Int. J. Nonlinear Anal. Appl. 15 (2024) 10, 243–261
ISSN: 2008-6822 (electronic)
http://dx.doi.org/10.22075/ijnaa.2023.30580.4433

A comparative study of the effect of community development on improving the quality of financial reporting of companies with an emphasis on the efficiency and effectiveness of strategic management accounting techniques (a comparative study of Iran and Japan)

Saeed Khodayareyeganeh[a], Zahra Poorzmani[b,c,*], Azita Jahanshad[b], Ramzan Ali Royaee[a]

[a]*Department of Accounting, Science and Research Branch, Islamic Azad University, Tehran, Iran*

[b]*Department of Accounting, Central Tehran Branch, Islamic Azad University, Tehran, Iran*

[c]*Visiting Professor of Science and Research Branch, Islamic Azad University, Tehran, Iran*

(Communicated by Mohammad Bagher Ghaemi)

Abstract

In this research, it was tried to study the effect of economic, social and political development of the country in improving the quality of financial reporting of companies by developing a comprehensive and scientific model by setting Japan as a model, emphasizing the efficiency and effectiveness of the technique—management accounting as a mediating variable. The mentioned model was developed through structural equation modelling with PLS software. This research aims to collect economic, social and political data from the data of international reports and to collect data related to the quality of the internal information environment (alternative index to measure the efficiency and effectiveness of management accounting techniques and tools) and The quality of financial reporting has been used from the financial statements of all companies in the automotive industry, parts manufacturing, electronic equipment and heavy vehicles in Tehran and Tokyo Stock Exchanges. The developed model and the results of the research hypothesis test showed that the main factors of development, including economic, social and political factors, have a significant positive effect on improving the quality of the internal information environment through the efficiency and effectiveness of management accounting techniques and tools, while the factors The main development, neither directly nor indirectly through the mediating variable of the quality of the internal information environment, has a significant effect on the quality of financial reporting of companies. The same result was repeated in the fourth hypothesis regarding the country of Japan, and it showed that economic, social and political factors in both Iran and Japan cannot lead to improving the quality of financial reporting.

Keywords: economic development, social development, political development, quality of internal information environment, quality of financial reporting
2020 MSC: 91F10, 91B54

*Corresponding author
Email addresses: saeed.khodayareyeganeh@iau.ac.ir (Saeed Khodayareyeganeh), zahra.poorzamani@yahoo.com (Zahra Poorzmani), azjahanshad@yahoo.com (Azita Jahanshad), r.royaee@srbiau.ac.ir (Ramzan Ali Royaee)

Received: January 2023 *Accepted:* May 2023

1 Introduction

The main goal of the accounting system as an information system is to meet the information needs of users in the intra-organizational and extra-organizational dimensions, in order to make strategic decisions. The most important tool that the accounting system has to achieve its goal is financial reports. The purpose of financial reporting is to provide summarized and classified information about the financial status, financial performance and financial flexibility of the business unit so that it is useful for a wide range of users to make economic decisions [3]. Meanwhile, the high quality of information in financial reporting leads to higher quality judgments and decisions [12]. The quality of financial reporting determines the value of financial reporting, and for this reason, providing a clear and complete definition of the quality of financial reporting has become a global demand [9]. However, the quality of financial reporting is a multifaceted concept that does not have a precise and unified definition that everyone can agree on. Some researchers consider the quality of financial reporting as criteria that separate useful and useful information from other information and increase the usefulness of information [55]. According to the definition of the Financial Accounting Standards Board, the International Accounting Standards Board, the British Accounting Standards Board and the Australian Accounting Standards Board, the quality of financial reporting is to provide financial statements with correct, complete and fair information about the financial status and performance of a business entity [26]. In many accounting and financial researches, the quality of financial reporting, and the level of honesty of managers in providing fair and true information to decision-makers has been defined [56]. The quality of financial reporting means promoting transparency and publishing quality annual reports through comprehensive disclosure [16]. The quality of financial reporting is the accuracy of the reported information for a better description of the company's operations [59]. Therefore, inevitably, researchers have used many different criteria to measure the concept of quality. In most of the research, criteria related to profit such as quality of accruals, quality of profit, stability of profit, smoothing of profit, management of profit, conservatism and other things are scattered in accounting research as measurement criteria The quality of financial reporting has been used repeatedly [45] because profit is the main part of the output of financial reporting [31]. although profit is not a perfect criterion for measuring the quality of financial reporting, it is at least the most important output of the financial reporting process [14]. In the meantime, in general, the common result of most of the research conducted in the field of financial reporting quality shows the usefulness of quality financial reports in improving economic decisions in the extra-organizational dimension.

Now, the first question that is raised here is: whether the high-quality financial reports that are supposed to lead to the improvement of economic decisions in the extra-organizational dimension, can originate from an unhealthy information platform inside the organization? In other words, can we expect quality in external financial reporting without considering the quality of the organization's internal information environment? It seems that the answer is negative. Accounting, as an information system, must first be able to improve the company's internal information environment so that it can subsequently achieve its goals in the external dimension, which is to improve the quality of financial reporting. Because if the company's internal information environment is contaminated as a platform for external financial reporting, the information prepared for external users will not necessarily be error-free. Basically, the quality of the internal information environment refers to the existence of a safe environment inside the company that leads to the provision of quality information [33]. Now, the second question that is raised here is: how the quality of the internal information environment should be improved? In response, it should be said that the management accounting system, as a part of the overall accounting system, is responsible for meeting the information needs of internal users and should be able to improve the quality of the information environment with the tools and techniques it has. To promote the internal organization. In the meantime, the results of internal research on the efficiency and effectiveness of management accounting tools and techniques such as [13, 38, 47, 53], and... indicate the lack of efficiency or the lack of use of modern management accounting techniques or the use of tools, and traditional techniques in Iranian companies.

Now, the third question that is raised is: why management accounting in Iranian companies, according to the results of the conducted research, has not been able to fulfil its mission properly and achieve its goals in the internal dimension? Management accounting, as its name suggests, is a branch of accounting that provides the necessary information for internal users to make useful and relevant decisions, and since organizations Due to environmental changes, are constantly changing [64], therefore, management accounting tools and techniques must reflect the different political, economic and social conditions of their environment in order to have the necessary efficiency and effectiveness [53]. Abbaszadeh and Bazaz-zadeh [1] believe that management accounting tools and techniques in most developing countries such as Iran are adapted from the procedures and techniques created in developed countries and are in accordance with the needs of users. and respecting their information priorities. They state that management accounting in developing countries cannot be studied and analyzed apart from economic, social and political factors. It is believed that management accountants, in addition to being aware of the development of management account-

ing tools and techniques, should also be aware of the socio-economic factors affecting these techniques [61]. In this regard, some researchers have studied the influence of effective factors on accounting and management accounting. Belkaoui [15] is one of the first researchers who investigated the effect of environmental factors on accounting based on contingency theory. Contingency theory states that there is no ideal form and universal unit for designing accounting information systems. Special conditions and situations in each society determine the best choice of system in that situation. Simply put, contingency theory argues that an effective management structure depends on circumstances. On the other hand, environmental conditions and various factors affecting the development of management accounting in different societies are not the same at all times. So an event in one country may be an opportunity, while the same event may be considered a threat in another country. Therefore, for each society, the specific environmental conditions of that society must be investigated and analyzed. As a result, it is not possible to provide a specific solution or model for all societies with different economic, social and political conditions, but by identifying the environmental conditions in each country and examining the direction and dimensions of the effects of factors and variables, it is possible to design and the development of payment management accounting systems and procedures [53].

The argument of contingency theory in the combination of economic, social and political factors basically refers to a concept called development in the economy. The concept of development is one of the most important concepts of today's societies, so today they classify the countries of the world and human communities based on it. In the past, instead of economic development, a concept called economic growth was used, until it became clear that this index is an incomplete index to show the state of countries. The concept of economic growth is mostly applied to the economic situation of countries and is measured based on the gross national product index. With the passage of time, it became clear that the GDP index and even the GDP per capita index alone are not suitable measures to show the economic status of societies, because these indices do not show the distribution of the GDP in the country. On the other hand, the concept of economic growth does not measure the social, political and cultural situation of the society and considers the economy alone as the basis for measuring all economic, social, political and cultural dimensions and the opportunities for the political, social and cultural growth of the society in the form of It has economic growth. While it became clear, in most cases, not only economic growth does not lead to the growth of other dimensions of society, but in many cases, it even prevents economic, political and cultural growth. Therefore, with the passage of time, a concept called development replaced the concept of economic growth. In addition to the economic status of societies, the concept of development also considers the level of inequality, the status of human resources, and the social and political status of the society. So that when a country is considered developed, all the different aspects of the society are promoted together with the necessary coordination, and at the same time, social, economic and political justice is realized in the society [57].

In another part of this research, we will evaluate the effectiveness of management accounting techniques and tools. According to the conducted surveys, no research has directly measured the efficiency and effectiveness of management accounting tools in a quantitative manner. Because it is very difficult or impossible to obtain financial information within the organization. For this purpose, researchers mostly use questionnaires to evaluate the efficiency and effectiveness of management accounting systems. In the present research, it was tried to use a concept called "quality of internal information environment" to quantitatively measure the efficiency of management accounting tools. The quality of the internal information environment refers to the existence of a safe environment inside the company, which leads to the provision of quality information [33]. Therefore, the argument is that if the management accounting system in companies has the necessary efficiency and effectiveness, it should be able to improve the quality of the internal information environment of the organization. Because management accounting as an internal information system must, first of all, be able to improve the quality of the company's internal information environment, therefore, if strategic management accounting techniques and tools are to be developed in accordance with the economic, political and social requirements of society. In order to function efficiently and effectively, this system must be able to improve the quality of the company's internal information environment. In the meantime, management accounting literature believed for a long time that the quality of the internal information environment will lead to the improvement of the decision-making process [40]. A high-quality information environment will improve the decision-making process by providing timely and reliable information about the financial status and performance of the company and by removing obstacles between accounting cycles [17]. A company with a high-quality internal information environment provides timely access to accurate and correct information and increases the transparency of internal financial information. Acquisition and integration of information are more in internal information environments with higher quality [39]. Therefore, according to the above arguments, it can be said that the tools and techniques used in management accounting, which according to contingency theory should be designed and implemented in accordance with the economic, social and political environment of the society, should ultimately be able to improve the quality of the internal information environment. Promote the company. Because the ultimate goal of the management accounting information system, as a part of the accounting information system, is to provide the information needs of the

company's internal users, including the managers of the organization at different levels, therefore, no matter how much management accounting tools and techniques are designed implemented in organizations, in accordance with the environmental requirements of that society, can lead to the improvement of the quality of external financial reporting by improving the quality of the internal information environment. Therefore, in the present research, with a comparative study of the development factors of societies on the effectiveness of management accounting techniques in improving the quality of the organization's internal information environment and subsequently, the role of improving the quality of the organization's internal information environment in improving the quality of financial reporting in the extra-organizational dimension between the two countries Iran and Japan will pay. To put it simply, in the current research, we will measure the effect of community development on both aspects of accounting, i.e. internal and external. The reason for choosing Japan as a model and reference country is that perhaps Japan can be called the cradle of management accounting. Because many management accounting methods and techniques are the result of the efforts of the thinkers of this land. In other words, it is assumed that Japan, as a model, is at the highest level of using management accounting tools and techniques and the highest level of internal information environment quality. In addition, according to international reports, Japan is always among the top 5 in terms of development indicators. Therefore, it is hoped that, in the present study, using Japan as a model, as a leading country in management accounting, a practical model can be designed based on the requirements of the Iranian society in the field of management accounting and its effect on the quality of internal and external suggested information.

2 An overview of the basics and background of research

2.1 Explaining the impact of economic development on accounting and management accounting

How the economy affects accounting and, accordingly, management accounting is not hidden from anyone. Accounting can be considered a sub-branch of economics. In other words, accounting is a knowledge that has been created and developed in the shadow of economic growth and development. Without the existence of a healthy, dynamic and competitive economy, we cannot expect that accounting and, consequently, management accounting will grow and develop. The effect of economic development on the development of accounting has been widely studied in the literature and accounting texts. The background of previous research in the field of accounting development shows that economic factors are among the most important factors in the development of accounting and financial reporting. In theory, economic development depends more on financial reporting practices and high levels of disclosure. In underdeveloped countries, economic activities are at a very low level, and as a result, the accounting profession is less developed. The more developed the economy, the more important the social role of accounting for measuring and transmitting economic information becomes [53]. The available evidence about the impact of the macroeconomic environment on accounting development is different. Researchers such as [21, 25, 30, 54, 62] provided evidence about the impact of economic development on accounting development. This is despite the fact that Belkaoui [15], Adhikari and Tondkar [4] and Williams [71] did not find any evidence in this regard. The market-based economy and capitalism led to the emergence of concepts such as competition, free market and political economy, which in turn led to the emergence of large organizations, the expansion of pension funds and the privatization of the economy. These factors, in addition to the globalization of the economy and as a result the emergence of large multinational companies, the separation of ownership from management and also the continuous change in the needs of customers and the need for flexibility and speed in economic enterprises, the scientific approach brought about the management [60] and following that, management accounting, which is considered as a tool for managing economic enterprises, underwent a fundamental change and transformation. By studying the historical course of management accounting, it can be seen that parallel to the aforementioned changes in societies, i.e., the economic development of societies, global trade, increased competition, attention and focus on customer needs, etc., the tools and techniques of management accounting also develop. have found Because if management accounting as the language of business does not grow and develop in parallel with the economic, political and social development of societies and organizations, it cannot play its main role in guiding businesses properly. Kashanipour et al. [44], did not find a relationship between economic and human factors in the use of management accounting tools. Bahram-Far et al. [13], introduced one of the factors of the lack of development of management accounting is the lack of timely information provision by accounting systems and continuous changes in economic policies. Uyar [68] in research about the use of management accounting in Turkey concluded that factors such as decreasing profitability, increasing costs, competitive market pressure, and economic crises are the factors that have resulted in increasing the importance of management accounting. Yagoubian et al. [72] found in research that three contingency factors including market competition, environmental uncertainty and company size significantly and positively moderate the relationship between the use of modern management accounting tools and company performance. A wide range of research such as [27, 37, 41, 50, 65, 67, 72], emphasized the impact of economic factors and competition on the evolution of management accounting. Amirazad et al. [11] in comprehensive research investigated

the factors affecting the quality of financial reporting. In their research, they proposed strategies to improve the quality of financial reporting, including the establishment of an effective internal control system and the establishment of a suitable system for the cost of products, and the conceptual model of the research finally showed that increasing the quality of financial reporting has positive consequences within the company. both in the capital market and in the economy as a whole.

2.2 Explaining the impact of political development on accounting and management accounting

One of the significant aspects in explaining the effectiveness of accounting and management accounting from political components that have an undeniable impact on the economy is economic sanctions due to political issues. An economic embargo means a deliberate stop or threat to stop normal commercial or financial relations by a government. Many companies active in the stock market rely on imports and exports, and the first effect of economic sanctions is the supply of raw materials at a higher rate and the increase of company costs, resulting in a sharp decrease in profitability in these companies [58]. Naturally, management accounting, as a sub-branch of accounting in the intra-organizational dimension, is influenced by the discussed political components, willingly or unwillingly, and management accounting cannot be considered a taffeta separated from accounting. For example, when the economy in society is affected by political sanctions, and as a result, competition in international markets becomes difficult or impossible for domestic companies, and on the other hand, the supply of raw materials due to the increase in Currency parity becomes expensive and, in some cases, impossible, now what can be expected from management accounting. Management accounting tools and techniques, which are generally designed and invented in free economies with a turbulent political environment, are not responsive to tense political and economic environments. Companies operating in embargoed countries, in order to import raw materials, face an increase in costs due to the devaluation of the national currency, and in many cases, when they are unable to import, they turn to supply materials from domestic producers, which also leads to The reason for the lack of new technologies entering the country on the one hand and the inflation created due to stagnation and unemployment on the other hand is that they are faced with low-quality and expensive raw materials, which are expensive and low-quality raw materials along with the existence of technology. Old and worn-out products will also result in low-quality products. On the other hand, due to the inflation in society, the cost of other production factors has also increased, and in total, the final produced products have a high price, as a result, the selling price will be high and the quality will be low. Therefore, in the conditions of the embargo, domestic industries will lose their ability to compete and be present in international markets, and new management accounting tools and techniques will not be efficient and effectiveness in these conditions. Aghdam Mazraeh et al. [6] investigated democracy and accounting development in the research. The results of the research show that there is a significant relationship between the indicators of democracy and the development of accounting, and their factor loads on the development of accounting, respectively, include the membership of people in organizations and parties, the selection of responsive and effective representatives, and freedom of expression., rule of law, freedom of vote, freedom of parties, competition in holding positions, personal freedoms. In general, the findings of this research show that the indicators of democracy have a major effect on the development of accounting. In another research in this field, Aghdam Mazraeh et al. [7] examined civil liberties and the development of accounting. The results of the research indicate that there is a significant relationship between civil liberties and the development of accounting in Iran, and the variables of freedom of speech, rule of law, freedom of parties and personal liberties respectively have the highest factor loads on the development of accounting in Iran.

2.3 Explaining the impact of social development on accounting and management accounting

Accounting is a phenomenon that emerged in a social context and has never been and will never be separate from social issues. Accounting systems, rather than being a technical phenomenon, are rooted in social phenomena and should be understood in this way. In order to understand accounting systems as a social phenomenon, a big change should happen in the approaches and perspectives that have been used so far. One of the approaches used to understand this phenomenon in the social context is the critical approach [46]. Therefore, in order to explain the impact of social factors on management accounting, a social-critical point of view is used in management accounting. This is the view of an academic school that deals with the critical evaluation of management accounting procedures in relation to the mutual influence between organizations and their socio-economic contexts. Proponents of this school believe that management accounting methods and techniques play an essential role in the production of vast socio-political systems. For example, Some researchers believes that management accounting is a set of social procedures that delineate the scope in which labor force activity may be observable and have rational calculations. Therefore, the supporters of the critical point of view with doubts in the technical-management attitudes and paying attention to social theories, believe that management accounting procedures are theoretical as long as they can be explained as

a social theory [61]. By creating this perspective, the nature of the accounting process has been analyzed from the perspective of understanding social interactions, but few attempts have been made to provide a qualitative and general description of the processes related to accounting interaction and its social environment. Therefore, it is necessary to study the interaction process of accounting and its social environment, especially in terms of social freedoms. One of the basic indicators of social liberties is civil liberties. In this approach, accounting is not a purely objective approach, but rather a mechanism affecting the economy and social management, which is itself influenced by social processes. Considering that the accounting profession is affected by its surrounding environment and accounting approaches and methods are also affected by these environmental changes, therefore, in order to identify the growth and development of accounting, it is necessary to identify these changes in the accounting environment. Accounting is a social science that has its impact on the society and due to the development of the needs of the society, it creates tremendous changes in itself. In recent decades, many ideologies have emerged in human societies, each of which has influenced and changed the views of societies and, consequently, social demands. One of these ideologies is the importance of finding social and civil liberties in today's societies, which has influenced the understanding of society and the relationships between its people. Accounting, as a profession whose goal is to regulate people's financial relationships, is not an exception to this rule [7].

2.4 Investment efficiency

Using the following regression, the company's investment levels are predicted and then its residuals are used as an indicator of investment inefficiency.

$$\text{Investment}_{i,t} = \beta_{0j,t} + \beta_{1j,t} * Q_{i,t-1} + \varepsilon_{i,t} \tag{2.1}$$

$$\text{Sale of property.Building and equipment} + \text{Capital expenditure} + \text{Research and development expenditure} = \text{Investment} + 100 \text{ depreciation of tangible and intangible assets} \tag{2.2}$$

$$Q = (\text{assets market value})/(\text{assets book value}) \tag{2.3}$$

$$\text{market value} = \text{total assets} + ((\text{share price} * \text{number of shares}) - \text{assets, shares of book value owners}) \tag{2.4}$$

$$\begin{aligned} \text{Under-investment} &: \text{Negative residuals of the investment model} \quad i,t > 0£ \\ \text{Over-investment} &: \text{Positive residuals of the investment model.} \quad i,t < 0£ \end{aligned} \tag{2.5}$$

2.5 Capital increase

Growth opportunities There are different perspectives to measure growth opportunities. In this research and in order to achieve suitable results for comparison, the following two approaches have been used separately in estimating the expected investment (Equation (2.1)) to calculate the free cash flow.

$$G01 = (M + TA–B)/TA \tag{2.6}$$

By classical method

$$GO2 = M/B \tag{2.7}$$

The symbols used are as follows:

(TA) Total assets at the end of the company's fiscal year (M) Market value of the ownership rights at the end of the company's fiscal year (B) Book value of the ownership rights at the end of the company's fiscal year Cash flow: free for the purpose of estimating cash flow, free from the Richardson method has been used. In this approach, the expected return on investment approach is used to calculate free cash flow. For this purpose, the following equation must be estimated first:

$$\begin{aligned} INEW_{i,t} = \beta_0 &+ \beta_1 GO_{i,t-1} + \beta_2 LEV_{i,t-1} + \beta_3 CASH_{i,t-1} + \beta_4 AGE_{i,t-1} \\ &+ \beta_5 SIZE_{i,t-1} + \beta_6 RET_{i,t-1} + \beta_7 INEW_{i,t-1} + \varepsilon_{i,t} \end{aligned} \tag{2.8}$$

The expected investment (INEW) for the current year and the previous year is calculated as follows and inserted into equation (2.1):

$$INEW = (I_{total} - I_{maintenance})/AVGTA \tag{2.9}$$

Itotal: net cash flow resulting from investment activities from the cash flow statement) + research and development costs

+ Funds paid for the purchase of property, machinery and equipment

- Funds received for the sale of property, machinery and equipment

(GO) growth opportunities at the end of the previous year (LEV) the total of long-term and short-term financial facilities divided by the total of facilities and the book value of property rights at the end of the previous year, (Cash) the cash balance divided by the total assets at the end of the previous year (AGE) The natural logarithm of the number of years that have passed since the company's admission to the stock exchange until the end of last year, (SIZE) the size of the company, the natural logarithm of the company's market value at the end of the previous year, (RET) the return on the maintenance period of the company's ordinary shares last year, (Imaintenance) The annual depreciation cost after estimating the expected investment is used to calculate the free cash flow from the following formula.

$$\begin{aligned} CF_{AIP(i,t)} &= CFO_{i,t} - I_{maintenance(i,t)} + RD_{i,t} \\ FCF_{i,t} &= CF_{AIP(i,t)} - INEW_{i,t} \end{aligned} \tag{2.10}$$

(CFAIP) Cash flow from existing assets (RD) Annual research and development expenses (CFO) Cash flow from operating activities at the end of the year (FCF) Free cash flow at the end of the year. In order to more accurately estimate the expected investment and to determine the free cash flow as accurately as possible, the total data of two samples has been used.

2.6 Financial reporting quality index

Using Dechow and Dichev's model [23], working capital regression of accruals is calculated for past, present and future cash flows in addition to changes in income and gross value of property, machinery and equipment. The quality of commitment items is the standardized residuals of this regression [69].

$$Accruals = \alpha + \beta_1 * CF_{i,t-1} + \beta_2 * CF_{i,t} + \beta_3 * CF_{i,t+1} + \beta_4 * \Delta Revenue_{i,t} + \beta_5 * PPE_{i,t} + \varepsilon_{i,t} \tag{2.11}$$

$$Accruals = (\Delta CA - \Delta CASH) - (\Delta CL - \Delta STD) - Dep \tag{2.12}$$

ΔCA: change in current assets, $\Delta CASH$: change in cash/cash equivalents, ΔCL: change in current liabilities, ΔSTD: change in short-term debt. DEP: depreciation of tangible and intangible assets, Cash flow: profit Net before unexpected accruals, $\Delta Revenue$: change in income, PPE: gross value of property, machinery and equipment.

Dechow and Dichev [23] approach: Based on this approach, operating cash flow is used to estimate the quality of financial reporting, for this purpose, the following regression model was first estimated, and then the actual values of each company were included in the equation. The amount of residual indicates the quality of financial reporting, so that a high amount of residual indicates a low quality of reporting, and vice versa, so that the result can be interpreted easily, the residual values were multiplied by one in the model.

$$TCA_{it} = \beta_0 + \beta_1 CFO_{i,t-1} + \beta_2 CFO_{i,t+1} + \varepsilon_{i,t} \tag{2.13}$$

(TCA) the ratio of changes in operational working capital to the average assets of period t at the end of the year (CFO) the ratio of cash flow from operating activities to the average assets of period t at the end of the year

$$TCA = \Delta AR + \Delta Inventory - \Delta AP - \Delta TP - \Delta DP \tag{2.14}$$

(ΔAR) Change in accounts and current commercial receivables of the period related to period 1-t ($\Delta Inventory$) Change in the inventory account of period t compared to period 1-t, (ΔAP) Change in accounts and current commercial payables of period t compared to the period 1-t, (ΔTP) change in tax payable in period t compared to period 1-t, (ΔDP) change in dividend payable in period t compared to period 1-t.

McNichols approach [51] is the adjusted model of Dechow and Dichev [23]. He believes that in addition to operating cash flow, changes in sales and ratio of property, machinery and equipment can also indicate the quality of financial reporting. Based on this, the following regression model was used to estimate the quality of financial reporting.

$$TCA_{i,t} = \beta_0 + \beta_1 CFO_{i,t-1} + \beta_2 CFO_{i,t} + \beta_3 CFO_{i,t+1} + \beta_4 \Delta Sales_{i,t} + \beta_5 PPE_{i,t} + \varepsilon_{i,t} \tag{2.15}$$

The values of the above model variables are divided by the average assets of period t. ($\Delta Sales$) changes in sales of the current year compared to the previous year (PPE) of property, machinery and equipment at the end of the current year.

2.7 Conceptual model and research hypotheses

According to the theoretical foundations of the research, the conceptual model and hypotheses of the research are drawn and expressed as described in Figure 1 below:

Hypothesis 1: The main factors of development in Iran have a significant positive effect on the quality of financial reporting of companies.

Hypothesis 2: The main factors of development in Iran lead to the improvement of the efficiency of management accounting tools.

Hypothesis 3: The effectiveness of management accounting tools in Iran leads to the improvement of the effect of the main factors of development on the quality of financial reporting of companies.

Hypothesis 4: The main factors of development in Japan have a significant positive effect on the quality of financial reporting of Japanese companies.

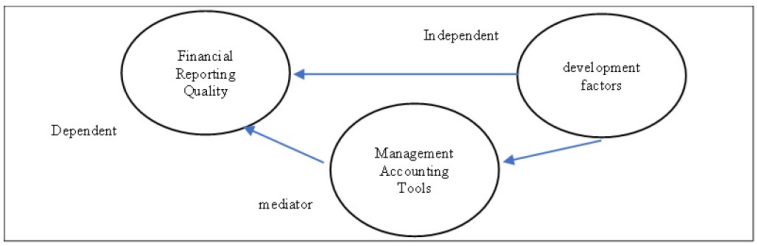

Figure 1: Conceptual diagram of the research

It should be noted that the main factors of development include economic development, political development and social development. Also, for two reasons, the mediating variable of the effectiveness of management accounting tools has not been used in Japan. The first reason is that, as stated in the previous sections, in this research, it is assumed that Japan is the model and cradle of modern management accounting at the highest level of application, efficiency and effectiveness of tools and techniques. Management accounting is located. The second reason is the lack of access to the data related to the management accounting efficiency of Japanese companies.

3 Research methodology

3.1 Type and method of research

In terms of implementation logic, the current research is part of deductive-inductive research and in terms of purpose, it is descriptive research. Because the current research seeks to describe the real characteristics of a phenomenon. Also, it is practical in terms of the method of implementation in the survey research group and in terms of the results, because the results of the current research can be used by a wide segment of the society, especially the professional accounting community. In this research, due to the type of conceptual research model and the existence of several dependent variables and the existence of hidden variables, each of which should be measured by several manifest variables, the variance-based structural equation modeling method will be used in Smart PLS software.

3.2 Population and statistical sample and data collection method

Considering that the present study is a comparative study between the economic, political and social conditions of the model country (Japan) with the prevailing conditions of the Iranian society, therefore, the data of such studies are applicable in order to be applicable. It should be extracted from a common information source with a single calculation basis. In the meantime, one of the best and most reliable sources of information for collecting and comparing economic, political and social data of the two countries of Iran and Japan is the international reports published by international institutions such as the World Bank. The World Economic Forum and... have been compiled and published. Regarding the measurement of accounting variables, the financial statements and reports published in Tehran Stock Exchange and Tokyo Stock Exchange have been used. Since the automobile industry (Toyota company) and electronics in Japan are known as symbols and pioneers in inventing and using management accounting techniques and tools at the world level, therefore, among the companies active in the automobile industry, component manufacturing, electronic equipment and heavy vehicles in Tehran and Tokyo Stock Exchange will be used as statistical population. In addition, the research period is from 2010 to 2021 (2010-2021). The total number of companies in the target society of the

current research in Iran is 40 companies. The same number (40 companies) of similar Japanese companies have been used.

3.3 Measurement of research variables

Development variables: The independent variables of the research include three major variables of the development of societies, including economic development, political development, and social development. To collect data related to the development of societies, as mentioned before, international reports will be used, which are summarized as described in the following table:

Table 1: Variables and indicators related to the main factors of development

The main variables	Subtotal variables	Index number	Period	Data collection source
Economic variables	Global competitiveness index	14	2010-2019	World Economic Forum
	Ease of doing business index	10	2015-2020	world bank
	Global Innovation Index	99	2010-2021	World Intellectual Property Organization
	Economic freedom index	12	2010-2021	Heritage Foundation
Social variables	Human Development Index	5	2010-2019	world bank
	Quality of life index	9	2010-2021	Nambeo Institute
	Legatum index	12	2010-2021	Legatum Research Institute
Political variables	Democracy index	6	2010-2020	Economist Information Unit
	Good governance index	6	2010-2020	world bank

Quality of financial reporting: The dependent variable of the research is the quality of financial reporting. In the accounting literature, there is no consensus on how to measure the quality of financial reporting, and researchers use several indicators that are mostly based on predicting future cash flows through accrual and indicative items. are the quality of profit, used to quantify the quality of financial reporting. In this research, in order to create more confidence in the results, several criteria including 1- the ratio of cash flow to operating profit, 2- models based on the characteristics of profit time series, including profit stability, profit predictability and variability profit, 3- real profit management and 4- financial information accuracy index were used as indicators of financial reporting quality, and the relevant models and the way to measure the variables are as follows [14]:

Effectiveness of management accounting tools: The mediating variable in the current research is the efficiency of management accounting tools. As with the quality of financial reporting, there is no consensus among researchers on how to measure the quality of a company's information environment. Givoly et al. [34] admitting that understanding the concept of quality (internal information environment) is quite difficult and the existing literature does not provide a clear definition of it, states that there is no single standard to cover all dimensions of quality and therefore in Several studies have used different criteria. Therefore, researchers have used several criteria as alternative criteria to measure the quality of the internal information environment of companies. In this research, the following criteria will be used as alternative criteria to measure the mentioned variable:

1. The quality of disclosure and transparency in financial reporting: The quality of disclosure and transparency in financial reporting is one of the main components of the quality of financial reporting in the external dimension, which is prepared in the context of the company's internal information environment and communicated outside the company. In this research, three criteria will be used: 1- disclosure quality, 2- profit announcement speed and 3- profit forecast error by managers. Each of these three criteria will be explained below:
   (a) Disclosure quality: In the present research, following the researches of Mehrani and Parvaei [52], Fakhari and Mohammadi [28], Aflatooni and Nemati [5], Zeynali et al. [73] and many other studies, In order to measure the quality of disclosure, the criterion of the quality of disclosure and appropriate information published by the Tehran Stock Exchange Organization, which includes two criteria of timeliness and reliability, will be used. Any increase in the size of these two indicators indicates an increase in the quality of the internal information environment and, as a result, the efficiency of management accounting tools.
   (b) The speed of profit announcement: Jennings et al. [42] stated in their research that if the accounting systems are of high quality, they can collect and combine information more accurately and quickly from different parts of the organization, leading to an increase in accuracy. and the speed of closing accounts at the end of the financial year. Also, along with the mechanization of accounting systems and the elimination of manual operations, the reporting process becomes more accurate and faster due to the reduction of repetition and the absence of duplicate information from different departments of the organization. Along with improving the quality of accounting systems, the time gap between the end of the financial year and the date of profit

Table 2: Financial reporting quality measurement models

model name	model and measurement criteria
The ratio of operating cash flow to operating profit	EQ= бCFO / бOI In this regard, CFO б represents the standard deviation of operating cash flow and бOI represents the standard deviation of operating profit in the last 5 years. The higher this index is, the higher the profit quality.
Sustainability of profits	$E_t= \beta_0+ \beta_1 E_{t-1} + \varepsilon$ β 1 The stability coefficient is profit. Whatever β 1 More and closer to the number one, the profit will be more stable and, as a result, the profit will be of higher quality and vice versa.
Ability to predict profit	$CFO_{t+1}= \beta_0+ \beta_1 E_t + \varepsilon$ The negative standard deviation of the model's error values over the past 5 years indicates the predictability of profit and, as a result, the quality of profit.
profit variability	$E_t= \beta_0+ \beta_1 E_{t-1} + \varepsilon$ The negative standard deviation of the model's error values over the past 5 years indicates the variability of profit and, as a result, the quality of profit.
Financial information accuracy index	$CFO_{i,\,t+1}= \beta_0+ \beta_1\, CFO_{i,\,t}+ \beta_2 \Delta AR_{i,\,t}+ \beta_3 \Delta INV_{i,\,t} + \beta_4 \Delta AP_{i,\,t} + \beta_5 DEPR_{i,\,t} + \beta_6 OTHER_{i,\,t} + \varepsilon_{i,t+1}$ OTHER= OP- (CFO+ΔAR+ΔINV-ΔAP- DEPR) The criterion for measuring the quality of financial reporting is the absolute value of waste. The smaller the absolute value of the residuals is, it indicates the accuracy of financial information and the high quality of financial reporting and, as a result, the high quality of the company's internal information environment.
Real profit management	The final size of the application of real profit management is calculated through the error values of each of the mentioned models, which error values can be positive or negative. Several researchers in order to calculate an integrated measure of the various components of real profit management, combined the residuals of all three models, the model of which is as follows:	$CFO_{it} /A_{it-1} = \beta_0 + \beta_1 (1 / A_{it-1}) + \beta_2 (Sales_{it} / A_{it-1}) + \beta_3 (\Delta Sales_{it} / A_{it-1}) + \varepsilon_{it}$ $CGS_{it} /A_{it-1}= \beta_0+ \beta_1 (1/ A_{it-1}) + \beta_2 (Sales_{it} / A_{it-1}) + \beta_3 (\Delta Sales_{it} /A_{it-1}) + \beta_4 (\Delta Sales_{it-1}/A_{it-1}) + \varepsilon_{it}$ $DISEXP_{it} /A_{it-1} = \beta_0 + \beta_1 (1 / A_{it-1}) + \beta_2 (Sales_{it-1} / A_{it-1}) + \varepsilon_{it}$ integrated index of profit mediation= (ε first model multiplied by -1) + (ε of the second model) + (ε of the third model multiplied by -1)

announcement is reduced. The speed of profit announcement refers to the time interval between the end of the financial year and the time of approval of the financial statements and the announcement and approval of the profit by the annual general meeting. The shorter the mentioned time interval, the higher the quality of the internal information environment and the efficiency of management accounting tools.

(c) Forecast error: Profit forecast error refers to the difference between the profit forecast by the managers and the net profit announced in the financial statements. Williams [70] showed in his research that managers have high motivations for accurate profit forecasting. Dorantes et al. [24], Graham et al. [35] state that profit forecasting by managers represents -a voluntary disclosure procedure in the company by which managers reduce information asymmetry in the capital market and through this can Improve the company's reputation for transparent and reliable reporting. On the other hand, the forecasts made by managers are based on internal financial and non-financial information obtained from the company's internal information systems. Therefore, the quality of the profit forecast by managers -directly depends on the quality of the company's internal information, and using this variable to measure the quality of the company's internal information provides the possibility to -measure the results of the company's information systems specifically. Following Gallemore and Labro [33] and Dorantes et al. [24] this Factor as Criterion reverse The quality of the environment Internal company information perceived and if it is low, it means that the efficiency of management accounting tools is high.

2. Audit Committee and Internal Audit: Respectfully to studies the past, the researchers found that with create committee audit, precision and information quality financial and accounting improved and with preparation and confirmation information financial clear, accountability direction management disclosure enough and appropriate and improvement reporting quality financial is promoted [29]. create and to employ this Committee In prevention from occurrence actions against and illegal, process improvement reporting financial and as well presentation information and reports financial transparent and able useful reliance and effective [10]. researches recent [36, 8] shows that existence committee audit can an effective role at improvement systems informational and create confidence of credit reports financial company had be as well Habib And Azim [36] expression they did that information accounting at the face existence audit committee, have value more are. Sun et al. [66] also believed that existence committee additional audit on promotion level qualitative structure governance corporate, can

cause increase quality reporting financial to be so with attention to levels above can be such argued that existence committee audit can cause upgrade and improvement environment informational company has been and subsequently can increase cash sloppiness take stock company particle for direct object looking for have [29]. The characteristics of the audit committee and the internal auditor used in this study include the size of the audit committee, the expertise of the committee members, the number of non-commissioned members of the committee, and the seniority of the internal auditor.

3. The quality of internal controls: the internal controls system is a process that is established in order to obtain reasonable confidence regarding the effectiveness and efficiency of operations, the reliability of reports and compliance with laws and regulations. Management accounting literature and texts show that if internal controls or quality are designed and implemented in the company, management decision-making will improve. High-quality internal controls improve the decision-making process of managers by providing timely and reliable information about the financial status and performance of the company to manage and remove obstacles between -accounting cycles. High-quality internal controls indicate a standardized and centralized business transaction process, short-term financial reporting cycle time, comprehensive and integrated information from different parts and their geographic location. A company with high-quality internal controls has timely access to accurate and correct information, and the transparency of internal information is more in such companies [43]. Therefore, it is argued that the existence of strong internal controls in a company indicates the quality of the internal information environment and leads to the improvement of the quality of financial reporting. In the current research, following the researches of Li et al. [48], Maleki et al. [49], Karami et al. [43], sayadi et al. [63], Ghaderi et al. [32] and many other researches used the following three variables to evaluate the quality of internal controls:
   (a) The auditor's comment type: is a virtual variable. If the auditor's opinion is an acceptable opinion, the number 1 is considered, otherwise the number is -1.
   (b) Notification of important weaknesses: similar to the research of Abed and Gupta [2] if the auditor's report about the company's internal control system does not contain any important weakness about the company's internal control, i.e., the company's internal controls are of high quality, the number is 1, and otherwise, i.e., there is an important weakness in the company's internal controls, the number is -1.
   (c) Restatement of financial statements: Brazel and Dang [17] state that companies that have presented less restatements of their financial statements have a higher quality control environment. Gallemore and Labro [33] believe that the most important reason for re-presenting financial statements is incomplete information. Therefore, companies with high internal information environment quality will be less likely to be represented. Therefore, in the present study, the negative logarithm of the absolute value of the re-evaluation number will be used as an inverse indicator of the quality of the internal information environment.
   (d) Quality index of internal controls: since the use of two-dimensional (binary) variables in -structural equation modeling is not possible, therefore, since the two variables of the type of comment and notification of important weaknesses of internal controls are two-dimensional variables, therefore, instead of using individual variables of the quality of internal controls, Internally, in the structural equation model, we designed an index from the combination of the mentioned variables, and the method of calculating the index is as follows. The higher the number of this index, the higher the quality of internal controls and, as a result, the improvement of the quality of the internal information environment.

$$ICQ_{it} = \log(RFS_{it}) + WIC_{it} + TAC_{it}$$

ICQ Quality index of internal controls
RFS Re-presentation of financial statements: If the company has re-presented, the log -revaluation amount is used in the formula. Otherwise (failure to renew financial statements), number 1 will be replaced.
WIC Informing the weakness of internal controls: if there is a weakness in internal controls, the number -1 and otherwise the number 1 will be replaced.
TAC Type of auditor's opinion: in case of conditional or rejected opinion, the number 1- is replaced by 1 otherwise.

4 Developing the model and testing research hypotheses

In formulating the model through structural equations by PLS method, the following steps will be implemented:

Fitting the measurement model: In the fitting of the measurement models, four criteria of factor loadings, Cronbach's alpha, composite reliability and convergent validity were used, the results of which are as described in Table 3 below. In the first step, in order to measure the reliability of the measurement model, factor loadings were measured.

if this value is equal to or greater than 0.4, it indicates the reliability of the measurement model. If the value of this index is less than 0.4, that index should be modified or removed [22]. In the present study, after removing the measures with factor loadings less than 0.4, all measures had factor loadings above 0.4. After measuring the factor loadings and initial modification or elimination of the measures, the traditional Cronbach's alpha criterion was used to measure the internal reliability. Cronbach's alpha above 0.7 indicates acceptable reliability, and Cronbach's alpha above 0.5 indicates moderate reliability. As can be seen in the table below, Cronbach's alpha value of most constructs is above 0.7 and some of them are above 0.6. In the PLS method, there is another more modern method than Cronbach's alpha to measure the reliability of structures, which is known as composite reliability (CR). The value of this statistic should be above 0.7 [22]. As can be seen in the table below, the combined reliability value of all structures is above 0.7. Therefore, Cronbach's alpha of structures less than 0.7 is acceptable in terms of reliability due to the high composite reliability statistic. To check the validity of the variables in the PLS method, the AVE statistic is used, which is known as convergent validity. The value of this statistic should be above 0.5. As can be seen in the table below, the value of this statistic is above 0.5 in all structures.

Since in the present study, two endogenous hidden variables of the quality of the internal information environment and the quality of financial reporting have constructive indicators, therefore, to evaluate the measurement model of the structures of these variables, two different criteria called t-statistics and VIF should be used. The results of the above two tests are as described in Table 4:

Table 3: The results of fit tests of reflective index measurement models

Country			Iran			Japan		
Indicators			Cronbach's alpha	Composite reliability	Convergent validity	Cronbach's alpha	Composite reliability	Converge nt validity
Economic factors	Global Innovation Index	Institutional framework	0.639	0.809	0.688	0.651	0.845	0.733
		Human capital and research	0.700	0.868	0.768	removed from the model		
		Infrastructures	0.677	0.826	0.618	0.823	0.910	0.835
		Market complexity	0.932	0.967	0.936	removed from the model		
		Business complexity	0.613	0.838	0.721	removed from the model		
		Output of knowledge and technology	0.711	0.853	0.747	0.701	0.836	0.644
		Creative outputs	0.664	0.805	0.679	0.866	0.937	0.881
	Competitiveness index	Infrastructure	0.816	0.931	0.785	0.957	0.972	0.922
		macroeconomic environment	0.903	0.921	0.630	0.960	0.968	0.815
		Commodity market conditions	0.793	0.855	0.673	0.725	0.837	0.576
		Labor market conditions	0.627	0.829	0.618	0.626	0.807	0.607
		Financial market conditions	0.647	0.840	0.705	0.871	0.919	0.630
		Technology and technology	0.693	0.733	0.659	0.823	0.941	0.785
		Market size	0.764	0.911	0.771	0.811	0.911	0.735
		Business conditions	0.648	0.783	0.905	0.760	0.849	0.653
		Business dynamics	0.634	0.845	0.729	0.929	0.943	0.704
		Business innovation	0.641	0.838	0.705	0.644	0.823	0.686
	Economic freedom index		0.747	0.844	0.506	0.615	0.715	0.507
	Ease of doing business index		0.845	0.895	0.682	0.796	0.756	0.586
social factors	Human Development Index		0.651	0.769	0.620	0.940	0.956	0.815
	Lekatum welfare index		0.694	0.848	0.664	0.778	0.903	0.642
	Quality of life index		0.601	0.861	0.772	0.748	0.854	0.664
	Education quality index		0.843	0.915	0.647	0.800	0.851	0.537
Political factors	governance		0.838	0.899	0.699	0.857	0.903	0.700
	democracy		0.891	0.930	0.774	0.690	0.800	0.578
	Institutions and government		0.954	0.958	0.721	0.963	0.969	0.779

Table 4: The results of the fit tests of the measurement models of the constructive indicators

Country name		**Iran**		**Japan**	
Indicator	**The name of the gauge**	**VIF statistic**	**t statistic**	**VIF statistic**	**t statistic**
Disclosure quality and transparency in -financial reporting	reliable	1.20	957.17		
	on time	1.10	570.3		
	Speed of profit announcement	1.16	820.2		
	Profit forecast by managers	1.08	611.1		
Audit Committee and Internal Auditor	Age of the audit committee	1.95	342.1		
	The size of the audit committee	24.41	895.0		
	Financial expertise of audit committee members	15.05	956.2		
	Educational qualifications of committee members	21.36	730.0		
Quality of internal controls	Mifit index of internal controls	1.16	772.2		
Financial reporting quality indicators	The measure of profit sustainability	1.00	350.1	1.01	789.0
	Profit predictability criterion	1.03	170.1	1.19	590.1
	A measure of profit variability	1.04	170.1	1.34	215.1
	Quality of accrual items	1.04	188.0	1.05	305.1
	Real earnings management index	1.00	820.0	1.19	758.0
	Financial information accuracy index	1.02	976.0	1.07	910.1

Test statistic is less than 5 for all measures except for the measures related to an audit and internal Due to the fact that the value of the VIF audit committee, therefore there is no collinearity between the measures and regarding the measures related to an audit and internal audit committee Also, because according to the theoretical foundations, this measure is considered a very important criterion in the quality of internal information, so it was ignored. Regarding the t- test statistic, since none of the above structures can be removed according to the theoretical foundations of the research, therefore, the removal of structures with a t- statistic less than 1.96 is ignored.

Fitting the structural model: according to the data analysis algorithm in the PLS method, after examining the fitting of the measurement models, it is time to fit the structural models of the research. In this section, unlike measurement models, we do not deal with measures (obvious variables) and only hidden variables are examined along with the relationships between them. To fit structural models from three significance criteria, t-value and R^2 criterion and the Q criterion 2 has been used, the results of which are shown in Table 5 below.

The first criterion for fitting structural models is the t-value criterion. If the value of this statistic is greater than 1.96, it indicates the correctness of the relationship between the constructs and as a result, the research hypotheses are confirmed at the 95% confidence level. Of course, this statistic only shows the accuracy of the relationships and does not show the intensity of the relationships between the structures. As indicated in the above table, most of the relationships between the variables are confirmed at a significance level of 99%, but the relationships between the main variables, which indicate the confirmation or rejection of the research hypotheses, except for one hypothesis, are rejected in the rest of the cases in both countries. The second criterion for fitting structural models is the R Square or R^2 criterion Is. This criterion is used to connect the measurement part and the structural part of modeling and shows the effect that an exogenous variable has on an endogenous variable. Any size R^2 value If it is more related to the endogenous structures of a model, it indicates a better fit of the model. Chin [20] introduced three values of 0.19 (weak), 0.33 (moderate) and 0.67 (strong) for this index. Therefore, as indicated in the above table, most of the endogenous structures of the model are in the strong and medium level in terms of fit, and a few items are in the weak level. The third criterion for fitting structural models is the Q^2 criterion. This criterion determines the predictive power of the model. This index should be calculated and reported for all the endogenous structures of the model. If the value of Q^2 If it is zero or less than zero in the case of an endogenous construct, it indicates that the relationships between other constructs and that endogenous construct are not well explained and the model needs to be modified. Regarding the severity of the predictive power of the model regarding endogenous structures, three values of 0.02 (weak), 0.15 (moderate) and 0.35 (strong) have been introduced. As can be seen in the above table, the predictive power of the model is strong for most of the endogenous variables, except for a few cases.

Overall model fitting: After fitting the measurement and structural models, it is time to fit the overall model. By confirming the fit of the overall model, checking the fit in a model is completed. To fit the general model, there is only one criterion called GOF criterion. This criterion is calculated through the following formula:

$$GOF = \sqrt{average(AVE) \times average(R^2)}$$

Three values of 0.01 (weak), 0.25 (moderate) and 0.36 (strong) have been introduced for the GOF index. According to these three criteria, it can be said that the general model developed has been strongly fitted. It should be noted

Table 5: Results of fit tests of structural models

	Iran						Japan					
Exogenous latent variable → endogenous latent variable	**t statistic**	**Sig.**	**R2**	**Impact rate**	**Q²**	**predictive power**	**t statistic**	**Sig.**	**R2**	**Impact rate**	**Q²**	**predictive power**
Development factors → Social development	175.865	0.000	0.87	Strong	0.468	Strong	96.264	0.000	0.784	Strong	0.378	Strong
Social → Human Development Index	79.172	0.000	0.665	Strong	0.373	Strong	203.891	0.000	0.854	Strong	0.686	Strong
Social→Lekatum welfare index	242.262	0.000	0.9	Strong	0.578	Strong	202.609	0.000	0.896	Strong	0.553	Strong
Social → education quality index	155.579	0.000	0.814	Strong	0.499	Strong	63.409	0.000	0.6	medium	0.294	medium
Social → quality of life index	164.638	0.000	0.803	Strong	0.607	Strong	116.522	0.000	0.795	Strong	0.508	Strong
Development factors → economic development	2057.063	0.000	0.992	Strong	0.49	Strong	1926.81	0.000	0.98	Strong	0.536	Strong
Economic→ economic freedom index	219.52	0.000	0.861	Strong	0.414	Strong	59.327	0.000	0.587	medium	0.263	medium
Economic→ ease of doing business index	68.598	0.000	0.648	medium	0.433	Strong	43.123	0.000	0.576	medium	0.176	medium
Economic → Global Innovation Index	195.353	0.000	0.863	Strong	0.362	Strong	28.402	0.000	0.381	medium	0.221	medium
Global Innovation→ Institutional Framework	52.198	0.000	0.532	medium	0.306	medium	120.272	0.000	0.87	Strong	0.634	Strong
Global innovation→ Human and research capital	101.428	0.000	0.796	Strong	0.602	Strong	Del.	Del.	Del.	Del.	Del.	Del.
Global Innovation Index → Infrastructure	47.246	0.000	0.601	medium	0.355	Strong	80.13	0.000	0.593	medium	0.428	Strong
Global Innovation Index → Market Complexity	43.32	0.000	0.527	medium	0.484	Strong	Del.	Del.	Del.	Del.	Del.	Del.
Global Innovation→ Business Complexity	15.915	0.000	0.406	medium	0.289	medium	Del.	Del.	Del.	Del.	Del.	Del.
Global innovation→ output of knowledge and technology	81.131	0.000	0.621	medium	0.396	Strong	178.629	0.000	0.903	Strong	0.574	Strong
Global innovation→ creative outputs	113.531	0.000	0.691	Strong	0.441	Strong	204.259	0.000	0.894	Strong	0.771	Strong
Economic → competitiveness index	2500.24	0.000	0.991	Strong	0.541	Strong	822.647	0.000	0.981	Strong	0.642	Strong
Competitiveness→ Infrastructure	48.891	0.000	0.524	medium	0.329	medium	305.897	0.000	0.892	Strong	0.812	Strong
Competitiveness → macroeconomic environment	195.336	0.000	0.802	Strong	0.46	Strong	1235.885	0.000	0.963	Strong	0.777	Strong
Competitiveness→ commodity market conditions	7.127	0.000	0.18	weak	0.084	weak	596.548	0.000	0.957	Strong	0.546	Strong
Competitiveness→ Labor market conditions	125.968	0.000	0.828	Strong	0.48	Strong	917.216	0.000	0.961	Strong	0.573	Strong
Competitiveness→ conditions of financial markets	470.735	0.000	0.935	Strong	0.637	Strong	1474.006	0.000	0.983	Strong	0.615	Strong
Competitiveness → technology	2.683	0.008	0.956	Strong	0.623	Strong	1024.473	0.000	0.975	Strong	0.760	Strong
Competitiveness → Market size	293.704	0.000	0.903	Strong	0.673	Strong	1760.098	0.000	0.986	Strong	0.718	Strong
Competitiveness → Business conditions	67.213	0.000	0.737	Strong	0.654	Strong	276.556	0.000	0.78	Strong	0.444	Strong
Competitiveness→ Business dynamics	444.745	0.000	0.942	Strong	0.669	Strong	244.005	0.000	0.884	Strong	0.598	Strong
Competitiveness → Business innovation	214.79	0.000	0.861	Strong	0.591	Strong	1091.883	0.000	0.966	Strong	0.654	Strong
Development factors → political development	109.452	0.000	0.76	Strong	0.324	medium	1144.982	0.000	0.958	Strong	0.513	Strong
Political → governance	105.669	0.000	0.772	Strong	0.527	Strong	73.124	0.000	0.768	Strong	0.509	Strong
Political → Democracy	107.057	0.000	0.831	Strong	0.632	Strong	44.225	0.000	0.51	medium	0.237	medium
Political → institutions and government	47.447	0.000	0.574	medium	0.32	medium	375.191	0.000	0.9	Strong	0.680	Strong
Development factors→quality of financial reporting	0.955	0.340	0.047	weak	0.004	weak	0.974	0.331	0.037	weak	0.001	weak
Development factors →quality of the information environment	26.565	0.000	0.505	medium	0.165	medium	-	-	-	-	-	-
The quality of the information environment → the quality of disclosure and transparency	32.213	0.000	0.619	medium	0.129	weak	-	-	-	-	-	-
Information environment quality → audit quality	54.936	0.000	0.712	Strong	0.569	Strong	-	-	-	-	-	-
Quality of information environment → quality of internal control	2.772	0.006	0.103	weak	0.061	weak	-	-	-	-	-	-
The quality of the information environment → the quality of reporting	0.826	0.409	0.047	weak	0.004	weak	-	-	-	-	-	-

that since the mediating variable of the internal information environment quality and the dependent variable of the quality of financial reporting have reflective indicators, therefore, the GOF index cannot be used to check the overall fit of the model in that variable.

Table 6: Results of general model fit tests

Country		**Iran**			**Japan**	
Indicators	R^2	AVE	GOF	R^2	AVE	GOF
Human Development Index	0.665	0.620		0.854	0.815	
Lekatum welfare index	0.900	0.664		0.896	0.642	
Education quality index	0.814	0.772		0.600	0.664	
Quality of life index	0.803	0.647		0.795	0.537	
Social variables	0.796	0.676	0.733	0.786	0.665	0.723
Economic freedom index	0.861	0.506		0.587	0.507	
Ease of doing business index	0.648	0.682		0.576	0.586	
Global Innovation Index	0.991	0.523		0.381	0.610	
Competitiveness index	0.991	0.550		0.987	0.658	
Economic variables	0.841	0.565	0.689	0.631	0.590	0.610
Good governance index	0.772	0.699		0.768	0.700	
Democracy index	0.831	0.774		0.510	0.578	
Institutions and government index	0.574	0.721		0.900	0.779	
Political variables	0.726	0.731	0.728	0.726	0.686	0.706

Research hypothesis test: According to the data analysis algorithm in the PLS method, after checking the fit of the measurement, structural and general models, you can go to the research hypothesis test. The results of the research hypothesis test are as described in Table 7:

According to the results of the research hypotheses test according to the above table, the first research hypothesis that the significant positive effect of the main development factors in Iran on the quality of financial reporting of companies is not accepted with 95% confidence. The second hypothesis of the research, that the main development

Table 7: Results of fit tests of structural models

Country	Iran			Japan		
Variables	Original sample	t value statistic	Significance level	Original sample	t value statistic	Significance level
Development factors -> quality of financial reporting	0.308	0.955	0.340	0.191	0.974	0.331
Development factors -> quality of the information environment	0.711	26.565	0.000	--	--	--
Development factors -> Social development	0.933	175.865	0.000	0.886	96.264	0.000
Social Development -> Human Development	0.815	79.172	0.000	0.924	203.891	0.000
Social Development -> Legatum	0.949	242.262	0.000	0.947	202.609	0.000
Social development -> quality of education	0.902	155.579	0.000	0.775	63.409	0.000
Social development -> quality of life	0.896	164.638	0.000	0.891	116.522	0.000
Development factors -> economic development	0.996	2,057.063	0.000	0.990	1,926.810	0.000
Economic development -> economic freedom index	0.928	219.520	0.000	-0.766	59.327	0.000
Economic development -> ease of doing business index	-0.805	68.598	0.000	-0.759	43.123	0.000
Economic Development -> Global Competitiveness Index	0.995	2,500.240	0.000	0.991	822.647	0.000
Global Competitiveness Index -> Infrastructure	0.724	48.891	0.000	0.944	305.897	0.000
Global competitiveness index -> macroeconomic environment	0.896	195.336	0.000	0.981	1,235.885	0.000
Global Competitiveness Index -> Commodity Market Conditions	-0.424	7.127	0.000	0.978	596.548	0.000
Global Competitiveness Index -> Labor Market Conditions	0.910	125.968	0.000	0.980	917.216	0.000
Global Competitiveness Index -> Financial Markets	0.967	470.735	0.000	0.991	1,474.006	0.000
Global Competitiveness Index -> Technology	-0.978	2.683	0.008	0.987	1,024.473	0.000
Global Competitiveness Index -> Market Size	0.950	293.704	0.000	0.993	1,760.098	0.000
Global Competitiveness Index -> Business Conditions	0.858	67.213	0.000	0.883	276.556	0.000
Global Competitiveness Index -> Business Dynamics	0.970	444.745	0.000	-0.940	244.005	0.000
Global Competitiveness Index -> Business Innovation	0.928	214.790	0.000	-0.983	1,091.883	0.000
Economic Development -> Global Innovation Index	0.929	195.353	0.000	0.617	28.402	0.000
Global Innovation Index -> Institutional Framework	0.729	52.198	0.000	0.932	120.272	0.000
Global innovation index -> Human and research capital	-0.892	101.428	0.000	--	--	--
Global Innovation Index -> Infrastructure	0.775	47.246	0.000	0.770	80.130	0.000
Global Innovation Index -> Market Complexity	0.726	43.320	0.000	--	--	--
Global Innovation Index -> Business Complexity	-0.637	15.915	0.000	--	--	--
Global innovation index -> knowledge and technology output	0.788	81.131	0.000	0.950	178.629	0.000
Global Innovation Index -> Creative outputs	0.832	113.531	0.000	0.946	204.259	0.000
Development factors -> political development	0.872	109.452	0.000	0.979	1,144.982	0.000
Political Development -> Good Governance Index	0.878	105.669	0.000	0.876	73.124	0.000
Political Development -> Democracy Index	0.912	107.057	0.000	-0.714	44.225	0.000
Political Development -> Institutions and Government	0.758	47.447	0.000	0.949	375.191	0.000
Quality of information environment -> quality of financial reporting	-0.197	0.826	0.409	--	--	--
Quality of information environment -> quality of disclosure and transparency	0.787	32.213	0.000	--	--	--
Information environment quality -> Audit Committee	0.844	54.936	0.000	--	--	--
Quality of the information environment -> index of internal controls	0.321	2.772	0.006	--	--	--

factors in Iran lead to the improvement of the efficiency of management accounting tools, is accepted at the 99% confidence level. The third hypothesis of his thesis that the effectiveness of management accounting tools in Iran leads to the improvement of the effect of the main factors of development on the quality of financial reporting of companies has not been accepted at the 95% confidence level and finally, the fourth hypothesis of the research based on the significant positive effect of the main factors The development in Japan on the quality of financial reporting of Japanese companies was also not accepted at the 95% confidence level. As stated above, among the four research hypotheses, only one hypothesis was confirmed and it showed that in Iran, the main factors of development including economic development, political development and social development have a strong positive and significant effect on the quality of the company's internal information environment. and 71% of the changes in the dependent variable of the quality of the internal information environment is explained by the three variables of economic development, political development and social development. It should also be noted that according to the results of the above table since all the hidden variables of the main variables of development are at a significance level of 99%, it indicates the appropriate explanation of the main variables by the sub-sections and the strength of the developed model. The confirmation of this hypothesis, the main idea of the current research, based on the positive effect of economic, political and social factors in improving the quality of the company's internal information environment and consequently improving the efficiency and effectiveness of management accounting tools and techniques, and confirming again the texts and The existing literature in this regard showed that if political and diplomatic relations are improved and political sanctions are removed, then the borders will be opened to foreign goods, foreign capitals will enter the country in parallel with

the removal of political sanctions and the creation of economic security, and as a result Those modern technologies, equipment and machinery have entered the field of production and trade, and in general, the economic wheels have started to circulate and the per capita income of households has increased, as a result, the general welfare in the society has improved and the quality of life, including education, health and treatment, and the environment., security and improve. Therefore, along with all these factors, the accounting profession as a factor and management accounting tools, techniques and systems in particular, which are considered a subset of humanities and social sciences and are influenced by the economic conditions of the society, will definitely improve. The results of the research hypotheses test showed that the main factors of development, neither directly nor indirectly through the mediating variable of the quality of the internal information environment, do not have a significant effect on the quality of financial reporting of companies. The same result was repeated in the fourth hypothesis and regarding the country of Japan, and it showed that economic, social and political factors in both Iran and Japan cannot lead to the improvement of the quality of financial reporting. Even the quality of the internal information environment (management accounting) could not play an effective role in the relationship between development factors and the quality of financial reporting. Of course, one of the main reasons for disconfirming the above-mentioned hypotheses in both Iran and Japan is the variables and models used to measure the quality of financial reporting of companies. Because, as stated in the previous sections of this article, there is no agreement on how to measure the quality of financial reporting among researchers, and researchers use different models, which are generally based on operating cash flows and profit quality measurement, to measure the quality of financial reporting.

The results of the current research regarding the impact of macroeconomic factors, competitiveness and technology on management accounting are in accordance with the results of the researches of [13, 18, 19, 27, 41, 53, 65, 68, 72] and contrary to the research results of Kashanipour et al. [44]. In comparing the results of the current research with the background of previous research regarding the impact of social factors on the efficiency and effectiveness of management accounting tools and techniques, unfortunately, no research similar to the current research was found either inside or outside. Research related to social capital and accounting variables has been done only in the field of social sciences, which was not mentioned in this section due to a lack of connection with the subject of the present research. Regarding the compatibility of the results of the current research with previous research regarding political factors, it is necessary to explain that no research was found that directly investigated political factors on management accounting, inside or outside, and only three articles related to the impact of political factors on development There is accounting in the country, and the results of the researches of Aghdam Mazraeh et al. [6], Aghdam Mazraeh et al. [7], Research has included.

References

[1] M. Abbaszadeh and H. Bazaz-Zadeh, *Management accounting in less developed countries*, Hesabras Mag. **11** (2008), no. 44, 50–57. [In Persian]

[2] G.T. Abed and S. Gupta, *The economics of corruption: An overview*, Governance, Corruption and Economic Performance, Washington: International Monetary Fund, 2002.

[3] Accounting Standard Setting Committee, *Accounting Standards*, Tehran: Audit Organization Pub. 2013. [In Persian]

[4] A. Adhikari and R.H. Tondkar, *Environmental factors influencing the development of accounting objectives, standards and practices in Peru*, Int. Account. Transnat. Decis. Butterworth-Heinemann, 1992 , pp. 39–56.

[5] A. Aflatooni and M. Nemati, *The role of financial reporting quality and disclosure quality in increasing commercial credit*, Account. Audit. Rev. **25** (2018), no. 1, 1–20.

[6] Y. Aghdam Mazraeh, H. Nikoomaram, and B. Banimahd, *Democracy and accounting development*, Manage. Account. **10** (2017), no. 32, 71–80.

[7] Y. Aghdam Mazraeh, H. Nikoomaram, F. Rahnama Roudposhti, and B. Banimahd, *Civil liberties and accounting development*, Financ. Account. Audit. Res. **11** (2019), no. 43, 27–48.

[8] A. Ahmed Haji, *The role of audit committee attributes in intellectual capital disclosures: Evidence from Malaysia*, Manage. Audit. J. **30** (2015), no. 8/9, 756–784.

[9] J.B. Akeju and A.A. Babatunde, *Corporate governance and financial reporting quality in Nigeria*, Int. J. Inf. Res. Rev. **4** (2017), no. 2.

[10] S.H. Alavi Tabari and R. Asabakhsh, *The role of audit committee and analysis of its non-establishment and non-application of this committee in Iran*, J. Account. Adv. **2** (2010), no. 1, 155–177.

[11] M.H. Amirazad, R. Baradaran Hassanzadeh, A. Mohammadi, and H. Taghizadeh, *Modeling the factors affecting financial reporting quality using grounded theory in Iran*, Financ. Account. Res. **10** (2017), no. 4, 21–42.

[12] M. Azizpour Shirsewar, *The relationship between audit quality and financial reporting quality*, Manage. Account. Res. Month. **25** (2015), 88–105.

[13] N. Bahram-Far, S. Khajavi, and A. Nazimi, *Identifying obstacles to the development of management accounting in manufacturing companies admitted to the Tehran stock exchange*, J. Dev. Capital **1** (2007), no. 1, 93–116.

[14] B. Bani-Mahd, M. Arabi, and S. Hasan-Pour, *Experimental and Methodological Researches in Accounting*, First Edition, Termeh Publications, Tehran, 2016.

[15] A. Belkaoui, *Economic, political, and civil indicators and reporting and disclosure adequacy: Empirical investigation*, J. Account. Public Policy **2** (1983), no. 3, 207–219.

[16] M.W. Brandt, A. Brav, J.R. Graham and A. Kumar, *The idiosyncratic volatility puzzle: Time trend or speculative episodes*, Rev. Financ. Stud. **23** (2010), no. 2.

[17] J.F. Brazel and L. Dang, *The effect of ERP system implementations on the management of earnings and earnings release dates*, J. Info. Syst. **22** (2008), no. 2.

[18] F. Cescon, A. Costantini, and L. Grassetti, *Strategic choices and strategic management accounting in large manufacturing firms*, J. Manage. Govern. **23** (2019), no. 3.

[19] R.H. Chenhall, *Management control systems design within its organizational context: Findings from contingency-based research and directions for the future*, Account. Org. Soc. **28** (2003), no. 2–3.

[20] W.W. Chin, *Commentary: Issues and opinion on structural equation modeling*, MIS Quart. **22** (1998), no. 1, 7–16.

[21] T.E. Cooke and R.S.O. Wallace, *Financial disclosure regulation and its environment: A review and further analysis*, J. Account. Public Policy **9** (1990), no. 2, 79–110.

[22] A. Davari and A. Rezazadeh, *Structural Equation Modeling with PLS Software*, 4th edition. Jahad Daneshgahi Publishing Organization, Tehran, 2017.

[23] P.M. Dechow and I.D. Dichev, *The quality of accruals and earnings: The role of accrual estimation errors*, Account. Rev. **77** (2002), 35–59.

[24] C.A. Dorantes, C. Li, G.F. Peters and V. J. Richardson, *The effect of enterprise systems implementation on the firm information environment*, Contemp. Account. Res. **30** (2013), no. 4.

[25] T.S. Doupnik and S.B. Salter, *External environment and accounting practices: A preliminary test of a general model of international accounting development*, Int. J. Account. Edu. Res. **30** (1995), no. 2, 189–207.

[26] S. Herath and N. Albarqi, *Financial reporting quality: A literature review*, Int. J. Bus. Manage. Commerce, 2 (2017), no. 2.

[27] H. Eatemadi and M. Tavakoli Mohammadi, *The effects of environmental factors on accounting development*, Sci. J. Shahid Univ. Bus. Strat. **3** (2014), no. 2, 21–34.

[28] H. Fakhari and J. Mohammadi, *The impact of organizational culture on the information disclosure quality (timeliness and reliability)*, Account. Audit. Rev. **23** (2016), no. 3, 394–414.

[29] H. Fakhari and Y. Rezaei Pitenoei, *Impact of audit committee on the companies information environment*, Manage. Account. **11** (2018), no. 36, 63–79.

[30] W.G. Frank, *An empirical analysis of international accounting practices*, J. Account. Res. **17** (1979), no. 2, 593–605.

[31] J. Francis, P. Olsson and K. Schipper, *Earnings quality*, Found. Trends Account. **1** (2006), no. 4.

[32] K. Ghaderi, S. Ghaderi and S.K. Ghaderizadeh, *The role of management ability in improving the quality of internal control*, Experim. Account. Res. **8** (2019), no. 3 (series 31), 71–90.

[33] J. Gallemore and E. Labro, *The importance of the internal information environment for tax avoidance*, J. Account. Econ. **60** (2015), no. 1.

[34] D. Givoly, C.K. Hayn and S.P. Katz, *Does public ownership of equity improve earnings quality?*, Account. Rev. **85** (2010), no. 1.

[35] J.R. Graham, C.R. Harvey and S. Rajgopal, *The economic implications of corporate financial reporting*, J. Account. Econ. **40** (2005), no. 1–3, 3–73.

[36] A. Habib and I. Azim, *Corporate governance and the value relevance of accounting information*, Account. Res. J. **21** (2008), no. 2, 167–194.

[37] T. Haldma and K. Lääts, *Contingencies influencing the management accounting practices of Estonian manufacturing companies*, Manage. Account. Res. **13** (2002), no. 4.

[38] Y. Hassas Yeganeh, Z. Dianati Deylami, and A. Noroozbeighi, *Management accounting practices in the firms listed on the Tehran stock exchanged: An empirical examination*, Manage. Account. **4** (2011), no. 1, 1–18.

[39] F.D. Hodge, J.J. Kennedy, and L.A. Maines, *Does search-facilitating technology improve the transparency of financial reporting?*, Account. Rev. **79** (2004), no. 3.

[40] C.T. Horngren, G. Foster, S.M. Datar, M. Rajan, C. Ittner, and A.A. Baldwin, *Cost accounting: A managerial emphasis*, Issues Account. Educ. **25** (2010), no. 4.

[41] C.R. Isa, *Management accounting change among local and foreign manufacturing firms in Malaysia*, World J. Manage. **1** (2009), no. 1.

[42] J.N. Jennings, R.C. Stoumbos and L.D. Tanlu, *The effect of organizational complexity on earnings forecasting behavior*, Working paper, Washington University in St. Louis, 2012.

[43] G. Karami, I. Dadashi, A. Firoznia, and H. Kalhornia, *Investigating the effect of the quality of internal controls on tax minimization in the circuits admitted to the Tehran stock exchange during the years 2009-2015*, Danesh Audit. **18** (2018), no. 72, 55–23.

[44] M. Kashanipour, A. Hamidizadeh, M. Kazempour, and M. Kabirpour, *Investigating the influence of economic and human factors in the use of management accounting tools*, Sci. Res. Quart. Manage. Account. **11** (2017), no. 36, 81–92.

[45] A. Kiani and M.A. Aghaei, *Evaluating the effect of financial reporting quality measurement proxies on future growth through firms' life cycle stages*, Appl. Res. Financ. Rep. **5** (2017), no. 2, 143–172.

[46] S. Khajavi and Z. Neamatollahi, *Critical theory and its role in accounting*, Manage. Account. **13** (2020), no. 44, 73–86.

[47] A. Khodami Pour and M. Talebi, *The investigation of management accounting tools application by managers of productive companies listed in Tehran stock exchange*, J. Account. Knowledge **1** (2012), no. 2, 117–173.

[48] W.L. Li, G.L. Xie, and J.Y. Hao, *The empirical study on the influence of managerial overconfidence on overinvests behavior*, J. Shanxi Financ. Econ. Univ. **10** (2014).

[49] M. Maleki, S.E. Safavi Hir, and P. Naziri, *The role of internal quality control in increasing investment efficiency*, J. Account. Manage. Vis. **3** (2020), no. 33, 62–72.

[50] S. Maqbool-ur-Rehman, *Which management accounting techniques influence profitability in the manufacturing sector of Pakistan?*, Pakistan Bus. Rev. **13** (2011), no. 1.

[51] M.F. McNichols, *Discussion of the quality of accruals and earnings: The role of accrual estimation errors*, Account. Rev. **77** (2002), no. s–1, 61–69.

[52] K. Mehrani and A. Parvaei, *Disclosure quality in family firms listed in the Tehran stock exchange*, Iran. Account. Audit. Rev. **21** (2014), no. 4, 527–540.

[53] H. Moghadaspour and A. Ebrahimi Kurdler, *The presentation of model of management accounting development in Iran*, Sci. Res. Quart. Manage. Account. Audit. Knowledge **3** (2014), no. 10, 73–106.

[54] R.D. Nair and W.G. Frank, *The impact of disclosure and measurement practices on international accounting*

classifications, Int. Account. Transnat. Butterworth-Heinemann, 1983, pp. 70–94.

[55] I. Noravesh, *The relationship between the quality of financial reporting and the number of trained accountants in business units admitted to the Tehran stock exchange*, Account. Audit. Rev. **7** (1998), no. 1, 8–33.

[56] Y. Nouri Fard and H. Chenari Buket, *The effect of financial reporting quality and debt maturity on investment efficiency*, Econ. Bus. Res. J. **7** (2015), no. 13, 29–44.

[57] M.H. Panahi, *Cultural development, the necessity of economic, social and political development*, Soc. Dev. Welfare Plann. Quart. **6** (2015), no. 22, 1–23.

[58] O.A. Parsa, M. Mehrkam, and F. Hesni Moghadam, *The impact of economic sanctions and political relations with emphasis on earnings and tax gaps: A test of political economy theory*, J. Tax. Res. **28** (2021), no. 48, 83–108.

[59] M. Peivandi and F. Khorram, *The importance of the company's management system and mutual relations between the audit committee, internal audit and independent auditor in improving the quality of financial reporting*, Auditor Mag. **69** (2013), 118–125.

[60] F. Rahnamaei Roudposhti, B. Banimahd, and S.J. Mirsaeedi, *Modernity and management accounting*, J. Manage. Account. Audit. Knowledge **3** (2014), no. 12, 1–12.

[61] F. Rahnamaei Roudposhti and A. Goudarzi, *Critical thinking in accounting*, J. Manage. Account. Audit. Knowledge **2** (2013), no. 5, 1–14.

[62] S.B. Salter, *Corporate financial disclosure in emerging markets: does economic development matter?*, Int. J. Account. **33** (1998), no. 2, 211–234.

[63] A. Sayadi Somar, K. Nasri and F. Sabzalipoor, *Evolution management accounting tools; the solution to reduce the ominous shadow opportunistic restatements*, Manage. Account. **11** (2018), no. 38, 59–78.

[64] R. Shabahang, *Management Accounting*, 14th edition, Audit Organization Publications, Tehran, 2007. [In Persian]

[65] S. Sulaiman, A. Ramli and F. Mitchell, *What factors drive change in management accounting in Malaysian organisations?*, Malay. Account. Rev. **7** (2008), no. 1.

[66] J. Sun, G. Lan, and G. Liu, *Independent audit committee characteristics and real earnings management*, Manage. Audit. J. **29** (2014), no. 2.

[67] T. Tuanmat, G.M. Smith, and G.H. Djajadikerta, *Management accounting and organizational change: An exploratory study in Malaysian manufacturing firms*, J. Appl. Manag. Account. Res. **8** (2010), no. 2, 51–80.

[68] A. Uyar, *Cost and management accounting practices: A survey of manufacturing companies*, Eurasian J. Bus. Econ. **3** (2010), no. 6.

[69] R.S. Verdi, *Financial reporting quality and investment efficiency*, Working paper, University of Pennsylvania, 2006.

[70] C. Williams, *Voluntary disclosures and insider transactions*, J. Account. Econ. **27** (1996), no. 3, 305–326.

[71] S.M. Williams, *Voluntary environmental and social accounting disclosure practices in the Asia-Pacific region: An international empirical test of political economy theory*, Int. J. Account. **34** (1999), no. 2, 209–238.

[72] S. Yagoubian, B. Jamshidi Navid, M. Ghanbari, and A. Nademi, *Identify the dimensions of corporate performance appraisal model, influenced by management accounting tools with emphasis on contingency theory*, Sci. Res. Quart. J. Manage. Account. Audit. Knowledge **11** (2022), no. 41, 111–128.

[73] M. Zeynali, F. Vahdati, M. Safari Aghbolagh, and H. Feizi, *Investigating the impact of IFRS acceptance on risk management and disclosure quality*, J. Account. Manage. Vis. **5** (2022), no. 62, 24–50.