific formula, the timing of information provision is monitored by the stock company, and companies that even one day has passed since they provided information face negative points, and, in some cases, the deviation is to such an extent that companies receive no score. In sum, the timeliness of information constitutes two-thirds of the ranking scores, and the remaining one-third is related to the reliability of information.

The timeliness is based on the time the company sends information (earning forecasts per share, unaudited interim financial statements, portfolio situation, auditor's statements about earning forecast for each primary and six-month share, and six-month interim financial statements, audited and unaudited financial statements of end of financial period and payment schedule for shareholder's interest is calculated at the intervals specified in the disclosure instruction by considering the delay in the delivery of information. The rate of volatility and changes in the delivered forecasts as well as the differences between the expected amounts and the actual audited performance is a measure of the reliability of these calculations (Securities and Exchange Organization, 2011).

Since such scores are calculated on the basis of precise and objective indicators, such as the timing of providing relevant information and the difference between forecasts and actual results, the quantity of disclosure is not considered in their calculations. Still, the timeliness and reliability of the disclosure of information are also considered. Therefore, the criterion has enough objectivity and reliability (Setayesh et al., 2011).

Independent variables

CEO tenure: The CEO's tenure is the number of years the CEO has consistently held this position (CEO). This method has been widely used in past literature (Hazerika et al., 2012; Zhang Werisma, 2009; Batwah et al., 2015).

Financial expertise of CEO: Previous literature acknowledges the competencies of accounting in enhancing executives' understanding of financial reporting and satisfying the skills required for an accounting profession (Vafeas, 2009).

Batwah et al. (2015) identified the CEO as a financial expert with a degree in accounting or who previously served as an accountant, chief financial officer, inspector, or other related accounting affairs.

In this research, according to the rate of access to information in the Iranian environment, according to Molazadeh et al. (2016), a CEO is considered a financial specialist if he has a degree in financial affairs such as accounting, management or economy.

This variable is an artificial one. If the CEO has an academic degree in accounting, management, and economics, the number is one and otherwise zero.

Competition in the audit market

According to Zhang (2015), the Herfindahl Index will be used to measure this variable. To calculate the Herfindahl Index, the total net sales of all companies active in that industry are calculated for each of the industry members of the statistical sample each year. Then, by dividing the net sales of each company in the industry by the total sales of that industry, each company's market share is calculated. Finally, the index is obtained for that industry in a year, by summing up the square market share of companies in each industry. This index inversely shows a criterion of competition. So the smaller the mathematical number, the more competition in the industry. For this reason, the final digit will be multiplied by -1 for easy analysis of this variable. In summary, equation (2) will be used to measure the industry's competition situation variable.

$$HHI_{i,t}=-Log(\sum_{1}^{n} S_i^2)$$

Equation 2)

HHI: Competition status in the industry related to company i in year t.

S: The share of the company i market in the industry.

N: The number of companies in the industry.

Control variables

Firm size: As the risk of large firms is lower and therefore the expected returns of the shareholders and their cost of capital are less, we expect the firm size to affect the company's earning management; as the size of the firm increases, the probability of earnings management increases. In this research, the logarithm of the accumulation of assets at the end of the fiscal year is used as the measure of the firm size.

Financial leverage: Financial leverage indicates more capital for investments or restrictions on the company's investment. The debt ratio reflects the agency relation and complexity of the entity's operations through the amount of financing out of the scope of ownership. In this research, the financial leverage is obtained by dividing the company's long-term total debt into total assets.

Return on Assets (ROA): It is the indicator of the company's profitability, depending on the total assets of that company. Return on Assets is an idea of efficient management of using assets to generate earnings (productive assets) calculated by dividing net annual earnings into total company assets.

Loss: It is equal to 1 if the company reports a loss in year t; otherwise it is zero.

Industry type: The type of industry is the industry in which the company operates. Therefore, any company that operates in its related industry is 1, otherwise 0.

Fiscal year (YEAREND): It is the end of the company's financial year. If the last day of the year is the end of the company's financial year, it is 1, otherwise 0.

Research models

After calculating the variables, we use the regression model to test the first, third and fifth hypotheses as follows:

Dis Q = a0 + a1CEOTit + a2CEOFEXit +a3AudMCompti + a4SIZE + a5LEV + a6 Loss + a7 Roa+ a8INDUSTRY+ a9YEAREND +εit

εit: Model error rate

The index i and t represent the company and the year and all the variables in the model are divided into the sum of the assets at the beginning of the year to be homogeneous.

Therefore, the disclosure quality (DisQ) will be the same model error (ε) values, i.e., the disclosure quality values will be equal to the error values or the remainder of the model's estimate at cross-section of data, for each industry and per year.

To test the second, fourth, and sixth hypotheses, the regression model will be used as follows:

$$CompAcct_i = a_0 + a_1 CEOT_{it} + a_2 CEOFEX_{it} + a_3 AudMCompt_i + a_4 SIZE + a_5 LEV + a_6 Loss + a_7 Roa + a_8 INDUSTRY + a_9 YEAREND + \varepsilon_{it}$$

Table 1) Defining variables

Group	Variable type	Variable name	Symbol	Calculation method
Dependent variable	Dependent	Disclosure quality	DisQ	The rating awarded to the company is based on the rating of the companies by the Tehran Stock Exchange
Dependent variable	Dependent	Comparability	Comparability	Based on the model of Franco et al., based on returns and profits
Control variables	Control	Firm size	SIZE	The natural logarithm of the total assets
	Control	Financial leverage	LEVERAGE	Total long-term debt divided by average assets
	Control	Loss	Loss	It is equal to 1 if the company reports a loss in year t, otherwise it is 0
	Control	Return on assets	ROA	The division of net annual profit by the total assets of the company.
	Control	Industry type	INDUSTRY	Each company that operates in its related industry is 1, otherwise 0 is assigned.
	Control	Fiscal year	YEAREND	If the last day of the year is the end of the company's financial year, the value is 1 otherwise 0.
Independent variables	Independent	CEO's tenure	CEOT	The CEO's tenure is equal to the number of years the CEO is in this position
Independent variables	Independent	CEO's financial experience	CEOFEX	If the CEO has at least a bachelor's degree in financial discipline, such as accounting, management, and economics 1, otherwise 0
	Independent	Competition in audit market	AudMCompt	To measure competition in the audit market, the Herfindahl Index is calculated based on net sales

4. The results

According to Table 2, the mean and median of the variables do not differ significantly, and the distribution of variables can be considered normal. On the other hand, low standard deviation in variables also confirms this issue. But in general, it should be examined using inferential statistics (it should be noted that accounting data is not practically normal, and this is usually not examined in regression methods). All observations are presented after the removal of outlier data.

Regarding the competition in the audit market, its mean is 1.762 and the manager's expertise is 0.363. This amount is lower than the theoretical mean of 0.5, and the CEO's financial expertise in sample companies is somewhat low. The tenure is also about 3 years. The dependent variables, i.e., comparability and disclosure quality, have a mean of 1.118 and 0.711, respectively.

The financial leverage variable has a mean of 0.079 and a return on assets of 0.097, i.e. the net earnings compromises about 10% of the assets of the sample companies. The loss variable also has a mean of 0.234; in other words, about 24% of companies and sample observations are losing. About 98% of companies also have the fiscal year in March.

Table 2) Descriptive statistics of variables

Variable	Symbol	Mean	Median	Sd	Min	Max
Competition in the audit market	AUDMCOMPT_IT	1.762	1.738	0.662	0.239	4.711
Financial expertise of CEO	CEOFEXIT_	0.363	0.000	0.481	0.000	1.000
CEO tenure	CEOTIT	2.999	3.000	1.961	1.000	11.000
Comparability	COMPACCTI	1.118	0.651	2.416	-1.241	3.769
Disclosure quality	DISQ	0.711	0.751	0.202	-0.012	0.999
Specific industry	INDUSTRY	0.542	1,000	0.499	0.000	1.000
Financial leverage	LEV	0.079	0.047	0.104	0.001	0.998
Loss	LOSS	0.234	0.000	0.424	0.000	1.000
Return on assets	ROA	0.097	0.088	0.155	-1.038	0.627
Firm size	SIZE	14.193	14.021	1.45	10.352	19.149
Fiscal year in March	YEAREND	0.984	1.000	0.124	0.000	1.000

Normality of variables

As the results of Table 3 show, none of the variables follow the normal distribution despite scaling (the significance of the Jarque and Bera test for all is below 5%). However according to the central limit theorem, if the number of observations is more than 30, then data can be assumed normal.

Correlation coefficients of variables

Unlike regression, which measures the effects of variables on the whole, the correlation coefficient measures two by two and measures the correlation between the two variables. This way, the more correlation between the two variables, the better results will be achieved. According to the results of Table 4, it can be seen that because the variables used in the research are mostly affected by earnings and return, there is a good correlation between them, which also leads to improved regression conditions. Also, in the case of the direction of variables, the direction of relations should be considered for relationships, in regression, and the effect of other variables.

Hypothesis testing

The previous sections examined descriptive statistics and necessary assumptions to prepare the variables for fitting the regression and testing the hypotheses. In this section, the hypothesis test is examined. First, we examine the default tests of the two models.

As can be seen, the significance of the F-limer (Chow) test in both models is 0.000, indicating that the fitting of the models will be as the panel. On the other hand, the significance value of the Hausman test, which examines the fixed effects in contrast to the random effect, is 0.000 for both models and below 5%. Therefore, the test of both models will be done in the form of a panel with fixed effects.

Testing the first, third and fifth hypotheses

The output of Table 6 reports the results of the first, third and fifth hypotheses. According to the table, it is evident that the significance of Fisher's statistic is 0.000 and the model is linear. Also, the adjusted coefficient of determination is 0.383, showing that about 38% of the dependent variable is explained by explanatory variables. The Durbin-Watson statistics with 2.270 and being in a range between 1.5 and 2.5 represent a lack of correlation between model errors.

But in the hypothesis test, it can be seen that the significant amount of competitive variables in the audit market, the financial expertise of the CEO and his tenure is 0.164, 0.003 and 0.014, respectively, and only two variables of financial expertise and tenure are below 5%. Therefore, the third and fifth hypotheses are confirmed and there is a significant relationship between the financial expertise of the CEO and his tenure with disclosure quality. However, it should be noted that the coefficient of financial expertise is -0.051 and the coefficient of tenure is 0.004; that is, there is a reverse significant relationship between financial expertise and disclosure quality, but there is a direct significant relationship between the tenure and the disclosure quality.

On the other hand, there is also a significant relationship between loss control, return on assets, firm size, fiscal year in March and disclosure quality.

Table 3) Normality of variables

Variable	Symbol	Jarque and Bera test	Significance
Competition in the audit market	AUDMCOMPT_IT	56.032	0.000
CEO's expertise	CEOFEXIT_	121.110	0.000
CEO tenure	CEOTIT	190.570	0.000
Comparability	COMPACCTI	296732.300	0.000
Disclosure quality	DISQ	71.720	0.000
Specific industry	INDUSTRY	118.025	0.000
Financial leverage	LEV	13297.270	0.000
Loss	LOSS	190.838	0.000
Return on assets	ROA	1470.534	0.000
Firm size	SIZE	152.116	0.000
Fiscal year at March	YEAREND	111257.300	0.000

Table 4) Correlation coefficients of variables

Variable	AUDMCOMPT_IT	CEOFEXIT_	CEOTIT	COMPACCTI	DISQ	INDUSTRY	LEV	LOSS	ROA	SIZE	YEAREND
AUDMCOMPT_IT	1.000	-0.016	0.063	-0.112	-0.016	0.217	-0.101	0.045	-0.062	-0.119	0.040
CEOFEXIT_	-0.016	1.000	-0.021	0.078	-0.133	-0.134	-0.020	0.015	-0.082	0.065	0.024
CEOTIT	0.063	-0.021	1.000	-0.016	0.050	0.103	0.076	0.002	0.034	-0.029	-0.029
COMPACCTI	-0.112	0.078	-0.016	1.000	-0.018	-0.023	-0.031	-0.065	0.107	0.370	-0.002
DISQ	-0.016	-0.133	0.050	-0.018	1.000	0.009	-0.212	-0.483	0.384	-0.088	-0.066
INDUSTRY	0.217	-0.134	0.103	-0.023	0.009	1.000	-0.101	0.058	-0.018	0.034	0.045
LEV	-0.101	-0.020	0.076	-0.031	-0.212	-0.101	1.000	0.301	-0.392	0.039	0.030
LOSS	0.045	0.015	0.002	-0.065	-0.483	0.058	0.301	1.000	-0.556	0.004	0.043
ROA	-0.062	-0.082	0.034	0.107	0.384	-0.018	-0.392	-0.556	1.000	0.030	-0.009
SIZE	-0.119	0.065	-0.029	0.370	-0.088	0.034	0.039	0.004	0.030	1.000	-0.004
YEAREND	0.040	0.024	-0.029	-0.002	-0.066	0.045	0.030	0.043	-0.009	-0.004	1.000

Table 5) Default model tests

Model	Test type	Statistics	Significance
First	Chow	3.580	0.000
	Hausman	43.020	0.000
Second	Chow	1.380	0.000
	Hausman	27.090	0.000

Table 6) Results of testing first, third and fifth hypotheses (dependent variable, disclosure quality)

Dis Q = a_0 + a_1 AudMCompti + a_2CEOFEXit + a_3 CEOTit + a_4SIZE + a_5LEV + a_6 Loss + a_7 Roa+ a_8INDUSTRY+ a_9YEAREND +εit					
Operational definition	**Symbol**	**Coefficient**	**SD**	**T-statistics**	**Sig.**
Fixed coefficient	C	1.056	0.027	38.610	0.000
Competition in the audit market	AUDMCOMPT_IT	0.005	0.003	1.390	0.164
CEO's speciality	CEOFEXIT_	-0.051	0.017	-2.904	0.003
CEO tenure	CEOTIT	0.004	0.001	2.456	0.014
Financial leverage	LEV	0.006	0.029	0.239	0.810
Specific industry	INDUSTRY	-0.005	0.013	-0.419	0.674
Loss	LOSS	-0.207	0.018	-11.160	0.000
Return on assets	ROA	0.176	0.037	4.764	0.000
Firm size	SIZE	-0.032	0.006	-5.138	0.000
Fiscal year in March	YEAREND	-0.099	0.016	-5.971	0.000
Fisher statistics	49.565				
Fisher statistics significance	0.000				
Coefficient of determination	0.390				
Adjusted coefficient of determination	0.383				
Durbin- Watson statistic	2.270				

Testing the second, fourth and sixth hypotheses

The results of testing the second, fourth, and sixth hypotheses are reported in Table 7. According to the table, the significance of the Fisher statistic is 0.000 and the adjusted coefficient of determination is also 0.718, which shows that about 72% of the dependent variable is explained by the explanatory variables. The Durbin-Watson statistic with a value of 1.907 and a range of 1.5 to 2.5 represents a lack of correlation between model errors.

However in the hypothesis testing, it is observed that the significant amount of competition in the audit market, the CEO's financial expertise and his tenure are all 0.000 and below 5%. Therefore, all three hypotheses are confirmed and there is a significant relationship between the audit market competition, the CEO's financial expertise and his tenure and comparability of financial statements. Also, the coefficients of these variables were -0.110, -0.087 and -0.059, respectively, indicating a negative relationship between competition in the audit market and comparability, a positive relationship between the CEO’s financial expertise and comparability and a negative relationship between tenure and comparability of financial information.

On the other hand, all the control variables except for “fiscal year being in March” have a significant relationship with the comparability of financial statements.

Table 7) Test results of second, fourth and sixth hypotheses (dependent variable, comparability)

CompAccti = a0 + a1 AudMCompti + a2CEOFEXit +a3CEOTit + a4SIZE + a5LEV + a6 Loss + a7 Roa+ a8INDUSTRY+ a9YEAREND +εit

Operational definition	Symbol	Coefficient	SD	T-statistics	Sig.
Fixed coefficient	C	-1.643	0.519	-3.164	0.001
Competition in audit market	AUDMCOMPT_IT	-0.110	0.022	-4.943	0.000
CEO's expertise	CEOFEXIT_	0.087	0.023	3.815	0.000
CEO tenure	CEOTIT	-0.059	0.012	-4.702	0.000
Financial leverage	LEV	0.046	0.021	2.159	0.031
Specific industry	INDUSTRY	0.018	0.046	4.042	0.000
Loss	LOSS	0.057	0.013	4.165	0.000
Return on assets	ROA	0.074	0.028	2.586	0.009
Firm size	SIZE	0.040	0.067	5.913	0.000
Fiscal year in March	YEAREND	0.112	0.156	-0.716	0.473
Fisher statistics	11.481				
Fisher statistics significance	0.000				
Coefficient of determination	0.729				
Adjusted coefficient of determination	0.718				
Durbin Watson statistics	1.907				

5. Conclusion

The success of any organization greatly depends on its managers in achieving their goals. The organisation will achieve its goals if the managers do their job properly. Therefore, managers encounter problems in performing their tasks and should identify different solutions and choose the best solution. Therefore, managers need timely, reliable and comparable information. In economic decision-making, information plays a vital role and without sufficient information, investors cannot identify opportunities and risks appropriately. Information can only be useful to users if they are of higher disclosure quality and more comparable.

However, given the market's competitive conditions, managers face many financial reporting challenges. On the one hand, the creation of a balance between the transparency of reporting and the lack of disclosure of excessive information is imperative since financial reporting, while being able to help the company's competitiveness, may also damage its competitiveness by providing strategic information to its competitors. On the other hand, managers should decide what quality the disclosed information should have to create a competitive advantage according to the competitive condition, while preventing undermining its competitive position. Meanwhile, economists believe that the exclusivity of the products market of a company increases agency issues and problems. In other words, companies active in the markets and exclusive industries have a vague and imprecise information environment. Under such circumstances, investors cannot assess the company's performance (Dhaliwal et al., 2008). Consequently, product market competition is considered an effective tool for solving agency problems and improving firm governance. It is considered a stronger mechanism than intra-organizational and even external governance mechanisms. Nevertheless, little attention has been paid to the issue of the CEO’s characteristics and the competitiveness of the product market as an important mechanism for accounting and financial reporting.

The present study examined the relationship between CEO’s characteristics and disclosure quality and the comparability of financial information. The results of the third, fifth, fourth and sixth hypotheses that examined the relationship between CEO's characteristics including his expertise and his tenure with the quality of disclosure and comparability, are similar to those of Francis et al. (2008), Zhang and Werisma (2009), Kim et al., (2016), Golden et al., (2018), have shown that CEO characteristics are important because they affect the accounting outcomes of the company, they find most of the opposite positive features for managing the company by the CEO to maintain high-quality financial reporting. Also, CEOs with more potential and human capital can maintain the system and control the company's financial information. Therefore, companies with such CEOs are ranked higher in terms of financial reporting quality. Like Batwah et al. (2015), they argued that the CEO's tenure improves his experience and knowledge of accounting practices, especially when presenting false reports, which enables the CEO to discover and prevent any misbehavior. Also, Salehi et al. (2017) examined the relationship between the CEO's characteristics and the quality of financial disclosure. They concluded that there was a positive significant relationship between the disclosure quality and the CEO's tenure, which is similar to the current results.

The study also examined the relationship between competition in the audit market and the quality of disclosure and comparability of financial information. Hence, the results of the first hypothesis test, which examined the relationship between competition in the audit market and the quality of disclosure are also in line with the results of the research by Balakrishnan and Cohen (2011). Cheng et al. (2013) concluded that competition in the market is one mechanism that regulates financial reporting processes. Therefore, political, agency and proprietary costs are complementary factors in the relationship between market competition and the quality of accounting information. Accordingly, companies with higher costs are less competitive and vice versa. Therefore, these factors, alone or in combination, incentivise managers to disclose low-quality accounting information. Also opposed to the results of Balakrishnan and Cohen (2014), were Lynn and Wi (2014), Lee and Jean (2016), and Kim (2017), who argued that market competition reduced the disclosure of information through ownership costs and the pressure on the capital market, as well as the increased ownership costs of firms due to competitors, reduces the amount of disclosure.

The results of testing the second hypothesis, which examined the relationship between the competition in the audit market and the comparability of financial statements, similar to those of Cheng (2013), concluded that there was a positive significant relationship between market competition and comparability of financial information. Therefore, competition in the audit market is an effective mechanism for increasing the quality of information.

According to the results, since CEOs are at the top management level in the organization, it can be admitted that if the CEO plays a role in a job position for a longer term, he will know more about the processes and procedures employed by the organization. Also, if such a CEO has financial expertise, he will try to apply accounting procedures that are in accordance with accounting and auditing standards. Therefore, it is recommended that the board of directors and shareholders of companies, in addition to taking into account quantitative criteria such as earnings, pay attention to managerial characteristics, including tenure and financial expertise considering the information environment of Iran and its high volatility. Also, given the significant relationship between market competition and comparability, the audit firms and their size should be considered because it shows better comparison.

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Collecting Tax Based on the Use of Governmental Resources and Facilities

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Abstract

Objective: The purpose of the present research in the first stage is to investigate tax evasion and satisfaction from the point of view of tax payers and investigate government expenses from the point of view of tax staffs in the current state of tax collection in the country. In the second stage, this research seeks to present a new model regarding the method of calculating and collecting taxes based on the use of government resources and facilities.
Methodology: The statistical population of this research consists of two general sections of tax payers and tax affairs employees in Fars province. The sample size is determined based on Cochran's formula. Also, simple random sampling method is used. In order to test the hypotheses of the research, SPSS version 22 was used, and according to the normality or non-normality of the data distribution, "one sample t" and "median test" were used respectively.
Results: The findings of the research indicate that the inappropriateness of the current tax collection situation in the country has increased the dissatisfaction of taxpayers and increase tax evasion. Meanwhile, from the point of view of taxpayers and tax officials, the approach of simulating taxation based on the use of government resources and facilities increase taxpayers' satisfaction and reduce tax evasion and can help reduce government costs.
Innovation: rendering a new model regarding the method of calculating and collecting taxes based on the use of government resources and facilities is innovation of this syudy.

Keywords: taxation based on the use of government resources and facilities, satisfaction of taxpayers, tax evasion, government expenses.

1. Introduction

Developing countries, including Iran, are always under the pressure of providing resources for growing public expenses and are caught in tax systems that disrupt the behavior of economic agents (Darvishi and Mahdian, 2016). In this regard, despite tremendous efforts made by researchers in the field of solving the problem of tax and tax evasion, unfortunately, not only has no definitive treatment been observed for this phenomenon, but it has also not taken the path to recovery. This is despite the fact that all the efforts made by researchers over the years have been ineffective only to the extent of diagnosing pain and illness or finally prescribing painkillers; Unaware of the fact that in the case of some diseases, such as cancer, not only painkillers will not have a positive effect on the treatment of the disease, but it will even cover up the growth of a gland, which will definitely even seconds be effective in its eradication and definitive treatment.

What researchers have identified and stated as problems up to now is that there is no tax fairness and justice, the culture and acceptance of voluntary tax payment still has no place among the people of different societies, the complexity and ambiguity in tax laws, the attitude of taxpayers towards the government, etc….., all complications which have a deep root, whose definitive treatment should be the basis of treatment. Since the survival of governments depends on taxes and the injection of taxes on the body of government is in most cases like the injection of blood on a half-life body, the current research with a new and fundamental approach and attitude tries to find a a quick and effective solution to eradicate this social and economic problem in the country. This issue is very important since the country's tax system can be effective in realizing the resistance economic policies (Khadem Alizadeh, 2015).

Currently, tax collection in most countries of the world, as well as in Iran, is based on the income of individuals, and this approach of the government in collecting taxes from taxpayers has made taxpayers look for ways to evade taxes and always think of taking measures in this direction. (Ilena Kar News Agency, 2016). The result is that sometimes the tax amounts are not collected until several years after the assessment, and only bring the additional costs of paying salaries of employees of tax department (in the various departments of assessment, notification, tax dispute resolution boards and the Supreme Tax Council) to the government.

Since the tax is actually the share of every citizen and his participation in paying government expenses for receiving public services, as long as every person, as a citizen, utilize the welfare and public facilities provided by the government from public funds, should participate and cooperate in the same proportion in providing the current costs related to these facilities. According to this definition, each person should participate in paying the costs of providing and maintaining these facilities to the extent of using the facilities provided by the government. Therefore, tax collection should not be based on income but should be based on the use of public facilities and government resources of the city and country where each taxpayer resides. The sources of income in the country's budget are divided into four categories:

- oil resources;
- Tax revenues;
- Resources from privatization;
- Resources from the increase in the price of energy carriers and other incomes.
- Costs or expenses are also divided into three categories in the country's budget:
- Current costs;
- Construction costs (acquisition of capital assets);
- The cost of importing gasoline and diesel.

It is clear that the source of financing for construction costs is the income from privatization, and the cost of importing gasoline and diesel from the sources is from the increase in the price of energy and other incomes (Neely et al., 2008); These two cases are not considered much in this article, and only give a glance on it. the main purpose of this research is how to provide current expenses from tax revenues.

In the rest of the article, the theoretical foundations and the background of research, as well as the research method and hypotheses derived from the problem and the theoretical foundations of the research are stated. Finally, the results of the hypothesis test are presented and at the end, according to the hypothesis test results, the theoretical foundations and the background, a conclusion is made. By suggestions and presenting the new model of tax collection in the country, the conclusion is made.

Theoretical Foundations and Research Background

According to the law, all citizens have rights that the government is obliged to fulfill, and they also have duties towards the government, including paying taxes. In this regard, tax is known as one of the main sources of government revenues (Falahti, 2012). In our country, submitting a declaration of income and readiness to pay taxes is done by taxpayers. Taxes in the Islamic Republic of Iran are classified into two groups, direct and indirect tax. Direct tax has a wider scope than indirect tax. In other words, direct tax is a tax that is collected from individuals, and legal entities when they make profits.

Sociologists believe that when the direction of public opinion and the society's attitude become one with the government's policies, the officials will undoubtedly achieve the expected goals by spending the least amount of time and money (ISNA Students News Agency, 2015). In fact, the success of the governments is determined by the attitude of the people in the society, and pay attention to this point will guarantee the durability and success of the governments (ISNA Students News Agency, 2015). This idea makes clear the need to explain the effects of tax payment and the need to introduce the place of its consumption. When the place of consumption of taxes received from taxpayers, which is injected into the country's budget and is considered as a source for establishing and equipping infrastructure and construction projects, is explained to the people in a tangible way, the people of the society by considering the place of consumption of taxes, have more confidence in the tax system and therefore, their participation in paying taxes increase. The actions that the tax organization has taken in recent years to introduce the effects of tax payment in the society have been in line with the above mentioned goal and with the approach of clarifying tax laws and circulars with the focus of gaining public trust. For example, according to the approvals of the parliament in the last few years, one percent of the value added tax is assigned for the health and treatment of the people of the society and is given to the Ministry of Health. This amount of tax is spent on equipping hospitals and healthcare facilities and also reducing the treatment costs of society members.

Undoubtedly, enlightening and clarifying the public opinion about where taxes are spent and its positive effects on the prosperity and development of the country has a significant effect on increasing people's trust and persuading the public opinion to pay taxes. Consistent expert investigations and comprehensive measures should be carried out in this regard in order to persuade taxpayers sto pay their taxes in due time. Providing information on this matter, to make people aware of where taxes are spent, can have a positive effect on public opinion and increase their desire to participate in paying taxes (ISNA Student News Agency, 2015). Since the importance of taxes in the country as a blood transfusion to the body of the society is the guarantee of the life of the governments and consequently the prosperity of the nation, it will undoubtedly be an inspiration for life when it has the three conditions of being healthy, appropriate, and timely. The absence of any of these three conditions will have no consequences other than destruction. Now, taking into account the three necessary and basic conditions for tax revenues in each country (healthy, appropriate and timely) in order to determine the fulfillment of the three mentioned conditions, a brief look at the tax collection system in Iran is rendered.

Currently, the annual performance tax is determined based on the income of each person and legal entities and notified to the taxpayer. In this framework, the process that the country's tax affairs organization undertakes to collect taxes, from beginning to end, is as follows:

1) assesment stage: If the taxpayer has submitted the tax declaration and legal documents to the tax collection office, the tax officer has one year to examine the declaration and records of the person or legal entities. and if he has not submitted the declaration and records, the tax authorities have 5 years to assess the tax of taxpayer.
2) Notification stage: After the assessment, the notification officer must deliver the tax assessment sheet to the taxpayer or his legal representative and receive confirmation; This stage also takes at least a few months.
3) Objection stage: After receiving the tax assessment form, the taxpayer can appeal the assessment tax amount within thirty days.
4) In the first stage of handling the objection, the head of the relevant tax department is obliged to deal with the case within 45 days. At this stage, the head of the relevant tax department agrees or disagrees with the taxpayer on the tax amount after considering the documents provided by the taxpayer and might deduct an amount from the tax as a discount or accepting some returned expenses by the tax auditor.
5) If the taxpayer does not agree with the amount of tax in above stage which might be adjusted or not, the head of tax department is obliged to refer the case to tax dispute resolution boards to resolve the dispute.
6) The stage of setting a time for the meeting of the Tax Dispute Resolution Board takes at least 5 to 6 months.
7) 7 .After the first meeting of the Tax Dispute Resolution Board, issuing and communicating the board's decision to the taxpayer takes about 5 to 6 month in practice.
8) At this stage, the decision of the board may be issued in 3 different cases:
   a) The amount of the previous tax has been verified and the file has been sent to the tax bureau, in this case the issuance and notification of the decision of the first Tax Dispute Resolution Board to the taxpayer requires at least 4-5 months.
   a. Previous tax is adjusted according to the presentation of positive documents by the taxpayer and the file will send to the tax bureau for notification, in this case, the issuance and notification of the decision as in item a will take at least 4 to 5 months.
   b) Because the case needs to be re-examined according to the request of the taxpayer and the decision of the head of the dispute resolution board, the decision to re-examine the case is sent to one of the tax staffs which again will take at least 4 to 5 months.
9) In the case of (a) and (b), the taxpayer has the right to protest again after seeing the result. In this case, the document send to secondary Tax Dispute Resolution Board for review. It is take the same length of time mentioned in previous stage. In case (c), the tax officer,requests documents, and issue his opinion about this case, which might takes up to one year. And again, at this stage, the taxpayer has the right to protest and refer the case to the secondary Tax Dispute Resolution Board.
10) After passing through the secondary Tax Dispute Resolution Board stage, the taxpayer has the right to refer his complaint to the Supreme Tax Council within the stipulated time, the process of convening the meeting, issuing and issuing the decision will take at least 1 year in the most optimistic case.

It is clear that crossing out of these 10 stages might take some years. During these years tax is not collected, and in opposite tax collection expenses occur in the stages of assessment, approval, collection, tax dispute resolution boards and the Supreme Tax Council. In some cases that the tax amount is low, up to several times of tax is paid to the officers for salary by the government. Even in some cases the taxpayer is right and nothing is collected at the end. Even if after the long process, tax authorities can collect the tax it has a severe decline in value due to high inflation in the country.

The second price that the government pays to collect this amount of tax, which is perhaps more important and destructive than the first price in most cases, is the psychological impact on the public mind, which has resulted in creating a gap between nations and governments in these years. The people do not consider themselves entitled to pay this tax for two reasons. Why should they pay taxes to the government? And why does he pay this amount? Failing to get proper answers to these questions, he will look for ways to evade taxes and it turns out, this is a chase that we see todays. The government always spends a lot of money to design control systems to determine the real income of taxpayers and collect taxes on that income, and the people are always looking for solutions to break these control systems to report lower income to the government. Based on this, I can say that none of the tax revenues in Iran will ever meet the three basic and necessary conditions of being healthy, timely and appropriate

Previous researches identified the ineffectiveness of Iran's tax system as the main cause of the excessive increase in the socio-economic tax evasion phenomenon, and by emphasizing on issues such as complexity and ambiguity in tax laws and regulations, the weakness of tax policies in tax processes, the human resources (employees of the Tax affairs department) and taxpayers have provided solutions to solve each problem as follows:

A) In dealing with the complexity and ambiguity of tax laws and regulations, the characteristics of good and efficient laws are prescribed as (Rezaei, 2015; Falahati, 2014; Tayebnia, 2015).

a) efficiency;

b) organization;

c) ability to understand;

d) coherence.

b) The summary of the financial bottlenecks and problems in Iran's financial systems is categorized as follows (Rezaee, 2016; Garainejad and Chehrdar, 2011; Diantapi et al., 2012; Hadian and Tahvili, 2014):

- Most of the processes are inefficient and fragmented. Also, there is no minimum measurement criteria for them.
- Lack of attention to satisfaction of taxpayers.
- Complicated employment and tax rules hinder reforms of the processes.
- The existence of limited information creates weak information regarding taxpayers.
- Implementation methods cause carelessness and significant amount of protest.
- c) In the field of human resources, researchers have addressed the existing problems regarding the tax affairs organization and consider the following factors in its effectiveness and reforms (Bank and Budak, 2012; Molaipour, 2011; Fallahati, 2012):
- Paying salaries and benefits with expertise and activity;
- flexibility in salary system;
- Considering group ideas in tax organization;
- Having job security from low level to senior managers;
- Need for more human resources and more equipments.
- d) In the field of solving the issues and problems of taxpayers, which is considered one of the most important and main concerns of government officials in order to collect tax volunteerly, many studies have been conducted and finally, certain cases have been identified as factors for volunteeringly accepted tax are described below.
- Tax fairness and justice;
- Organizational capacity of tax administration.
- The level of information of taxpayers.
- Culture;
- Integrity of taxpayers;
- Disability to payment.
- Internal social factors.
- Attitude towards the government.

Research Hypotheses

In order to achieve the goals of the research in this article, according to the theoretical foundations and background of the research, hypotheses have been developed as follows:

First hypothesis: Inappropriateness situation of the current tax collection in Iran increases the tendency of taxpayers to evade taxes.

Second hypothesis: collecting taxes based on the use of government resources and facilities will reduce tax evasion of taxpayers.

Third hypothesis: the inappropriateness situation of the current tax collection in Iran leads to the dissatisfaction of taxpayers.

Fourth hypothesis: collecting taxes based on the use of government resources and facilities increases the satisfaction of taxpayers.

Fifth hypothesis: levying taxes based on the use of government resources and facilities reduces government costs.

Research Method

The research method used is a descriptive correlational survey type, which is considered a cross-sectional study in terms of time. The statistical population of this research consists of two parts; The first part of the statistical population is tax payers in Fars province, whose number is around 250,000 according to the inquiry made by the Tax Affairs Organization of Fars province. The second part of the statistical population includes the employees of tax affairs in Fars province, which according to the inquiry made by the recruitment department of tax affairs organization in Fars province, their number is about 1350 people. Using the Cochran formula, the sample size for the statistical population of tax payers was equal to 384 people and for the statistical population of tax affairs employees was equal to 150 people. In order to increase the power of the test and reduce the sampling error, 400 questionnaires were distributed to the statistical population of tax payers and 207 complete questionnaires were collected. Also, 200 questionnaires were distributed for the statistical population of tax affairs employees and 127 complete questionnaires were collected. It should be noted that the sampling method used is simple random.

The tool used in this research to collect data is a questionnaire designed by the researchers. The first part of the questionnaire includes general questions, which consists of 4 questions. These questions provide information about gender, age, level of education and work experience of the respondents. The second part of the questionnaire consists of 29 questions, each of which examines one of the hypotheses of the research. This questionnaire has been evaluated in the form of a Likert spectrum with the options of not at all, little, medium, much and very much, respectively, with the ranks of 1 to 5.

The Method of Data Analysis and Hypothesis Testing

Descriptive and inferential statistical methods used to analyze the data obtained from the questionnaire. In order to qualitatively analyze the general information obtained from the respondents, descriptive statistics methods including classification and organization of information, relative and absolute frequency distribution used. In this research, first, Kolmogorov-Smirnov test was used to test the normality of the data, and then according to the normality or non-normality of the data distribution, the "one-sample t" test or the "median test" at the 95% confidence level used respectively. In this research, in order to ensure content validity, the questions of the questionnaire were modified and finalized with the opinion of experts in several stages. Cronbach's alpha test was used to evaluate the reliability of the questionnaire. For this purpose, at first, 30 questionnaires were randomly distributed among people of statistical population. The results of the calculation of Cronbach's alpha for the questions related to each of the research hypotheses are presented in Table No. 1.

Table1. The Result of Cronbach's Alpha

Questions related to …	Cronbach's alpha
First hypothesis	0.712
Second hypothesis	0.821
Third hypothesis	0.768
Fourth hypothesis	0.798
Fifth Hypothesis	0.813

Research Findings

Descriptive Statistics

In the first part of the questionnaire, 4 general questions related to the personal characteristics of the respondents, including gender, age, level of education and work experience asked. The results obtained from the descriptive analysis of these questions are rendered in Table 2.

Inferential Statistics

Table 3 posits the result of Kolmogrov-Smirnov test for investigating the normality or non-normality of research data.

The results of the normality test showed that the frequency distribution of the data related to the first, second and fourth hypotheses is not normal. Therefore, the aforementioned hypotheses were examined using the "median" test. The results listed in table 4 indicate the acceptance of the first, second and fourth hypotheses of the research. In other words, the results indicate the confirmation of the opposite assumption. According to the fact that for all these three hypotheses, most of the respondents have chosen answers greater than the median, it can be claimed that the current situation of tax collection in Iran is inappropriate and causes an increase in tax evasion. Thus, tax collection based on the use of government resources and facilities reduce tax evasion of taxpayers and increase their satisfaction.

Because the results of the normality test show that the distribution of the frequency of the third and fifth hypotheses of the research is normal, these hypotheses examines using the "one-sample t" test. Table 5 shows the results of the statistical test of the third and fifth research hypotheses. Considering the positivity of the lower and upper limits, the average of population is significantly greater than the tested value; That is, the inappropriateness of the current situation of tax collection in Iran leads to the dissatisfaction of taxpayers. Therefore, collecting taxes based on the use of government resources and facilities will reduce government costs.

Table 2. General Information of the Questionnaire

Row	Questions		Staff of tax organization		Tax payers	
			percent	frequency	percent	frequency
1	Gender	Women Men	89 11	113 14	67.8 32.2	141 67
		Total	100	127	100	208
2	Age	<30 30< <40 41< <50 >50	14.2 50.4 19.1 6.3	18 64 37 8	29.3 47.6 15.4 7.7	61 99 32 16
		Total	100	127	100	208
3	Education	Diploma Diploma Bachelore M.A. PH.D.	1.6 6.3 44.1 46.5 1.6	2 8 56 59 2	20.2 12 40.4 25.5 1.9	42 25 84 53 4
		Total	100	127	100	208
4	Work Experience	<5 years 5<*<10 11<*<20	25.2 22 52	32 28 66	28.4 29.8 28.8	59 62 60

Row	Questions		Staff of tax organization		Tax payers	
			percent	frequency	percent	frequency
		>20	0.8	1	13	27
		Total	100	127	100	208

Table 3. Kolmogrov-Smirnov Test

Hypothesis	number	mean	K-S test	Probability
1	208	3.770	1.384	0.043
2	208	4.033	2.020	0.001
3	208	3.551	1.113	0.168
4	208	4.066	1.752	0.004
5	127	3.563	0.950	0.328

Table 4. The Result of Hypotheses 1, 2, and 4

Hypothesis	Class	number	% of observation	Test Ratio	Significance	result
1	<=median	27	0.13	0.5	0.000	Acceptance
	>median	181	0.87			
	Total	208	1			
2	<=median	13	0.06	0.5	0.000	Acceptance
	>median	195	0.94			
	Total	208	1			
4	<=median	13	0.06	0.5	0.000	Acceptance
	>median	195	0.94			
	Total	208	1			

Table 5. The Result of Hypotheses 3, and 5

Hypotheses	T-statistics	Degree of freedom	Significance level	Mean difference	Confidence interval of 0.95 for mean difference		Result
					Low Limit	High Limit	
3	(11.868)	207	0.000	(0.55192)	(0.4602)	(0.4636)	Acceptance
5	(11.899)	126	0.000	(0.56343)	(0.4697)	(0.6571)	Acceptance

New Model of Taxation

Considering the confirmation of the research hypotheses and in line with the realization of the goals of this study, that it is possible to optimize the existing tax system by changing the method to collecting taxes based on the use of government facilities and resources. In the following the proposed model for collecting taxes based on the use of Government resources and facilities will be provided. In this regard, the necessary steps to implement this new method of tax collection are described.

First step: Determining the poverty line

The first step in determining the tax-paying household is determining the poverty line. In determining the country's poverty line, several features are considered:

- Age, ability to work and physical health of each person;
- Amount of assets and employment status of the person;
- Personal independence and not being dependent;

- The number of dependents of each person.

As an example, people and households with the following conditions should be placed below the poverty line:

1) People over 70 years old, physically and mentally disabled, including those people whose age, and disabilities are such that they do not have the strength and ability to do work and provide services to other members of the society.
2) Persons who are employed in official and full-time jobs, but with regard to dependents who are not able to generate income (children, elderly and disabled), their income is only sufficient for basic daily needs.
3) The person, while having conditions 1 and 2 or both mentioned conditions, should be independent and not under the protection of another person or organization or institution.

After determining that the above conditions have been met by any person, regarded as below the poverty line, and therefore they are exempt from paying taxes, and their share of using public resources and government facilities is provided by oil revenues and other revenues (taxes, exports, etc.). After identifying and exempting the people below and on the poverty line, the providers of the government's current expenses will be exclusive to the people who are above the poverty line.

Second step: How to determine the eligibility of each household in paying the expenses of each budget section

It is obvious that when the tax collection is supposed to be based on the consumption of each household in the country, various cases of the employment and life situation of that household should be considered, some of which are briefly mentioned here:

- The way of employment and income generation and its effect on the development and welfare of other people in the country;
- Number of covered and dependent people;
- Determining the amount of usage from the country's resources and facilities by the taxpayer and dependents.

One of the most prominent and fundamental problems that have been mentioned in previous researches is the lack of fairness and justice in the prevailing tax system. One of the most important examples of the lack of fairness and justice in the ruling tax system is that a person with a revenue of for example 20 million tomans per month, who pays 10 million tomans for housing rent, must pay the same tax as a person who owns a house, a car, a garden, and the same amount of revenue. In this chapter, the following solutions are proposed to ensure fairness and tax justice:

A- In order to avoid any ambiguity in the definitions, it is appropriate to specify the following items in the laws and even with Rial amount and percent of change in every year by considering the inflation rate:

- Classification of people's jobs in order to be placed in the relevant decile;
- Town and village zoning in terms of the value of immovable properties and assets (lands, houses, gardens, shops, workshops, factories, etc.) in order to classify households and determine the corresponding decile;
- Value classification of other movable assets that may be owned by households, such as types of motor and non-motor vehicles, types of supplies and equipment, including administrative, industrial, medical, etc;.
- Classification and valuation of intangible assets that may be in the possession of households, including: royalties, goodwill, patent and exploration rights, etc.

After valuing all the assets and belongings that each household may own, in order to fairly collecting tax, first all households are classified in terms of financial and economic status into predefined deciles.

B- In order to more appropriately determine the poverty line and assigning of each household, it is suggested that the households be divided into deciles as follows:

First decile: households that do not own any assets, do not have a suitable job for their daily livelihood, are unable to work at all due to illness and disability, and households that are financed by government bodies and charities institutions ,or live on monthly pensions.

Second decile: Households that do not own any assets, are employed but barely able to meet their living expenses.

Third decile: Households whose assets and job revenues only cover their daily living expenses.

Explanation: In order to avoid any ambiguity in the laws, it is appropriate for statesmen to provide clear and acceptable limits and definitions for ambiguous concepts (daily living expenses in the usual limit and suitable jobs).

The fourth decile: households whose total assets are a house and a used car (lower areas of the city according to government zoning) and live with a normal revenue.

Fifth decile: households whose assets are located (houses in the average areas of the city and cars in the average range) and live with a normal revenue.

sixth decile: Households that own surplus properties in addition to the average house and car they use (under the terms of the 5th decile, they own assets that are surplus to consumption).

Seventh decile: Households whose assets (house in good areas of the city and good cars) are located while live with a normal revenue.

Eightth decile: Households whose assets are in the same condition as the 7th decile, and whose revenue is above the average.

Ninth decile: Households that have all the conditions of the eighth decile and also own surplus assets are included in this group.

Tenth decile: The rest of the households whose assets and employment income are more than the level of the ninth decile are included in this group.

The third step: determining the payment share of each eligible person from the current expenses

Various factors should be considered in determining the payment share of each eligible person from the country's current expenses:

1. Occupation and way of earning income of the person and his dependents;

Example:

A- A person who has a shop in one of the streets of the city and his revenue is provided from this place, for using the security, health facilities, development, and education and employment, is required to pay the share of providing expenses, but in accordance with capital that he used inorder to provide services (access to the shop in this area) to the people residence there would be exempt from tax.

B- A factory owner who has used his capital in setting up a factory and provided employment opportunities for a number of workers, in exchange for using government facilities such as welfare, security, health which provided the basis for this person's investment, is subject to the payment of the security share. due to the fact that it employs a number of workers and has played a significant role in the creation of employment in the country, it is exempted from paying the share of employment in the determined proportion. By setting up a factory, a step has been taken towards the development of the country, a percentage of this share is also exempt (it should be noted that the percentage of exemptions should be determined by determining the region and the amount of investment.

2. The number of dependents in determining each person's share of paying current expenses;

Example:

Let's assume that the head of the household takes care of both his old and disabled parents and has two students who are studying, this family is exempt from paying taxes for supporting and maintaining 2 elderly and disabled people and for two children, who are student. If these two children are studying in public schools and universities, they are subject to the payment of the share of education and other government services.

The amount of inclusion of each household in paying current expenses is determined based on their position in the ten deciles mentioned in the previous section, and the proposed plan in this regard is stated as follows:

The first to third deciles are considered to be below the poverty line in terms of the fact that they do not own any assets and are barely able to pay their daily expenses and therefore are declared exempt from paying any taxes.

From the fourth decile onwards, they will contribute to the payment of current government expenses based on the use of facilities as follows:

The fourth decile - the assets are at a lowest level and the revenue is at a normal level - (5% to 10%)

The fifth decile - average assets and revenue - (10% to 15%)

The sixth decile - assets are surplus to consumption and sufficient revenue - (15% to 25%)

The seventh decile - assets in the lux areas of the city and sufficient revenue - (15% to 30%)

The eighttth decile - assets in the lux areas and normal revenue - (20% to 40%)

The nineth decile - assets in the lux area and income above the average - (40% to 60%)

The tenth decile - assets in the lux area of the city and surplus to consumption and high revenue - (60% to 100%)

The amount of sharing in current expenses in each decile is defined flexibly because the households classified in each decile will definitely not be similar to each other, and in each class can be divided into several sub-deciles to be clearer and more accurate.

Table No. 6 shows a sample of tax invoices issued to each taxpayer in the new model.

In general, in the current system, first the revenue from taxes is predicted and then based on the amount of unrealized collected income, which is solely based on the predicted revenue amounts of the previous year, the share of expenses of each section of the budget is determined and approved. But the proposed model of this study is the opposite of the mentioned method. In this way, first the current expenses needed to provide the public facilities of the country for a financial year are determined and then the share of each beneficiary is determined.

Table 6: sample of tax bill for tax completion

Name of taxpayer: ---------------			**Decile: -------**		**Year: --------------**
Assets And Their Condition	**Safety Portion**	**Health Portion**	**Welfare And Social Security Portion**	**Development Portion**	**Job And Education Portion**
Home of taxpayer	40%	40%	40%	40%	40%
Factory	20%	20%	20%	20%	exemption
Elderly people		10% exemption	10% exemption		
Total	60%	50%	50%	60%	40%

Conclusion and Suggestions

The results obtained from the first and third hypotheses of the research show that the current situation of tax collection in Iran is unfavorable and causes dissatisfaction of tax payers and as a result increases tax evasion. Thus, it is suggested to reduce the problems caused by these two phenomena i.e. dissatisfaction of taxpayers and tax evasion the authorities should think of solutions as soon as possible and reform the structure of the tax system through immediate and basic measures instead of increasing the pressure on the taxpayers which itself causes an increase in dissatisfaction and in turn induce the increase in tax evasion reform. According to the results obtained from the second and third hypotheses of the research, which is a survey of taxpayers about the new model presented regarding tax collection based on the use of government resources and facilities and taking into account all the conditions of each household, the new model was highly approved by the taxpayers. Therefore, we hope pay attention of the authorities to this model and it it will be implemented as soon as possible at the country level.

Because the confirmation of the fifth hypothesis of this research is the reduction of the government's expenses in the tax employees' salary sector due to the implementation of the new model presented, that is, the collection of taxes based on the use of government resources and facilities, and finally the confirmation of the five hypotheses of the current research indicates an increase in the satisfaction of taxpayers. tax, the reduction of tax evasion and as a result the reduction of government expenses is due to the implementation of the new model of tax collection, it is suggested that the respected officials take the necessary measures to reform the structure of the tax system.

Finally, due to the fact that the new model of taxation has been proposed and researched for the first time, it is suggested that in order to clarify the advantages of this model as much as possible, it should be surveyed and researched on a wider level and with more explanations for other statistical societies. So that the results obtained from the next researches will make the country's tax authorities more confident about the implementation of this model compared to the current system and provide the ground for its implementation at the macro level.

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Audit Fee and the Basis of its Determination and Reasons for Dumping in Iran and the Effect of that on Financial Reporting Quality

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Abstract

Objective: This study investigates the audit fee and the basis for determining that and the reasons for dumping in Iran and the impact of dumping on the quality of financial reporting.
Methodology: The research method in the first stage to analyze the qualitative data - a questionnaire from interviews with experts – is to test the research hypotheses and the structural equation model with the help of Smart PLS Software. In the second stage, to analyze the quantitative data - information obtained from financial statements in the period 2015 to 2020 in 100 companies listed on the Tehran Stock Exchange - is to test the research hypotheses, multivariate regression with panel data.
Results: The results of testing the qualitative data showed that audit quality, expertise in the industry of the auditing firm, reputation of the auditing firm, type of audit comment, length of the auditor's tenure, size of the client, dependence of the client on business groups, having several companies by one client, large number of auditing firms, lack of work in the auditing profession, elimination of Article 272 of the Law on Direct Taxes, exemption of small companies from auditing, low income of auditing firms, loss of auditing firms, lack of adherence of members of the community to professional conduct, lack of auditor expertise and the auditor's lack of knowledge of the profession, lack of accuracy in selecting certified public accountants by relevant authorities, the size of the auditing firm, being a single product and focusing only on auditing services and not paying attention to non-auditing services, economic crisis, lack of specific and compiled principles to determine the audit fee by the Society of Certified Public Accountants of Iran and other relevant authorities, the factor of reputation and credibility of the client's company, audit risk, ownership structure of the client's company, lack of supervision of audit services rates by relevant organizations are those critical factors that according to the theory of auditing professionals and activists in Iran, affect the audit fee and price breaking in auditing contracts. The results obtained from the effect of dumping on audit fees and competition between audit firms on the quality of financial reporting indicate that dumping in audit fees and competition between audit firms reduce the quality of financial reporting.
Innovation: The research results can be helpful for investors, creditors, policymakers, standards and regulatory bodies. It can also effectively develop and improve the quality of auditing and economic development by identifying existing weaknesses and challenges and explaining theoretical frameworks.

Keywords: Audit Fee, Financial Reporting Quality, Audit Quality

1. Introduction

In some countries, such as the United Kingdom and Australia, there has been mandatory disclosure of audit fees for decades. Many other countries, such as the United States (US) (US Securities and Exchange Commission 2000 and the European Union and Belgium (Royal Decree, 2007), following various accounting scandals (e.g. Enron, Lernout and WorldCom), the introduction of Audit Cost Disclosure Regulations mainly arises from concerns about the independence of the auditor from the independent audits that provide audit reports. When mandatory disclosure of information about the costs paid to the auditor and the range of services the auditors provide to their clients is provided, it is likely to increase the competitive price in the audit market (Averhals, Van Caneghem and Willekens, 2020).

Auditors provide their services to the company for a fee. Audit fees are the product of the rate and quality of audit services provided to the companies under review. The audit fee is determined by the auditor and a committee of non-executive members of the board of directors (audit committee) (Auditing Standards, Standard No. 21). According to the Code of Professional Conduct, auditing fees should be determined based on reasonable criteria such as the duration of the audit process, costs associated with providing audit services and expected profits. Audit fee pricing is usually influenced by normal and competitive market conditions of auditing services. This means that the audit fee is usually higher than the fee amount under competitive conditions under normal market conditions. Under the conditions of competition in the market, auditing firms to attract and retain customers may reduce the fee in auditing contracts with the client and as a result, the phenomenon of dumping may occur, ultimately reducing the quality of auditing and financial quality of companies. Accordingly, this study investigates the audit fee, the basis for determining the reasons for dumping in Iran and the impact on the quality of financial reporting.

Understanding how to determine audit fees is essential for auditors, owners, and policymakers. Independent auditors and auditing firms, due to the multiplicity of auditing firms in the market and the creation of competitive conditions for the provision of auditing services, may reduce the audit fee in their audit contract to penetrate the market for auditing services, attract more customers, and continue to operate and cover auditing costs and earn appropriate profits in the future. Due to the possible consequences of reducing the audit fee on the audit services market and the quality of audit services provided, audit researchers can consider this issue to work with the pathology of this phenomenon to protect the audit profession and its position. Previous studies have been conducted in countries where large international institutions have been active and have the largest market share. So far, no research in this field has been conducted in Iran. In the audit services market in Iran, due to creating a community of certified public accountants and increasing competition in the market, examining the impact of this issue on the pricing of the first and subsequent years of auditing can provide evidence in this regard. This has not been seen in previous audit research. For this reason, this study will be the first study that examines the audit fee, the basis for determining the reasons for dumping in Iran and the impact of dumping on the quality of financial reporting in the Iranian audit services market.

2. Theoretical principles and hypothesis development

The pricing of audit services is one of the topics of interest to many audit researchers. For this reason, much research has been done in developed and even developing countries (including the United States, the United Kingdom, Australia, France, New Zealand, Finland, Canada, Japan, India, Bangladesh, Taiwan, Singapore, the United Arab Emirates, and Kuwait) (DeAngelo, 1981; Simon and Francis, 1988; Ashton, Willingham and Elliott, 1987).

Audit fee pricing is usually influenced by normal and competitive market conditions of audit services.

This means that the audit fee is usually higher than the fee amount under competitive conditions under normal market conditions. Under the conditions of competition in the market, auditing firms to attract and retain customers may reduce the fee in the initial audit contracts or even subsequent contracts with the client, resulting in a dumping phenomenon. There are two theories about how to price auditing contracts:

The first theory holds that the audit fee is higher in the first year than in subsequent years. The high fee in the first year is so-called start-up costs, such as the cost of recognizing the auditor from the client and the formation of permanent audit files. The second theory holds that because of competition in the market for auditing services, auditors typically charge less than normal underwriting in early audit contracts because of their superiority over competitors, customer acquisition, and the hope of offsetting reduced costs in subsequent contracts (Van Caneghem, 2010).

Until the emergence of the Iranian Society of Certified Public Accountants, i.e. before 2001, the market for the supply of Iranian auditing services was mainly in possession of the auditing organization. The law's approval on the use of specialized services of certified public accountants in 1993 and the formation of the Iranian Society of Certified Public Accountants in 2001 increased the number of auditing firms in the market and increased competition among these firms. This increased level of competition among audit firms may affect the pricing of auditing services. Also, the Tehran Stock Exchange Organization, to improve the quality of financial reporting and the quality of auditing financial reports, approved the auditors' rotation Act and set the period of the auditor's cooperation with the client for four years.

Mandatory rotation of auditors may increase audit risk by creating competition in the market and increasing the number of competing firms. Copley and Doucet (1993) showed that the periodical rotation of auditors' can correct competition in the auditing market and remove it from monopoly. In addition, proponents of forced rotation believe that the audit market is over-centralized and that rotation can improve competition between large and small audit firms. The audited firms have to change their current auditors. With the mandatory rotation and reduction of the auditor's tenure with the client, the cost of recognizing the client is likely to be included in the pricing of the initial audit fee and increase the fee in the first audit contract. This study examines the following questions:

What are the principles of audit fee determination in auditing contracts in Iran?

H_1: What factors affect the determination of fees in auditing contracts and price dumping in auditing fees in Iran?

Corporate financial statements are the most important source of information for investors to make decisions. Performing quality audits gives credit to the financial statements. The fees paid to auditors affect the quality of the audit. Audit fees are imposed on organizations as an economical cost and are determined based on the time required to perform the audit operations. Auditors may be paid less to hire despite competition in the auditing market. According to DeAngelo (1981), due to the competitiveness of the audit market and the auditors' competition for future benefits, auditors may offer a discounted contract amount to attract the client so that with a future increase in remuneration, the discount amount is compensated. In this situation, auditors tend to reduce the initial audit fees to earn future benefits (Stanley, Brandon and McMillan, 2015).

The business unit's profit is one of the decision criteria of special importance for all users. However, due to realities such as conflict of interest between information providers and investors, the use of estimates in calculating some elements of profit and loss and the possibility of using different accounting methods, this decision criterion is threatened and, ultimately, the quality of profits is reduced. Profit quality refers to the potential for growth and the likelihood of future profits. Stable profits are important and are considered sustainable. The more stable the profit, the more power the company has to maintain current profits and, as a result, the higher the quality of profit. Shareholders use audited financial statements as a reassuring tool to assess the correctness of a manager's performance and performance. Therefore, profit quality can be affected by factors such as audit fees.

The audit's mission is to give credentials to the financial statements and build confidence in the users of the financial statements. Independent auditing provides the basis for economic transparency, public and community trust in the capital market, and government accountability to the people. Therefore, low fees and unhealthy competition in this field shake the foundations of the auditing profession. Therefore, fee reduction is associated with less auditor effort and lower quality of accounting information (Beswick, 2013). Several studies have examined the relationship between audit fees and earnings quality. For example, Bala, Amran and Shaari (2018) found that the quality of accruals has a positive relationship with audit fees and higher audit efforts increase the quality of profits. Caramanis and Lennox (2008) found that less audit effort increases earnings management.

H_2: there is a significant relationship between audit fee dumping and financial reporting quality.

H_3: there is a significant relationship between audit firms' competition and financial reporting quality.

DeAngelo (1981) argues that the reduction of auditing fees in auditing contracts is the reaction of independent auditors to competitive market conditions; in fact, the reduction of auditing fees in auditing contracts is equivalent to the cost of superiority in a competitive market. Another study in 1988 found that by creating competition between auditing firms to hire a new client, the amount fee at the beginning of the work (initial audit) is less than the fee for continuing audits. In their study, Chu et al. (2018) concluded that competition between audit firms affects the cost of auditing (audit fees). In their research, Krishnan, Patatoukas and Wang (2019) found that focusing on major customers increases audit costs and reduces the quality of financial reporting. Gunn, Kawada and Michas (2019) found that concentration in the audit market has reduced audit costs as well as reduced audit quality. Mao, Ettredge and Stone (2020) showed that audit costs are significantly reduced for firms with good work environments, and the results also showed that auditors consider such clients to be less risky. As a result, auditors spend less effort or charge less risk premiums. Averhals Van Caneghem and Willekens (2020) stated that after mandatory disclosure of audit fees, price competition among auditors intensifies because the transparency of audit fee information is likely to increase customer bargaining power or competitive pressure. Using a set of data including audit costs before and after disclosure of private clients, they observed that after mandatory disclosure of audit costs, clients with unusual positive (negative) audit costs experience adjusted downward (downward) costs. Darabi et al (2021), in a research titled "explain the relationship between audit quality, auditor independence and audit fees with the quality of financial reporting in insurance companies". The method of the present study was correlational in nature and content and hypothesis testing based on multivariate regression was used and in terms of the type of purpose, it has been part of applied research and the research has been done in the framework of inductive reasoning. Its statistical population includes all insurance companies in Iran In order to achieve the research goal, the period between 2013 to 2019, has been selected as a sample. The results of the test of research hypotheses indicate a significant and direct (positive) relationship between audit quality, auditor independence and audit fees with the quality of financial reporting in insurance companies in Iran.

3. Research methodology

Since the results of this study are to inform accountants, auditors and the Iranian Society of Certified Public Accountants about the assessment of auditing fees, the basis for determining the reasons for dumping in Iran and the effect of that on the quality of financial reporting in listed companies on the Tehran Stock Exchange and identifying the factors affecting that, this study is a type of applied research, in terms of purpose. Since the necessary data to significantly assess the opinions of the selected sample members were obtained through a field questionnaire, it is based on the type of field research.

This research is of applied type and qualitative and data-based type. The statistical population of this research is all auditing firms that are members of the Iranian Society of Certified Public Accountants and activists in the accounting and auditing profession in universities and companies. The total number of auditing firms in Iran, which are members of the Iranian Society of Certified Public Accountants, is 255 auditing firms. For this purpose, a sample of 90 audit firms with a rating of A (the highest quality audit rating in Iran) was selected, and their members were interviewed about the audit fee, the basis for determining the reasons for dumping in Iran and the impact of that on the quality of financial reporting. Factors affecting audit fees in Iran and reasons for dumping in Iran were identified. Then, forty questionnaires were sent from the final interview, and the variables that were identified were sent to the experts, of which 36 valid questionnaires were obtained. To determine the questionnaire's external validity (reliability), the method of halving and Cronbach's alpha were used. Based on the results, it can be said that the coefficients of the two halves of 0.886 and 0.905 indicate relatively high reliability of the alpha of both halves. When using the whole data for the above variable, the value obtained for the Guttman halving coefficient is equal to 0.728, which indicates relatively high reliability. To assess the internal validity of the questionnaire, Lavache's (1975) content validity measurement was used. The final results showed the approval of 47 factors affecting the audit fee and the basis for determining the reasons for dumping in Iran and the impact on Iran's financial reporting quality.

To collect a part of the data required for the research, first, the financial statements and notes attached to the financial statements and basic information of the stock exchange board (collected in Rah Avard Novin Software and the database of the Bureau of Statistics) were used. Hypotheses were tested and their conclusions were analyzed using statistical software of Eviews, SPSS, and Lisrel.

The scope of this research is 2021 in terms of time for the research question and six years between 2015 and 2020 for the second and third hypotheses. The statistical population of this research for the research question includes all auditing member firms of the Iranian Society of Certified Public Accountants and activists in the accounting and auditing profession in universities and companies. In addition, the questionnaire of this research was sent electronically to all auditing firms active in the country and accounting professionals in universities and companies. 520 questionnaires were sent to individuals and auditing firms and 107 answers were received that statistical tests were carried out on the entire sample.

3.1. Research models and variables

To test the first question, interviewing auditing experts in Iran was used and a high-precision questionnaire was prepared and distributed after interviewing auditing experts and elders. The factor analysis method in SPSS software and the structural equation method in LISREL software was used to test the answers given to the distributed questionnaire.

Cronbach's alpha test was used to assess the reliability of the questionnaires. This test examines and calculates the internal consistency of the designed questionnaire. The alpha coefficient obtained for the research question was 0.846. Since Cronbach's alpha is greater than 0.7, the test has acceptable reliability and indicates the questionnaire's high validity.

However, the data panel approach has been used in EViews software to test the second and third hypotheses. In this regard, the real data of listed companies should be used, so the calculation of variables to test the second and third hypotheses is as follows:

Statistical model of the second hypothesis:

$$FRQ_{it} = \beta_0 + \beta_1 BR_{it} + \beta_2 MB_{it} + \beta_3 size_{it} + \beta_4 Leverage_{it} + \beta_5 \Delta Cash_{it} + \beta_6 Audit\ Tenure_{it} + \beta_7 Ceo\ Tenure_{it} + \varepsilon_{it}$$

FRQ: The quality of financial reporting was calculated using a model developed by Rajgopal and Venkatachalam (2011). Regression of working capital of accruals for past, present, and future cash flows plus changes in income and gross value of machinery and equipment property is calculated. The quality of accruals is the standardized residuals of this regression (Dechow and Dechow, 2002).

$$\frac{TCA_{it}}{Assets_{it-1}} = \beta_0 + \beta_1 * \frac{CFO_{i,t-1}}{Assets_{it-1}} + \beta_2 * \frac{CFO_{i,t}}{Assets_{it-1}} + \beta_3 * \frac{CFO_{i,t+1}}{Assets_{it-1}} + \beta_4 * \frac{\Delta REV_{i,t}}{Assets_{it-1}} + \beta_5 * \frac{PPE_{i,t}}{Assets_{it-1}} + \varepsilon_{i,t}$$

TCA: all current accruals for the firm i in the year t
Assets: total assets of the firm
ΔREVi,t: change in net sales from t-1 to t
PPEi,t: the gross value of properties and machinery in the year t
CFO: operational cash flow
εi,t: estimation error
TCA = (ΔCA– ΔCash) –(ΔCL + ΔSTD)-dep
ΔCA: change in current assets
ΔCL: change in current debt
ΔSTD: change in long-term debts
ΔCash: change in cash
Dep: depreciation of in/tangible assets
BR: dumping in auditing fees (if there is dumping in auditing contracts 1, otherwise, 0 will be assigned. Dumping occurs when the amount of the auditing fee in a new contract is less than the amount of the auditing fee in the previous contracts. Of course, the amount of the audit fee can be deducted from the notes attached to the financial statements can be extracted from the attached notes to the financial statements).
MB: market value to book value
Size: firm size (natural logarithm of total assets of the firm)
Leverage: debt ratio of the firm (equal to total firm debts divided by total assets of the firm)
ΔCash: change in firm cash (cash in the current year minus that of the previous year divided by cash in the previous year)
Audit tenure: auditor's tenure (refers to the number of years the auditing process of the firms held by an auditing firm)
CEO tenure: tenure of the firm CEO (refers to the number of years a person has been in the position of CEO)
Statistical model of the third hypothesis:

$$FRQ_{it} = \beta_0 + \beta_1 MSA\_DIFFERENCE_{it} + \beta_2 MSA\_DOM\_DIFF_{it} + \beta_3 IND\_DOM\_DIFF_{it} + \beta_4 NATION\_DOM\_DIFF_{it} + \beta_5 MB_{it} + \beta_6 size_{it} + \beta_7 Leverage_{it} + \beta_8 \Delta Cash_{it} + \beta_9 Audit\ Tenure_{it} + \beta_{10} Ceo\ Tenure_{it} + \varepsilon_{it}$$

In this paper, four components are used for measuring competition among audit firms (Chu et al., 2018) that include MSA_DIFFERENCE, MSA_DOM_DIFF, IND_DOM_DIFF, and NATION_DOM_DIFF
MSA_DIFFERNCE: It is equal to the total amount of auditing costs among large auditing firms in the market divided by the total auditing costs of listed companies (Chu et al., 2018).
MSA_DOM_DIFF: If the audit costs in the industry in which the company is active are higher than the average audit costs in listed companies, one, otherwise, zero (Chu et al., 2018).
IND_DOM_DIFF: If the auditor has the highest number of audits in the industry, one; otherwise is equal to zero (Chu et al., 2018).

NATION_DOM_DIFF: If the auditor leads the market, it is equal to one and otherwise equal to zero (to measure this variable, if the auditor is large, he is considered the audit market leader (Chu et al., 2018). However, the auditing organization responsible for developing auditing standards is approximately equal to 100%.

4. Research findings

Results obtained from the research question are presented, in short, in Table 1:

As can be seen in Table 1, it can be stated that the factors affecting the determination of fees in auditing contracts and dumping in auditing contract fees in Iran, given the KMO index that is close to 1, and also according to Chi-square statistics the significance level of which is less than 0.05, it can be stated that the factors affecting the determination of fees in auditing contracts and dumping in auditing contracts fees in Iran and also due to the high degree of commonalities among the questions of the questionnaire: audit quality, auditing firm industry expertise, reputation of the auditing firm, type of audit opinion, duration of the auditor's tenure, size of the client, dependence of the client on business groups, having several companies by one client, large number of audit firms, lack of work in the audit profession, deletion of Article 272 of the Law on Direct Taxes, exemption for small companies from auditing, low income of auditing firms, loss of auditing firm work, lack of adherence of community members to the code of professional conduct, lack of auditor expertise and lack of sufficient knowledge of the auditor of the profession, lack of careful selection of accountants By the relevant authorities, the size of the auditing firm, being a single product and emphasizing only on auditing services and lack of attention and activity in non-auditing services, the economic crisis in the country, lack of clear and defined principles for determining the auditing fee by the Association of Certified Public Accountants and others Relevant authorities, the factor of reputation and credibility of Sahebkar company, audit risk, ownership structure of client's company, lack of supervision of audit services rates by relevant organizations are the most critical factors that according to the theory of auditing professionals and activists in Iran affect the audit fee and dumping in audit contracts.

Table 1. The Results of research question test

Hypothesis	KMO index	Chi-square	Significance level	Total explainable variance (Coefficient of determination)
Factors affecting the determination of fees in audit contracts and dumping in audit contracts fees in Iran	0.72	9016.231	0.000	82.484

4.1. Structural equation model of factors affecting the audit fee

According to the results obtained from Figure 1, the significance of the coefficients and parameters obtained from the measurement of factors affecting the determination of auditing contracts fees and dumping in auditing contracts in Iran in the standard estimation form with output (0.000) show the RMSEA for the model that is a good fit for this model. Also, the obtained p-value is greater than 5 percent, so the model is approved. Also, the Chi-square index divided by the degree of freedom is less than 3, so it is a good model for fitting the factors affecting the determination of fees in auditing contracts and dumping in auditing fees in Iran.

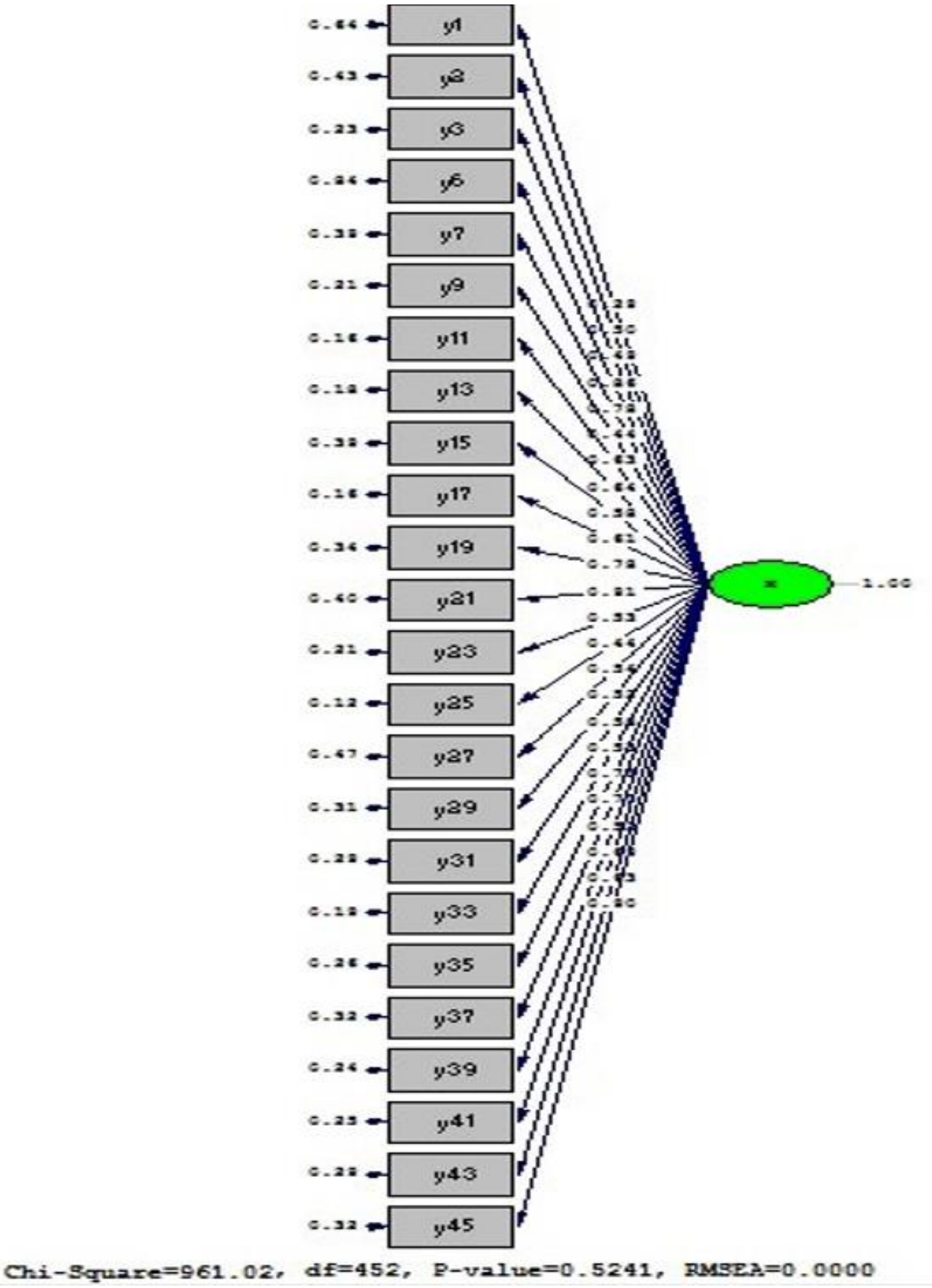

Figure 1. The Structural equations model of factors affecting dumping in audit fee

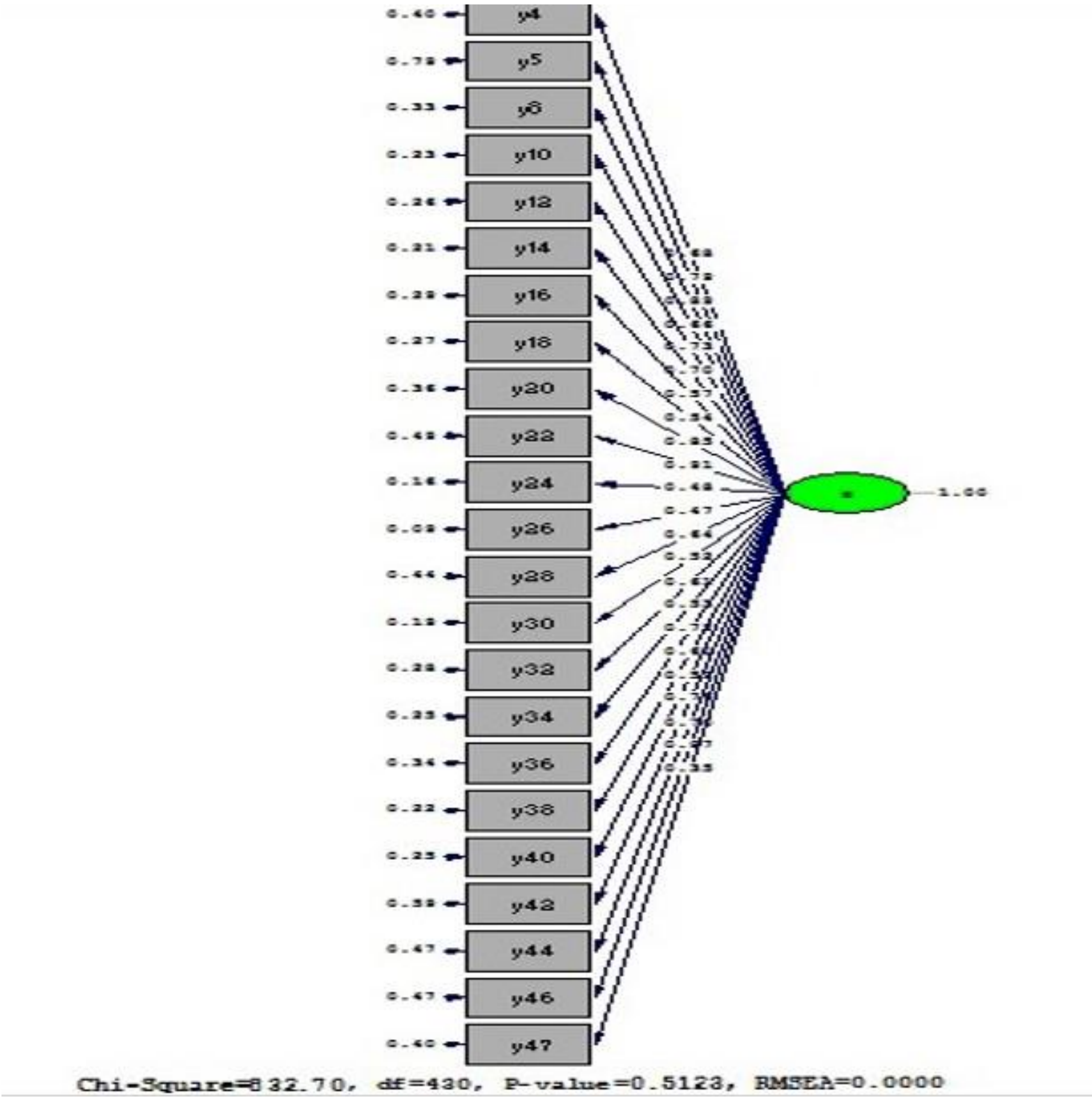

Figure 2. The structural equation model of the factors affecting the rate breaking of audit fees

4.2. Results of second hypothesis testing

As shown in Table 2, The significance level of the F-statistic for independent variables (auditing fee dumping) is less than 0.05, so the second hypothesis of the research is confirmed, considering that the value of the t-statistic related to audit fee dumping is -2.622 and the significance level is related to the audit fee dumping is less than 0.05. Also, according to t-statistics, it can be said that the dumping in the audit fee has reduced the quality of financial reporting.

4.3. Results of third hypothesis testing

As shown in Table 3, the significance level of the F-statistic for the independent variables of the third research hypothesis (competition of auditing firms) is less than 0.05, so the third research hypothesis is confirmed. Besides, in interpreting the effect of independent variables on the dependent variable, we can express that between the four components that were considered to measure the competition between auditing firms, two components of auditing costs in the industry in which the company is active compared to the average auditing cost in Tehran Stock Exchange and also the component of the number of companies examined in the industry by the auditor on the amount of auditing costs had a positive effect, which means they increased the quality of financial reporting, but the two variables of the amount of auditing costs of large institutions to the total cost of auditing in the stock market and having market leadership by the auditor had no effect.

Table 2. The Results of second hypothesis testing

Variables	Estimated coefficient	Standard error	T-test statistic	T-test probability
BR	0.059	0.022	-2.622	0.009
MB	0.029	0.003	7.579	0.000
SIZE	0.007	0.005	-1.286	0.198
LEVERAGE	0.146	0.067	-2.186	0.029
CASH	0.003	0.003	0.945	0.343
AUDITTENURE	0.009	0.008	-1.204	0.228
CEOTENURE	0.006	0.004	1.348	0.178
C	0.554	0.098	5.615	0.000
Coefficient of determination	0.282	Durbin-Watson Criterion		1.854
The adjusted coefficient of determination	0.272			
Fischer F statistic	18.831			
Fischer F probability	0.000			

Table 3. The Results of third hypothesis testing

Variables	Estimated coefficient	Standard error	T-test statistic	T-test probability
MSA_DIFFERENCE	-0.225	0.267	-0.842	0.399
MSA_DOM_DIFF	0.742	0.029	25.272	0.000
IND_DOM_DIFF	0.173	0.027	6.334	0.000
NATION_DOM_DIFF	-0.052	0.028	-1.878	0.060
MB	0.027	0.003	6.984	0.000
SIZE	-0.008	0.006	-1.312	0.189
LEVERAGE	-0.167	0.067	-2.471	0.013
CASH	0.004	0.003	1.084	0.278
AUDITTENURE	-0.013	0.008	-1.625	0.104
CEOTENURE	-0.004	0.004	-0.945	0.344
C	0.628	0.132	4.745	0.000
Coefficient of determination	0.377	Durbin-Watson Criterion		1.742
The adjusted coefficient of determination	0.333			
Fischer F statistic	36.727			
Fischer F probability	0.000			

5. Discussion and conclusion

As mentioned, the purpose of this study is auditing fees, the basis for determining the reasons for dumping in Iran and the impact of rate breaks on the quality of financial reporting. One question and two hypotheses were tested. The results showed that audit quality, expertise in the industry of the auditing firm, reputation of the auditing firm, type of audit comment, length of the auditor's tenure, size of the client, dependence of the client on business groups, having several companies by one client, large number of audit firms, lack of work in the auditing profession, elimination of Article 272 of the Law on Direct Taxes, exemption of small companies from auditing, low income of auditing firms, loss of auditing firms, non-adherence of community members to the practice of professional conduct, lack of auditor expertise, lack of recognition of adequate auditor of the profession, lack of accuracy in selecting certified public accountants by the relevant authorities, the size of the auditing firm, being a single product and focusing only on auditing services and inattention and activity in non-auditing services, economic crisis in the country, lack of specific principles and development to determine the audit fee by the Association of Certified Public Accountants of Iran and other relevant authorities, the factor of reputation and credibility of client's company, audit risk, ownership structure of client's company, lack of supervision of audit services rates by relevant organizations are the most important factors in Iran that based on the theory of auditing professionals and activists in Iran influence auditing fees and dumping in audit contracts and are among the effective factors in determining the amount of audit fees as well as dumping in audit contracts in Iran.

It should also be noted that there is a significant relationship between auditing fee pricing and competition of auditing firms with the quality of financial reporting. Financial results directly show that these results mean an increase in the quality of financial reporting while increasing competition between auditing firms. However, a closer look reveals that the two components of audit costs in the industry in which the company operates proportionate to the average audit cost in the Tehran Stock Exchange and also the component of the number of companies examined in the industry by the auditor have a positive effect on the amount of audit costs, and this indicates that whenever audit firms have received higher fees and have more expertise in the industry, the quality of financial reporting has increased. To put it simply, whenever the level of competition decreases, the accuracy of the auditor is increased, and finally, the quality of the companies' financial reporting is increased.

Research suggestions

Now, according to what was mentioned above and considering the results obtained from the research question and research hypotheses, it is suggested:

The Society of Certified Public Accountants of Iran and other institutions in charge of auditing in the country to the factors affecting the rate of audit contracts in Iran and also factors that can cause rate breaks in auditing contracts including: audit quality, expertise in the industry of the auditing firm, reputation of the auditing firm, type of audit comment, length of the auditor's tenure, size of the client, dependence of the client on business groups, having several companies by one client, large number of audit firms, lack of work in the auditing profession, elimination of Article 272 of the Law on Direct Taxes, exemption of small companies from auditing, low income of auditing firms, loss of auditing firms, non-adherence of community members to the practice of professional conduct, lack of auditor expertise, lack of recognition of adequate auditor of the profession, lack of accuracy in selecting certified public accountants by the relevant authorities, the size of the auditing firm, being a single product and focusing only on auditing services and inattention and activity in non-auditing services, economic crisis in the country, lack of specific principles and development to determine the audit fee by the Association of Certified Public

Accountants of Iran and other relevant authorities, the factor of reputation and credibility of client's company, audit risk, ownership structure of client's company, lack of supervision of audit services rates by relevant organizations are the most important factors in Iran that based on the theory of auditing professionals and activists in Iran influence auditing fees and dumping in audit contracts and considering the effectiveness of the above-mentioned factors, they should try to provide standards and laws in the field of improving the status of contract rates, as well as the type of determination of auditing fees in the country.

Regarding the factors that affect the audit fees as well as dumping in the audit fees in Iran, it is suggested; The Iranian Society of Certified Public Accountants should try to merge and consolidate auditing firms in the country so that this reduction in the number of auditing firms and their transformation into larger firms reduces competition between firms. Audit managers in these institutions eventually cause the audit work to be done with higher quality, and also if the shape and structure of audit firms as large companies with employees in different positions who are all certified public accountants, the possibility of dumping and also the decline of audit quality will be reduced.

Another factor that should be considered by the Iranian Society of Certified Public Accountants to try to ban is that if an auditing firm audits several companies or all companies in a business group, then with increasing dependence on auditing firm revenues, we will encounter contracts with that business group that can reduce the auditor's independence as well as revenue dependence and ultimately reduce the quality of the audit and the quality of financial reporting. Therefore, it is recommended that a directive on the prohibition of auditing more than one company from the business group be proposed and approved by an auditing firm to reduce the degree of auditors 'dependence on a client and thus the degree of auditors' independence and quality of audit work as well as distribution of revenue between all institutions and ultimately reduction of dumping.

One of the issues that have led to dumping in auditing contracts is the lack of work in the auditing profession. Of course, this can be done with the above cases in the field of banning the audit of several companies from a business group by an auditing firm, as well as suggestions on activating audit firms in other areas such as financial services and financial evaluations and activating firms in these areas Increases the work and revenue of auditing firms and ultimately reduces the cost of auditing contract fees.

Another issue that has caused dumping in the contract fees is the lack of basis for determining the fee of audit contracts and the lack of supervision of auditing services rates by the relevant organizations. Of course, these principles can be determined based on the client's assets, debts, or sales. Other auditing firms cannot ignore the code of professional conduct and turn to price-cutting in customer acquisition competitions.

Of course, one of the cases that the interviewees and respondents of the questionnaire emphasized was the lack of expertise of the auditor and the lack of sufficient knowledge of the auditor about the profession and also the lack of sufficient accuracy in selecting certified public accountants by the relevant authorities, who have no background or activity in the field of profession and are classified as certified public accountants by directives and laws, which has led to the entry of people into the auditing profession who do not know the profession and professional etiquette, and most are active in the auditing profession after retirement from other departments due to their influence without considering the conditions of the profession. They do not know how to review and audit the financial statements and approve the companies' financial reports, which ultimately reduces the quality of auditing and weakens the profession in the country. Of course, it should be borne in mind that the removal of Article 272 of the Law on Direct Taxes and the increase in inflation also indirectly reduced the income of auditing firms and ultimately led to an increase in dumping.

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The Impact of Audit Committee on the Relationship between Financial Reporting Readability and Specific Volatility of Stock Returns

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Abstract

Objective: The present study aimed to trace the impact of audit committee on the relationship between financial reporting readability and specific volatility of stock returns.

Methodology: In this regard, a sample of 124 companies listed in Tehran Stock Exchange during 2013-2022 was selected by systematic exclusion model, and finally, the research hypothesis was tested using multiple linear regression test based on consolidated data. To measure the specific volatility of stock returns , standard deviation model Fama and French model was used and for evaluation The readability of financial reporting was used by Fugue index and finally a comprehensive model was used to measure the audit committee's quality.

Results: The results of hypothesis testing indicated that the readability of financial reporting has a negative and decreasing effect on the specific volatility of stock returns. Also, the interaction of auditing committee and readability of financial reporting has a significant negative effect on the specific volatility of stock returns.

Innovation: This research provides useful evidence for managers of companies and capital market factors that can be controlled by better utilization of financial information disclosure mechanisms.

Keywords: Audit Committee**,** Readability of Financial Reporting, Special Volatility of Stock Returns.

1. Introduction

The basis of decision making by investors and capital market participants is the information published by companies in the form of financial statements, and it is possible to fully benefit from this information when it is timely, complete, accurate and easily understandable to investors (Yin et al, 2022). On the other hand, if this information is distributed, unfairly, unequally, or in scientific terms, asymmetrically, It can lead to different results and affect the capital market and investors and, ultimately, stock returns. Therefore, any lack of transparency in this information can disrupt the decision making of shareholders and analysts in the capital market and lead to disagreements among investors (Peng et al, 2016). Managers of companies knowingly and unconsciously may exacerbate the lack of transparency and complexity of information exported to the market, and in such a case, the shares are bought by higher value investors, so simultaneously in A higher level is valued and this will lead to specific volatility in the stock price (Silva & Serqueira, 2021). Considering the importance and increasing trend of specific volatility of stock returns in recent years, investigating the factors affecting it has been very much considered. In investment activities, especially in the stock market, risk and return are two main weights in investors' decisions, and the question of what risk factors affect stock returns has been themain question of capital market researchers for years (Akhgar & Mirzaei, 2019). One of the factors affecting the specific volatility of stock returns is the lack of transparency of financial information and the complexity of financial statements. Readability of financial reporting refers to the likelihood of a reader succeeding in reading in a text or writing. The readability of financial reporting is also defined as the clarity of the text and success in the comprehensibility of financial information, which helps to understand the numbers and figures contained in the financial statements and is therefore of great importance (Seifzadeh et al, 2021). Yin et al. (2022) in a study titled The Causal Effect of Improving the Readability of Financial Reporting on Stock Price Declines in the Market, suggests that vague financial reports lead to higher stock price crashes. From the perspective of economic theory, if the financial statements provided by companies have a low readability, investors cannot easily evaluate it, and they tend to look for other information and thus rely on it (Bagheri Azghandi et al. 2018). The same factor-can trigger volatility in stock returns. Specific (special) volatility of stock returns is a pervasive macro variable that accounts for more than 80% of the total stock price fluctuations. This phenomenon exists in the capital market and predicts future stock returns. The variability in the total return of securities that is not related to the total market variability is called special volatility (unsystematic) and represents that part of the variability in the total stock return that It does not depend on developments in general economic activities (Izedinia, 2021). Equity specific volatility reflects an unusual return that standard asset pricing models cannot adequately describe. When the quality of financial reporting is lower than acceptable, information asymmetry increases and analysts need to rely more on their private information, which increases dispersion in the projections of beneficiaries and capital.Investors will be. In fact, itcan be stated that forecasts reflect the expectations and opinions of investors in the capital market, and that failure to properly understand corporate informationwill cause specific fluctuations in stock returns (Silva and Serqueira, 2021). So the question comes to mind: Does the readability of financial reporting have any effect on the specific volatility of stock returns?

The purpose of an audit committee is to create a set of experts and specialists to oversee management activities on behalf of the owners of companies. An audit committee is a subcommittee under the corporate governance framework in which the board delegates some supervisory responsibilities. The audit committee helps to establish a proper communication between the board, the independent auditors, and the internal auditors of the company. The audit committee can also Supervise the performance of senior managers of the company and monitor the actions and decisions of managers (Zalghi et al. 2019). The audit committee is responsible for evaluating and monitoring internal controls. Therefore, to achieve the financial goals of internal controls, the role of the audit committee and its quality will be essential; therefore, as the quality of this committee is improved, the supervision of the managers' work will also increase, and the company will be deprived of its performance and performance. The quality of financial reporting will be higher (Herostia and Suridinata, 2022). The audit committee considers the selection and approval of the procedures used by the companyand can affect the approach of financial reporting, disclosure, compliance with standards, complexity of financial reports, etc. as the main pillar of corporate governance (Mousavi shiri et al, 2021). According to the stated contents, the overall purpose of the research is to answer the question of whether the audit committee has any impact on the Does it have a relationship between financial reporting's legibility and the specific volatility of stock returns? Considering the lack of definitive findings in relation to the research subject and the creation of research gaps in this regard, the present study was formed. The structure of the research is first to expand the theoretical foundations, hypotheses and empirical bases of the research, and then the methodology and operational definitions of the research variables and finally the findings and conclusions of the research are presented.

2. Literature Review and Theoretical Principles

The specific volatility of stock returns reflects the fluctuations of the company's specific returns, which result mainly from the company's activities and are independent of capital market volatility. Specific volatility of stock returns contradicts the efficient market hypothesis and asset pricing models, which are the two main pillars of the financial mainstream. The relationship between the readability of financial reporting and specific (special) volatility of stock returns corresponds to the literature on financial information disclosure, future stock returns, incorrect stock pricing, corporate debt maturity and market shortcomings and poor quality of financial reporting (Silva & Silquera, 2021). Akhgar and Mirzaei (2019) in a study entitled "The relationship between company life cycle and stock return specific volatility due to fundamental uncertainty and information uncertainty in this way stated that company life cycle has a significant effect on the specific volatility of stock returns of companies. Peng et al (2016) in a study titled Accruals Accounting, Heterogeneous Investor Beliefs and Stock Returns stated that the level of heterogeneity in investor beliefsover the value of the company is higher when the company has a greater increase in accounting accruals. Also the future return of shares after declaring profits when items are declared Corporate accounting accrual. Heterogeneity of investor beliefsincreases by a larger degree, increases. The extent and manner of disclosure of corporate information in the form of financial reporting is associated with a greater dispersion of disagreement in analysts' forecasts, as it increases the uncertainty and weight investors have to give to their personal valuations. Chen et al (2012) In a study entitled Unconventional Return Fluctuation and Information Quality under Managerial Perspectives, they have investigated the fluctuation of unconventional returns and concluded that this fluctuation is caused by volatility of optional accruals and the existing correlation between earnings before applying managerial opinions and optional acknowledgments that reflect the quality of information published by companies. Previous studies show that the structure of financial statements can be effective in obtaining, evaluating and measuring its informational content. The low readability of financial statements can make it more difficult for investors to extract the required information content (Dadashi and Norouzi, 2020). Bagheri Azghandi et al (2018) in a study titled "Readability of Financial Statements and Investors' Sensitivity to the Use of Accounting Data", stated that the empirical findings of the research indicate a significant and inverse relationship between the readability of financial statements and the sensitivity of investors to the use of accounting information. Hashemi Dehchi et al (2021) in a study titled "Comparing Financial Statements on the Specific Volatility of Stock Returns" with emphasis on the quality of financial reporting, stated that the ability to compare financial statements has a negative and significant effect on the specific volatility of stock returns. Also, the findings of the research showed that when the quality of financial reporting is poor, the impact of financial statements comparison on the specific volatility of stock returns is stronger. Overall, this research emphasizes the benefits of comparing financial statements. The ability to compare financial statements reduces the risk of uncertainty about cash flows and future performance of the company, and reduces the specific volatility of stock returns. The low readability of financial statements makes investors feel unreliable and therefore less responsive to it. The results of similar studies show that investors invest in a company whose financial statements are more transparent, legible, and accurate (Seifzadeh et al, 2021). Seyfzadeh et al (2021) in a study with characteristicManagers' readability of financial statements showed that there is a negative relationship between managerial bias and accrual-based earnings management and between real earnings management, managers' nearsightedness, narcissism and overconfidence and readability of financial statements. YU (2022) in a study titled "Readabilityof Financial Statements and Accounting Conservatism", stated that accounting conservatism can affect quantitative information of financial statements. This results indicate that accounting conservatism can reduce managerial opportunism in the qualitative disclosure environment. Therefore, investors' judgments on non-accounting information become more sensitive in these circumstances. That is, the impact of other environmental information on their judgment will be significant and will be less than the company's accounting information (Jung et al, 2018). When sources of uncertainty (such as limited disclosures) cause disagreements among investors, it will bring about specific volatility in higher stock prices (Silva & Serqueira, 2021). Fatehi (2016) in a study titled "The Effect of Financial Reporting Quality on Volatility of Unconventional Return on the Stock Exchange of Tehran Stock Exchange Listed Companies in Tehran Stock Exchange" stated that the quality of financial reporting has a significant and inverse effect on the volatility of unconventional stock returns. Therefore, according to the above-mentioned contents, the first hypothesis of the research is presented as follows:

H1: Is there a significant inverse and significant relationship between the readability of financial reporting and specific volatility (special) of stock returns.

The audit committee is one of the effective regulatory mechanisms for improving the quality of disclosure in an internal control system that helps to reduce agency costs. The characteristics of the audit committee such as the independence, size, financial expertise of committee members, the number of meetings and financial experience of the committee members are important to the effectiveness of the audit committee (Bruynseels et al. 2014). Yazdifar and Mohammadi Sedaran (2022) in a study entitled The Role and Importance of Audit Committees, Remuneration and The introduction in the board of directors of the companies stated that the results indicated that forming board committees has many advantages including responsibility, expert knowledge, accountability, adjusting the power of the CEO, reducing the complexity of business activities, reducing coordination and communication problems, and making more efficient decisions. An effective audit committee will reduce the abuse of managers, in addition to increasing the quality of the internal control system with the effectiveness of the audit committee (Hoitashe et al, 2009).

The audit committee is one of the main pillars of the corporate governance system and is also one of the most important specialized committees of the board of directors, which strengthens the health and quality of financial reporting, improves the quality of internal controls, improves auditors' performance and assists the boardThe manager is accountable in carrying out the responsibility (Jami and Rostamian, 2016). Herustia and Suryadniata (2022) in a study titled The Impact of Corporate Governance and Audit Committee on Aggressive Business Strategy stated that the effectiveness of corporate governance is positively correlated with aggressive business strategies. Also, the effectiveness of audit committees is negatively associated with aggressive strategies. In a study titled "Readability of Annual Financial Reports, Information Efficiency and Stock Liquidity," Aldosari and Meleji (2023) stated that improving the readability of annual reports, in addition to analyzing the factors affecting it and voluntary disclosure requirements, is essential in order to help users of financial statements to understand the topic of information and facilitate decision making. The existence of a strong audit committee will create quality financial reporting and thus reduce disagreements in the market and influence the specific volatility of stock returns. Naslmousavi et al (2021) in a study titled "The Impact of Audit Quality on the Relationship between Audit Committee Characteristics and Financial Reporting Quality", stated that there is a positive and significant relationship between the characteristics of audit committee and the quality of financial reporting. Also, the results of the research indicate that audit quality has a positive and significant effect on the relationship between the characteristics of audit committee and the quality of financial reporting. For this reason, the second hypothesis of the present study is presented as follows:

H2: is that the audit committee influences the relationship between the readability of financial reporting and the specific (special) volatility of stock returns.

3. Research Methodology, Model and Variables, Population and Sample

The present study is applied and from methodological perspective, correlation is causal (post-evental). The statistical population of this study is all the companies listed in Tehran Stock Exchange and the period under study period from 2013 to 2022. Companies listed in Tehran Stock Exchange that meet the following criteria have been selected as a sample. In order to be comparable, the end of the financial year of the companies Skip to content In the 10-year period of the review, the financial period has not changed. Information about the variables selected in this study is available. They are not banks, insurance or investment firms. Finally, 128 companies were selected as the final sample of the research. Data analysis is done using combined data method and panel data approach and using Eviews12 software and standard error tool in testing hypotheses.

Operational Definitions of Research Variables

Dependent Variable: Special Volatility of Stock Return

Following the research of Silva and Serqueira (2021), Akhgar and Mirzaei (2019) and Zamani et al. (2021), the specific volatility of the company's stock returns as "the remaining standard deviation from the Fama and French three-factor model" of monthly returns in one year is as follows.

$$Rit - rf = \propto i + \beta i(Rmt - rf) + \gamma iSMBt + \varphi iHMLt + uit$$

Where:

Rf –Ri: The difference between return on equity and risk-free return (rate of interest on deposits)

Rm-RF: Spend Market Risk

Where Rm is the market return and is calculated as:

$$\mathrm{R_{mt}} = \frac{\mathrm{TEDPIX_t} - \mathrm{TEDPIX_{t-1}}}{\mathrm{TEDPIX_{t-1}}}$$

Where TEDPIX $_t$ is the total index of the stock exchange.

SMB: Size factor

HML: Value factor

In the first step, the variables of size and value should be sorted from small to large:

Size: The size of the company, which is the logarithm of the stock market value.

Value: The ratio of book value to the market value of a company.

Companies are then divided into two groups of small S and Big B, based on the value factor, and 30% of its high value, as high-value companies (H). The middle 40% are defined as mid-value companies (M) and the bottom 30% are defined as low-value (L) companies .

In the second stage, the variables of the research are calculated as follows:

A-Operating Size:SMB

$$\mathrm{SMB} = \left(\frac{\frac{\mathrm{S}}{\mathrm{L}} + \frac{\mathrm{S}}{\mathrm{M}} + \frac{\mathrm{S}}{\mathrm{H}}}{3}\right) - \left(\frac{\frac{\mathrm{B}}{\mathrm{L}} + \frac{\mathrm{B}}{\mathrm{M}} + \frac{\mathrm{B}}{\mathrm{H}}}{3}\right)$$

B. Value factor: (HML)

$$\mathrm{HML} = \left(\frac{\frac{\mathrm{S}}{\mathrm{H}} + \frac{\mathrm{B}}{\mathrm{H}}}{2}\right) - \left(\frac{\frac{\mathrm{S}}{\mathrm{L}} + \frac{\mathrm{B}}{\mathrm{L}}}{2}\right)$$

In which:

S/L is a company that is small in size and has a low ratio of book value to market value.

S/M is a company that is small in size and has an average ratio of book value to market value.

S/H is a company that is small in size and has a high ratio of book value to market value.

B/L is a company that is large in size and has a low ratio of book value to market value.

B/M: Companies that are large in size and whose ratio of book value to market value is average.

B/H is a company that is large in size and has a high ratio of book value to market value.

Independent Variable: Readability of Financial Reporting

The independent variable of the research is the readability of financial reporting, which is used in accordance with Safari Geraiely et al (2017) to measure it. The level of readability of financial reporting through the Fogg index is a function of two variables of sentence length in terms of the number of words and the complexity of words (defined as the number of three or more syllable words) measured by the relation (1):

Relational (1) (3/Total Fugue Index in the 100-word sample at the beginning, middle and end of the report) = readability of financial reporting

For 100-word sampling and calculating the Fogg index in each of these samples, the following is done:

1) Randomly select a 100-word sample from the beginning, middle and end of the report.
2) Count the number of sentences in each sample.
3) Specify the average length of sentences by the number of words by dividing the number of words by the total number of sentences of each 100-word sample.
4) Count the number of words three or more syllables as an indicator of complex words in each of the one-hundred-word texts.
5) After the average number of words in each sentence and the percentage of complex words have been obtained, the Fogg index for each of the 100 word samples of the first, middle and end of the report is calculated through the following relationship (Safari Grilli et al., 2017).

Relation (2) (Average length of sentence in terms of number of words + percentage of complex words) = 0.4 Fogg Index

The high and low values of the Fugue index show lower readability and more financial reporting, respectively. In order to obtain a direct measure of the Fugue index with the readability of financial reporting, the values of this index are multiplied by negative number 1 (-1).

Modifier variable: Audit Committee (Committee)

In order to comprehensively measure the audit committee following the research of Herosita and Suridinata (2022), Bazrafshan (2016) and Abedini et al (2019), a comprehensive index that shows the quality of the audit committee is used. To measure the quality of the audit committee, the average of the following three indices is used to measure the quality of the audit committee. With the total scores earned each year, the company has achieved the final rank of the audit committee quality of each company. And then the number of (3) indices will be divided and the average will be calculated. Higher ratings in this index indicate higher audit committee quality.

Independence of the audit committee: The ratio of non-commissioned members to the total members of the audit committee. If the proportion of non-commissioned members of the audit committee exceeds the median age of the companies in the sample, the number 1 or 0 is awarded (Herosita and Suridinata, 2022).

Financial Expertise of Audit Committee Members: The ratio of the number of members with expertise in the fields of accounting, financial management and economics to the total members of the audit committee . If the proportion of the members with the financial expertise of the audit committee exceeds the mid-year-corporate in the sample, the number 1 or 0 will be awarded (Herosita & Suridinata, 2022).

Audit committee formation history: For this purpose, from the time of the formation of the audit committee in the company up to the year of consideration, and the history of the formation of the audit committee is calculated and if the audit committee is more than the middle years of the companies in the sample, the number is 1 and otherwise 0 is awarded (Herosita and Suridinata, 2022).

Control variables of research

SIZE: Natural logarithm of total assets.

Boardind: The ratio of non-executive members of the board to the total members.

LOSS: The qualitative variable of the two values that if the net profit of the company is negative, code (1) or (0).

BTMratio: To calculate this variable, the division of the capital's market value by the book value of capital is used at the end of the financial year.

INST: Investors such as banks, insurance and investment firms, and individuals and companies holding more than 5% of the company's shares are referred to as institutional shareholders who have been used as institutional investors.

Cash: The ratio of operating cash to total assets.

AGE: Natural logarithm of the year of company establishment of the desired year.

LEV: Total liabilities divided by total assets.

Research satisfaction model

$$\begin{aligned}\mathrm{IVOL}_{it} = \beta_0 + \beta_1\mathrm{Read}_{it} + \beta_2\mathrm{Committee}_{it} \\ + \beta_3(\mathrm{Read} \times \mathrm{Committee}) \\ + \beta_4\mathrm{SIZE}_{it} + \beta_5\ \mathrm{Board\ Ind}_{it} \\ + \beta_6\mathrm{LOSS}_{it} + \beta_7\mathrm{BTMratio}_{it} \\ + \beta_8\ \mathrm{Inst}_{it} + \beta_9\ \mathrm{Cash}_{it} \\ + \beta_{10}\ \mathrm{Age}_{it} + \beta_{11}\ \mathrm{LEV}_{it} + \varepsilon_{it}\end{aligned}$$

4. Findings

Descriptive statistics of research variables

The findingsof the research include descriptive statistics and inferential statistics which are first presented in table 1 of descriptive statistics.

Table 1 shows the descriptive statistics of the research variables. As we can see, the average financial leverage of the company is (0.55), which showsthat most of the data is around this point. The highest standard deviation was for institutional investors (30.7) and the lowest was related to the specific volatility of stock return (0.046). The maximum and minimum also showed the highest and lowest values in the data.

The results in Table 2 show that the significance level of White's test in the research model is more than 5% and there is no difference in variance in disturbing sentences. Also, the significance level of Brush Godfrey test in the research model is less than 5% and indicates the existence of serial autocorrelation in the model, which in the final estimation of the model using standard error tool in Eviews software and command (GLS) has been raised.

According to the results obtained in Table 3, it is observed that the significance level of F-Limer and Hausman test with a significance of less than 5% is confirmation of the pattern ofpanel data with fixed effects of width from source (Banimahd et al, 2016).

According to the results obtained in Table 4, it is observed that the significant level of variables in the stability test was less than 5% and indicates the stability of the variables.

Table 1) Descriptive statistics of quantitative research variables

Variable	Mean	Max.	Min.	S. dev.
IVOL	0.19	0.41	0.011	0.067
Committee	0.29	1.00	0.0000	0.27
Read	-17.9	-13.06	-23.3	1.46
CASH	0.12	0.84	-0.34	0.15
INST	0.58	0.98	0.0000	30.7
LEV	0.55	0.99	0.10	0.20
SIZE	14.72	21.32	11.30	1.54
Board ind	0.65	1.00	0.20	0.17
BTMratio	4.30	15.8	1.00	3.81
AGE	3.63	4.24	2.48	0.36
LOSS	0.093	1.00	0.0000	0.29

Table 2) heterogeneity of variance and serial autocorrelation test

Test Model	Test Statistics	Sig.	Test Results
White Test	91.19	0.11	The lack of variance of Residuals
Breusch-Pagan test	18.75	0.0000	The existence of serial autocorrelation

Table 3) F-Limmer and Hausman Test Results

Test Model	Test Statistics	Sig.	Test Results
Test (F-Limmer)	4.46	0.0000	Use of Panel Data
Test (Hausman)	260.081	0.0000	Using the of fixed effects

Table 4) Stability Test of Quantitative Variables of Research

Variable	Maximum	Results	Variable
IVOL	-11.5120	0.0000	Stationary
Committee	-6.81237	0.0000	Stationary
Read	-15.4873	0.0000	Stationary
CASH	-12.9787	0.0000	Stationary
INST	-5.17537	0.0000	Stationary
LEV	-13.0799	0.0000	Stationary
SIZE	-6.05509	0.0000	Stationary
Board ind	-4.35426	0.0000	Stationary
BTMratio	-14.8184	0.0000	Stationary
AGE	-86.4421	0.0000	Stationary

Table 5) Test Results of Research Hypotheses

Variable	Coef	S. D	t statistic	Sig.	VIF
Read	-18.8	7.73	-2.43	0.0150	1.00
Committee	-17.49	5.52	-3.16	0.001	1.21
Committee×Read	-4.80	1.53	-3.12	0.001	1.05
SIZE	-0.38	0.50	-0.77	0.43	1.22
Board ind	-0.16	0.75	-0.21	0.82	1.06
LOSS	-0.65	0.35	-1.85	0.064	1.14
BTMratio	12.8	3.66	3.49	0.0005	1.14
Inst	-0.033	0.011	-2.97	0.003	1.28
CASH	-0.33	0.68	-0.49	0.61	1.12
AGE	-0.026	0.047	-0.56	0.57	1.08
LEV	3.48	0.78	4.44	0.0000	1.40
C	0.18	0.19	0.97	0.33	-
Adjusted R 2		0.48			
Durbin-Watson		1.97			
F statistic		9.9324			
Sig.		0.0000			

The results of Table 5 show that the readability of financial reporting with negative coefficient (-18.8) and a significance level below 5% (0.015) has a negative effect on the specific volatility of stock returns, so the first hypothesis of the research is not rejected at the error level of 5%. The interaction of financial reporting readability and auditing committee with negative coefficient (-4.80) and a significance level below 5% (0.001) has a negative effect on the specific volatility of stock returns; Therefore, the second hypothesis of the research is not rejected at the level of error of 5%. Also, the growth of the company, institutional investors and financial leverage at the fault level of 5% and the loss of the company at the error level of 10% affect the dependent variable. The coefficient of model determination is equal to 0.48%, which indicates that the independent and control variables in the model have been able to explain 0.48% of the variation of dependent variable which is-significant in the mixeddata.Also the amount of camera Watson It is equal to 1.97 and since it is between 1.50 and 2.50, it shows that there is no strong correlation between disturbing sentences and this case has been resolved. Colinear statistic is less than 5, which shows that there is no strong correlation between the variables of the research. Test statistics (F) with a significance level below 5% indicate that the research model has a good fit.

5. Conclusion and suggestions:

When managers hide information in order to achieve the most benefits and sometimes hide the crisis in the company, this can reduce the transparency of information and sometimes use the complexity of information in financial terms to hide information. This factorcan cause volatility in the price and stock return of companiesdue to investors' reaction tothis-information. When in the capital market, investors' expectations are different due to the information provided to them about the companies' stocks, this same factor can cause volatility in the stock market, because when the expectations of investors are disparate with each other, a group of people think of short-term and even daily volatility , and this contradiction in supply and demand causes extreme volatility. In the return will be earned. In fact, it can be stated that by stabilizing the information available to investors about the shares of companies, it can be helped to stabilize the stock returns.

The readability of financial reports that have been addressed in recent years in financial societies is one of the important issues in investment decisions of individuals in the market and analysts, that if the text of the statements presented to the market is less complex, investors will have a better analysis of these faces, which has sometimes been suggested that managers prefer complexity in these casesto keep the facts secret. By improving the readability of financial reports, it can be said that the lack of transparency of information as necessary and necessary for this matter has been reduced, and also by providing financial statementswith less complexity, managers are forced to disclose all the facts in the company, and this by increasing the information available to investors, it can reduce the specific volatility of stock returns. By examining the second hypothesis, it was found that the variable interaction of the audit committee and the readability of financial statements has a negative effect on the specific volatility of stock returns. The purpose of the audit committee is to create a set of experts and specialists to oversee management activities on behalf of corporate owners. An audit committee is a subcommittee under the corporate governance framework in which the board delegates some regulatory responsibilities to it. He does. The audit committee helps to establish proper communication between the board, the independent auditors, and the internal auditors of the company. The committee can also monitor the performance of the senior managers of the company and monitor the actions and decisions of the managers. Since a strong and high quality audit committee can have an impact on the quality of the board of directors and their supervision, so managers and members of the audit committee will have a great impact on the performance and manner of financial reporting and providing information to the stakeholders and by increasing the quality of the information received to the market, they will be able to Reduce the fluctuations caused by this information. It is suggested that the Exchange Organization consider special privileges for the readability and complexity of financial statements and introduce companies whose reports are more readable with special privileges and professional authorities have special efforts to strengthen the strategies to improve the readability of financial statements. Managers can improve the readability of financial reportsThey can reduce the fluctuations in returns and prices. In comparison the results are somehow in line with the results of Silva and Serqueira (2021) and Peng (2016). It is suggested that in order to clarify all aspects of the researcher, interested in studying the subject in different industries and compare the results with the results of the present study.

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Studying the Impact of the Value Added Tax on Profitability and Survival of the Companies in Tourism Industry (Case study: Hotels in Tehran)

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Abstract

Objective: The present study aimed to trace Studying the Impact of the Value Added Tax on Profitability and Survival of the Companies in Tourism Industry (Case study: Hotels in Tehran)

Methodology: According to the value added tax law and activities of tourism industry that are subject to value added tax exemptions, this study examines the impact of value added tax on the profitability and survival of the companies in the tourism industry in Tehran hotels. The research method is quasi-experimental and retrospective conducted by using retrospective data in the accounting research scope based on real data. The analysis of the data was done in two sections; before and after the valued added tax increase: descriptive statistics included 30 sample hotels during a period of 12 years (2007 to 2019) and the number of year- hotel (360).

Results: The results showed that increase of value added tax has a significant inverse effect on the profitability of the hotels in the country implementing this law.

Innovation: Considering the importance of the tourism sector in promoting the economic growth of developing and developed countries, several empirical studies have been conducted on factors affecting tourism demand in recent years. In this regard, the relationship between the tax rates as one of the government's financial instruments and the profitability of the tourism industry has been less considered in tourism studies.

Keywords: Value Added Tax, Profitability and Survival of the Company, Tourism Industry.

1. Introduction

Taxation is one of the most important and stable sources of income for governments in most countries. Among the types of taxes, the best way to collect taxes is value added tax. This tax was not very famous in early 1970s; however in recent years, the main focus of the tax system reform program, in almost all countries in the world, is value added tax. So that this tax was adopted by the majority of developed and developing countries in the last half century and on average a quarter of the government's income is provided by these economies (Azizi & Mansouri, 2019). In fact, value added tax is one of the most progressive tax systems in the world that has been converted to the most common ones in the world. The implementation of this type of tax causes transparency in economic exchanges and avoiding the phenomenon of the underground economy, reducing tax evasion, preventing goods smuggling, economic corruption, encouraging investment or improving economic conditions, business environment and production and establishing justice economy (Kolahi and Noor, 2016). Hence, it is expected that value added tax influences different sectors of an economy.

The complexity of implementing the value added tax, such as need for specialized personnel and administrative costs, regular registration of accounts, understanding the value added tax, multiplicity of tax rates and exemptions have caused issues regarding non-realization of this goal. This problem is significant especially in developing countries more than developed countries. In addition, some inadequacies and practical problems of the value added tax system including its impact on inflation, decreasing nature, relating this tax with the financial services sector, how to impose the tax on public sector institutions, etc. are the concerns of the government in some countries that have not introduced this tax. Some countries have experienced income reduction by using the value added tax system. Perhaps one of the other important reasons for not applying value added tax in some countries is worry about the issue of income reduction. The importance of the government's role in the economy is determined according to the impact of the budget and financial policy on economic activities. Since adoption of financial policies has a significant impact on the main variables of the economy, examining the government's revenues and expenses are very important as fundamental tools. For this reason, in investigating the most important reasons for reforming the tax system in Iran, it can be mentioned that revenues from oil sales and tax revenues are two important components of the government revenues (Jaafari Samimi et al., 2018).

Excessive reliance on the oil revenues due to the fluctuation of its price in the world markets has caused very severe instability in the government revenues. In other words, tax revenues are influenced indirectly by the foreign exchange flow resulted from the sale of oil, since decrease in foreign exchange earnings leads to a decrease in imports and indirect tax (import tax). Given that tax revenues, as a major item of government revenues, can be used as an effective financial tool to provide financial resources for necessary government expenses, adjusting distribution of income and wealth and directing the economic activities of the society are considered and therefore, according to this important necessity using an efficient tax system seems essential in Iran economy (Kia et al., 2021). Tax policies and the reforms of tax rates in the tourism sector are among the measures that have been taken by the countries with tourism destinations in the last two decades. In the past, the aim of the taxation policy was to establish a source of income for the governments and the management of the tourism industry, but during the last two decades, generally, the countries implements the policy of tax exemption aiming at tourism development. Various countries take into account the tax issues and prices in the tourism industry seriously. Introducing new taxes, choosing the tax target community and the method of taxation deserve to be discussed under separated titles, but tax exemptions have been recognized as a tool for the prosperity of the tourism sector in countries. For instance, many European countries consider an exemption varying between 40 and 50 percent for the value added tax of hotels (Barati & Rasulzadeh, 2022).

Duties and taxes paid by the economic operators of the tourism sector are factors that changes the price and the cost of providing services to tourists. Tax exemption on tourism facilities has been implemented for several years and the tourism activists and the agents have been supported, however, the government seeks to eliminate these exemptions from its the work plan. Of course, these exemptions are not applied to all tourism businesses and the trustees of the tourism industry seek to extend these tax exemptions to all businesses in the tourism industry. Currently, based on the value added tax law and the resolution of the Islamic Council of Ministers, the value added tax exemption is being implemented for the suburban, rail and air transportation sector (both freight and passenger). While municipal fees, airport fees, and passenger safety monitoring fees are collected. Travel agencies are also exempted from value added tax (for tours entering the country). While the ticket sales fee is charged by the travel agencies from the passengers and the added value of this fee is also received. The tax exemption for inbound tours or domestic tours is different, so that exemption is between 50 and 100 percent. Restaurants and sales centers and supply goods to tourists have no tax exemption and they have to pay it completely. Also hotels (except hotels with four and five stars) are exempt from paying value added tax. Regardless of the issues related to the type and amount tax that restaurants receive from tourists, it is worth mentioning that different departments providing services to tourists generally receive taxes or fees in some form from tourists, mainly as value-added tax. In few cases, other types of taxes or duties can be added to it. However, taxes have been collected from tourism economic operators in different ways, but essential measures have been established to apply wider tax exemptions to the tourism industry since 2021 in order to promote the prosperity of tourism sector (Islamic Council, 2020).

Value added tax in Iran has been taken into account due to the favorable characteristics of this type of tax in the fields of expanding the tax base, reduction of relying on oil revenues, increasing the systematization of the tax system, improving the efficiency of the tax system, improving individuals participation in tax payment, the issue of tax revenues and the imbalance in government budget expenditures and revenues. Value added tax has a high power to generate income for the government, so that experts consider it as a money machine. Therefore, value added tax should be considered in analyzing the profitability of the tourism industry. This type of tax is an economic tool for tourism management, in the sense that it is ultimately a tax that has an impact on the customer behavior. According to the above mentioned, applying and increasing the value added tax on the tourism industry provides the possibility that the operators of this industry, such as hotels and restaurants, cannot receive the increased costs from the final consumers because of the intense pressure of competition. Therefore, these changes increase the risk of sustainability of some industries including tourism industry significantly. One percent increase in prices due to increase in value added tax rate can lead to a drop in the number of tourists entering and ultimately affecting the number of visitors will also reduce the total tourism income. Higher value added tax causes some smaller businesses to give up since they are currently operating with limited profits and unable to receive the cost from the customers under intense competitive pressure (Mateus & Mateus, 2021).

Considering the importance of the tourism sector in promoting the economic growth of developing and developed countries, several empirical studies have been conducted on factors affecting tourism demand in recent years. In this regard, the relationship between the tax rates as one of the government's financial instruments and the profitability of the tourism industry has been less considered in tourism studies. Therefore, in this research, it has been tried to answer this question, whether the practices and the increase in the value added tax rate affect the profitability of the tourism industry (Tehran hotels)? Suggestions should be presented to managers and tax officials in the Tax

Affairs Organization based on the results and findings of the research.

2. Review of Literature and Theoretical Background

If we consider the tourism industry as an export sector in a country with many tourists, it will be introduced as a foreign sector of the economy. Trade is one of the most important factors in the foreign sector of the economy and is one of the main components of development. In today's economy, countries are aware of the need for strengthening and paying attention to trade as one of their main goals in policies making since in addition to driving the production sector, it transfers knowledge and establishes economic and cultural interaction and it is important in the era of globalization. For this purpose, important steps are taken in order to eliminate the commercial obstacles in order to join The World Trade Organization and trade liberalization. One of these steps is decreasing direct commercial taxes and the customs tariffs that have caused the reduction of the government's income from this point of view. On the one hand, it has been tried to improve trade and resources for preventing lose of income with replacing other internal taxes. Due to the favorable characteristics of the value added tax, most countries uses it. The issue that should be considered whether this movement has been able to improve the statue of the foreign trade or this type of tax will also indirectly limit trade. The consequences of implementing value added tax can be strongly influenced by the business structure and the way of implementation in countries. If tax to be applied to the added value of goods and services produced inside a country, the tax system will be based on the principles of the origin. In this case, the import of goods and services is outside the scope of value added tax. In contrast, if value added tax to be imposed on goods and services used within a country, the tax will be based on the principle of destination and in this case, export will be outside its scope (Ernst and Yang, 2012).

Research related to the value added tax and profitability and survival in the tourism industry are as follows: Cheharghani and Zaranejad (2019) investigated the effect of value added tax on Iran's economic growth using the CGE equilibrium model and the analysis has been done in the form of nine scenarios, which include imposition of value added tax with applicable rates in all scenarios and the value added tax rate in the agricultural sector is assumed to be zero. Azizi and Mansouri Kasvai (2021) studied the effect of value added tax on trade and compared this effect in countries exporters and non-exporters of oil, their results indicated that value added tax has a significant negative effect on trade and export in each group of the studied countries and there was a significant negative effect on trade and export in each of the studied country. However, its negative effect is more in oil exporting countries than in non-exporting countries. Kia et al (2021) identified the criteria and metrics for evaluating the value added tax policy. The results of the sampling adequacy test fulfilled the objective of the factor analysis. Next, confirmatory factor analysis was used. The results of the confirmatory factor analysis confirmed the compatibility between the theoretical structure and the experimental structure of the research model. Lambi (2017) assessed the impacts of a major tax reform and the effects of tax reforms including value added tax in Uruguay using the computable general balance method. The result showed that in order to maintain the neutrality of the budget after tax reforms, the value added tax rate should be reduced. Timmermans and Achten (2018) investigated the value-added tax to a damage and value-added tax partially based on life cycle assessment: principles and feasibility that aimed to examine the argument in favor of changing from value added tax or sales tax to loss value added tax mainly based on the assessment of the life cycle of goods and services. With this change, goods and services that damage the environment seriously and are harmful to health will be expensive. Mariscal and Werner (2018) studied the effects of the value-added tax on income distribution. They relied on two tax conditions in Mexico increasing the tax rate for a group of cities and exempting another. Zou and Jingxian (2019) studied the effect of value added tax on tax leverage: taken from the reform of China's value added tax and stated that they have used the revised China's value added tax in 2007, which aims to attract fixed investment, as a natural experiment to find out the effect of financial leverage. According to Dang et al (2019), the evidence showed that maintaining transparency and economic stability will effectively reduce the tax burden. Hosseini and Briand (2020) studied the effect of replacing sales tax with value added tax on production efficiency and informality in Indian states. Using scalable anomaly detection techniques, Jellis van Hooyveld, David Martens, Bruno Peters (2020) stated that the range of tax fraud detection with a very small number of known labeled data (legal fraud/legal case) is representative for the population due to sample selection bias. Kisanga et al. (2021), in a research entitled the evaluation of the distributional impact of reduced VAT rate on the standard rate items in Tanzania and options for refunds income loss stated that these results are sustainable development solutions to strengthen Tanzania's research to achieve development goals. In research to analyze the impact of the tourism industry, Mateus and Mateus (2021) investigated the consequences of a significant increase in value added tax in the tourism industry regarding estimation of profitability and survival of related Food and Beverage companies' service providing activities. Analysis of this research is divided into three periods of before the value added tax, after the increase of the value added tax and during the financial crisis. The results showed that a significant increase in value added tax significantly affects the profitability of the companies in the country implementing value added tax more impressive than the financial crisis.

Mateus and Mateus (2021) in the article entitled "Does the increase in value added tax harm the tourism industry, evidences from Portuguese", investigated the mentioned topic since 2003 to 2013. The analysis was done based on a sample of 23388 Portuguese companies and 4969 Greek companies, which annual observations for each company were on average 5.1 and 6.9 for Portugal and Greece, respectively. Portugal and Greece are the closest countries in southern Europe with similar population, GDP per capita, cultural dimensions and tourism indicators. The findings of this research depicted that demand for tourism is flexible and sensitive to price changes. Therefore, a 1% increase in the tourists cost leads to a 2% decrease in the number of tourists arriving to the country.

3. Research Methodology

The method for conducting this quasi-experimental and retrospective research is using past information in the scope of accounting research based on real information. In this type of research, the purpose is investigating the relationships between the variables and the data collected from the environment existed naturally or were past events analyzed without direct intervention of the researcher. Data review method is in the form of mixed data analysis of year-on-year review using multivariate regression. The data were collected using the financial statements of Tehran hotels for a period of 12 years (2007-2018).

Research Model and Variables

The regression model of this research is as follows:

$$PROFIT_{i,t} = \beta_{0,i} + \beta_{i,j}VAT_{i,j,1} + \sum_{k=1}^{k} \beta_{1,k}Y_{i,k,t} + \sum_{k=1}^{k} \beta_{2,l}Z_{l,t-1} + \varepsilon_{i,t}$$

The dependent variable

Profitability (PROFIT) has a special place and is the main axis as a dependent variable in this research. If this variable is not calculated accurately, the accuracy in calculating the independent variables will be useless. In this research Profitability is measured by the ratio of profit before interest and tax to total assets.

Independent variables

In addition to value added tax, two groups of factors affect profitability, a series of the factors are related to the company itself, which are: size, financial leverage, and we considered these factors in the form of ΣY. And a series of the factors related to macroeconomics are: exchange rate, inflation and economic growth, which we considered in the form of ΣY.

Value Added Tax: (VAT) is application and stability of the criterion, and imaginary variables of zero and one are used.

Size: Small businesses are often considered as innovators and job creators. Small businesses have a significant contribution in the tourism sector. Jobs, production growth and contribution to the economy of this group of companies are often compared with large businesses. Size should affect profitability. Economy of scale, diversity of business and its scope means that a large company will generally be more profitable than a smaller company. Besides, they probably will have easier access to bank financial resources, generally face lower borrowing costs and likely to go bankrupt because, unlike small companies, they can absorb higher costs easily. Here we measure firm size by the natural logarithm of total firm assets (Mateus and Mateus, 2021).

Financial leverage: (LEV) is a type of financial tool to increase the return in an investment. In fact, the use of financial leverage means using debt in a specific investment. A company or investor can increase his capital and financial activities apart from assets and capital, without adding new investors, through borrowing (creating debt) capital. Financial leverage is calculated by dividing total liabilities by total assets.

Inflation rate: The inflation rate is a decreasing function of the real exchange rate and the nominal exchange rate that directly increases the price. Compared to domestic goods, foreign goods increase the demand for domestic goods and wages and production costs and it leads to an increase in the price of domestic goods until the real exchange rate reaches the equilibrium rate. Exchange rate can act as a monetary policy variable. Inflation rate is equal to the logarithm of the inflation rate announced by the central bank.

Economic growth rate is simply a ratio in percentage that shows the changes of value added of economy established by the country in a period, which is usually a year, compared to the previous period or the previous year. In economists' point of view, it depicts how much the GDP of a year has decreased or increased compared to the previous year. Economic growth equals to the GDP of the current period minus the GDP of the previous period divided by the gross output of the previous period.

Exchange rate is a number that shows the value of a country's currency in terms of exchange currency in a certain time, which is measured through the increase in the general level of the dollar and the dollar rate in this research is considered for its standardization and natural logarithm was taken (Varharami & Abbasgholinejad Asbaghi, 2018).

4. Research Findings

Descriptive Findings

In order to examine the general characteristics of the variables and their detailed analysis, familiarity with the descriptive statistics related to the variables is necessary. Table (1) shows the descriptive statistics of the data related to the variables used in the research. Descriptive statistics is related to 30 sample hotels during a period of 12 years (2007 to 2018) or the number of (360) hotel years.

The main central index is average, which indicates the balance point and the center of gravity of the distribution, and is a good index for the centrality of the data. For instance, the average value for the financial leverage variable equals to 0.09, which shows most of the data are concentrated around this point. In general, dispersion parameters is a measure to determine the amount of dispersion from each other or their dispersion relative to the mean. One of the most important dispersion parameters is the standard deviation. The value of this parameter for the economic growth variable equals to 2.66 and the financial leverage variable is equal to 0.12 percent, which shows that these two variables have the highest and lowest standard deviation, respectively. The minimum and maximum also shows the lowest and highest amount in each variable.

Table 1): Descriptive statistics of research variables

Variable	Abbreviation	No.	Mean	Median	Max.	Min.	SD
Profitability	Profit	360	0.12	0.048	1.57	-0.022	0.27
Value added tax	VAT	360	0.66	1.00	1.00	0.00	0.47
Hotel size	SIZE	360	19.98	19.98	20.71	17.87	0.38
Leverage	LEV	360	0.097	0.082	1.24	0.035	0.12
Inflation rate	Inflation	360	1.13	1.05	1.54	0.95	0.19
Economic growth	GDP	360	-0.81	0.12	9.58	-0.89	2.66
Exchange currency	EXCH	360	4.24	4.24	4.62	3.90	0.26

Variance Heterogeneity Test

The results in table (2) show that the significance level of the test in the research model is less than 5% and indicates presence of heterogeneity of variance in disturbance sentences and this problem has been solved in the final estimation of models by executing the *gls* command and also using the features of the standard powerful tool fixed in Eviews 10software.

According to the results of table (3), it can be seen that the significance level of the serial autocorrelation test of the research model is less than 5% and indicates the existence of serial autocorrelation in the models. This issue has been resolved with addition of the first order break in the model (Aflatoni, 2018).

The unit root test of variables

To check the presence of unit root in panel data, Levin, Lin and Chu test can be used, the results are summarized in Table (4).

Serial Autocorrelation Test

According to the results obtained in table (4), it can be seen that the significance level of the variables in the unit root test is less than 5% percentage and indicates the significance of the variables.

Table 2) The results of the heterogeneity of variance test

Test model	Statistics	Sig	Result
Research hypothesis	353.21	0.0000	Variance Heterogeneity

Table 3) Results of serial autocorrelation test

Test model	Statistics	Sig	Result
Research hypothesis	280.8	0.0000	Serial Autocorrelation

Table 4): Unit root test (Levin, Lin and Chu) quantitative research variables

Variables	Abbreviation	Statistics	sig	Result
Profitability	Profit	- 7.28619	0.0000	Stationary
Hotel size	SIZE	- 3.89671	0.0000	Stationary
Leverage	LEV	- 14.9500	0.0000	Stationary
Inflation	Inflation rate	- 3.90373	0.0000	Stationary
Economic growth	GDP	- 3.18738	0.0000	Stationary
Exchange currency	EXCH	- 4.50764	0.0000	Stationary

Hypothesis Test Results

F-limer test (Chu)

According to the results obtained in table (5), it can be seen that the level of significance of the Chu test for the hypothesis of the research is less than 5% and it indicates the acceptance of panel data model which needs to be assured. Hausman's test is presented below (Aflatoni, 2018).

Hausman test

According to the results obtained in table (6), it can be seen that the significance level of the test in the research hypothesis test model is less than 5% and indicates the acceptance of constant effects.

Hypothesis Test Results

Research hypothesis: increasing the value added tax has a negative and significant effect on the profitability of the tourism industry.

The results of table (7) show that the value added tax increase variable with a negative coefficient (0.045) and a significance level below 5% (0.0001) has a negative effect on profitability; therefore, the research hypothesis is not rejected at 5% error level.

The internal variables of hotels, including size and financial leverage, have a significant relationship with profitability with a significance level below 5%. Also, external variables affecting hotels include inflation rate, exchange rate and economic growth with a significant level below 5% have a significant relationship with profitability. The coefficient of determination equals 81%, which shows independent and control variables in the model, and they were able to explain 81% of the changes in the dependent variable. Also, the value of the Durbin Watson (DW) is equal to 1.99 and since our number is between 1.50 and 2.50, it shows that there is no strong autocorrelation between the sentences of the disturbance model. The test statistic with a significance level below 5% depicts that the research model is suitable. The co-linearity statistic below is 5, which shows there is no strong correlation between the research variables.

Table 5): F-limer test results (Chu)

Test model	Statistics	Sig	Result
First secondary hypothesis	8.500	0.0000	Accepting data panel model

Table 6): Hausman test results

Test model	Statistics	Sig	Result
Research hypothesis	63.337	0.0000	Fixed impact of y-intercept

Table 7): The result of the research hypothesis test
Dependent variable: profitability

Variables	Abbreviation	Coefficients	SD	t statistics	Sig	VIF
Value added tax	VAT	-0.045	0.011	-3.97	0.0001	2.33
Hotel size	SIZE	-0.025	0.007	-3.41	0.0007	1.63
Leverage	LEV	0.48	0.067	7.21	0.0000	1.15
Inflation rate	Inflation	0.21	0.058	3.56	0.0004	2.80
Economic growth	GDP	-0.10	0.026	-3.75	0.0002	2.26
Exchange currency	EXCH	-0.11	0.026	4.20	0.0000	1.27
y-intercept		- 0.008	0.23	- 0.037	0.96	
Coefficient of determination		0.81				
Durbin Watson		1.99				
Statistics F		35.854				
Sig		0.0000				

5. Discussion and Conclusion:

Change in tax policies and use of value added tax system in tourism industry is one of the demands that has recently been raised by private sector activists and studies have been conducted regarding it. In the experts' opinions, one of the factors affecting the tourists' decisions to choose a destination is its price. According to the World Economic Forum, Iran ranked first in 2015 in terms of cheap travel destinations. While, Iran considered this feature (cheap travel) as one of its advantages to compete in the global tourism market, the application of value added tax imposed on tourists can make this travel destination more expensive and have a negative effect on its competitiveness. However, it depends on the rate of value added tax that can be received from tourists. It also depends on the facilities, but it should be noted that almost one third of Iran's tourists are Iraqi who mainly come to Iran with pilgrimage intention, and in these cases, such a tax reduces the number of tourists visiting Iran besides other consequences. Meanwhile, some experts believe that instead of relying on the cheap index for Iran's competition with competing destinations, it can be measured in other strengthened competitiveness indices. However, it seems that if the rate of value added tax is to be collected from the tourists there will be a need for serious and deep discussions and the rate that is determined will be very important. How can it be established? By a reasonable and rational rate the tax from industry activists can be transferred to mostly foreign tourists and providing profitability for the businesses related to the field of tourism can improve the related infrastructures directly and indirectly. On the other hand, Iran has not lose the advantage of being competitive in the price of travel destinations in a situation where it has big competitors which have been marginalized to some extent only due to security conditions and may enter the tourism market of the region at any moment. In this regard, different experiences have been recorded in other countries, which can be helpful for Iran. Great Britain, The United Arab Emirates and Tanzania have had different experiences before and after establishment of value added tax gaining experiences from three continents and with different economic systems.

Finally, some suggestions are recommended:

1) It is suggested that the level of value added tax coverage to include a wider range of hotel services with a significant impact on the change in demand and the resulting impact on the accommodation sector, direct benefits for the government and interests and indirect demand for tourists. This expansion should be based on the type of tourists and the purpose of the policy maker should be considered and should not make a broad policy regardless of the type of beneficiary society.
2) In terms of price and tax policies, travel service offices should be supported because they are influenced by the tourism industry price policies. On the other hand, transportation services are important due to the extent of inter-sectorial relations and any policies that have price effects on the tourism economy should be implemented with more consideration. Also, depending on the type of tourists and the policymaker's goal of applying taxes, analyses should also be done in this regard
3) Taxes on agency services and tour operators have significant direct effects and any tax on this group of activists in the tourism industry (due to the very low level of domestic and national tourist demand) to use this type of service and also, the low share of foreign tourists from the entire country's tourism industry influence the development of travel agency services. Therefore, value added tax coverage is not recommended for this group of tourism industry activists.

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