



Developing a Comprehensive Critical Thinking-Based Earnings Management Model

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ABSTRACT

In the comprehensive earnings management model, the financial accounting primarily aims at providing useful information for investors to predict the performance of the economic entity. Because of assessing the current economic performance, predicting the future profitability, and determining company value, understanding earnings management is important for users of financial statements. Critical thinking in accounting can be expressed in the emergence of qualitative characteristics of accounting information, namely, impartiality, objectivity, and honest expression existing within the conceptual framework of financial reporting in most countries. Eventually, critical thinking is a rational reasoning of what people believe and what they do.

Keywords:

Critical Thinking, Financial Reporting, Earnings Management.



1. Introduction

One of the main goals of setting accounting standards is for users to make relatively relevant and correct decisions based on financial statements, therefore, accounting profession is in need of a reporting method that desirably observes the interests of all users. However, as implied by the earnings management definition, managers report earnings in a way that is in conflict with the public interest of the users to achieve specific goals that logically serve the interests of a particular group. Auditors must verify the desirability of financial statements within the framework of accounting standards, while accounting standards in some cases allow managers to choose their accounting method. In fact, the problem arises when earnings management sometimes leads to misleading financial statements, while financial statements perfectly meet accounting standards, and auditors cannot complain about the financial statements in this regard. Therefore, considering that earnings is one of the most important factors in decision-making, users' awareness of the earnings reliability can help them make-decisions (Mashayekhi and Safari, 2006).

Effective transfer of information to extra-organizational individuals is the main role of financial reporting. As a means of communicating information to investors and creditors, managers can use their knowledge of the company's business to improve the effectiveness of financial statements. However, earnings management can likely occur if managers have incentives to mislead users of financial statements by exercising their authority over accounting choices in financial reporting (Hassas Yeganeh and Karimi, 2010). For example, there is authority (using personal taste) in estimating the value of scrap, the useful life of intangible assets and the reserve for doubtful debts, etc., (Aghaei et al., 2009). Managers' main motivation to manipulate accounting earnings is to increase their current reward (Moshki and Noordideh, 2012). Emphasizing the transparency and disclosure of accounting estimation items as well as those creating a lot of ambiguity, Herdman (2001) introduced it as a critical practice and called it critical thinking accounting. In this regard, the New York Securities and Exchange Commission in 2002, emphasizing the disclosure of accounting estimates, required using disclosure of critical accounting procedures. Critical accounting refers to the disclosure of items that are highly ambiguous and affect financial

statements. After the Enron scandal - the largest active energy company which was one of the most successful American companies with brilliant financial statements and a very attractive earnings forecast, which was at the top of every investor's choice of stocks, experts such as Peter and McLean (2011) stated that one of the most important reasons for this was the fictitious accounting and deliberate distortion of financial statements and insufficient obligation to disclose accounting estimates and transparency in financial statements (Peter and *McLane*, 2011). After that, the Securities and Exchange Commission in 2002, emphasizing the role of financial management in maintaining capital market efficiency, obliged the transparency of financial reporting, disclosure of accounting and analytical estimates and risk assessment in the notes accompanying financial statements as critical accounting for all listed companies (Levine and Smith, 2011).

Critical thinking in accounting can be stated in the emergence of qualitative characteristics of accounting information, namely, impartiality, objectivity, and honest expression existing within the conceptual framework of financial reporting in most countries. Critical researchers believe that these features somehow legitimize the activities of business units that provide information. From the point of view of critical thinking, accounting creates this legitimacy by determining information that is not important for measurement and disclosure, i.e. accounting first poses a problem and then solves it, but not solving a designed problem (Nikoomaram and Bani Mahd, 2009). Eventually, critical thinking is the rational reasoning of what people believe and what they do.

The initial purpose of financial accounting is providing investors with useful information to predict the performance of a financial entity. The necessity of earnings reporting as a primary source for decision-making by investors, managers and analysts can be well cited, and earnings reporting in various ways such as providing a basis for calculating taxes, a criterion for evaluating company performance success, a criterion for determining distributable earnings, a criterion to manage the distribution of earnings, a criterion for the management of an economic unit and others help the population economy. Also, because the value of a company pertains to its current and future earnings, determining earnings is vital (Kurdistani and Hedayati, 2010). Moreover, calculating the net

earnings of a for-profit unit is affected by accounting methods and estimates. Managers' authority in using the principles of realization and compliance, estimation and predicting, as well as applying methods such as changing the inventory assessment method, goodwill *amortization*, current or capital costs, accepting research and development costs and determining the cost of doubtful debts, are among the issues that managers can do to change earnings. On the one hand, due to the greater awareness of managers about the company's situation, it is expected that information will be prepared and presented in a way that reflects the company's situation in the best way. On the other hand, for reasons such as maintaining in the company, receiving rewards, etc., the management of the for-profit unit, willingly or unwillingly, may make the company's situation favorable by manipulating earnings. Under such circumstances, the real earnings is inconsistent with the earnings reported in the financial statements and an event called earnings management occurs (Mojtahedzadeh and Aghaei, 2004).

Managers often manage earnings in order to mislead shareholders about the actual performance of the company. This earnings management, conducted by manipulating accounting figures and actual activities, reduces the accuracy of earnings messaging. It increases the risk and uncertainty of extra-organizational individuals and also leads to information asymmetry and reduced investment efficiency. Earnings management not only hides the actual performance of the company but also hides the actual trend of the company's earnings and revenue growth, which is useful in predicting the future growth of the company. Meanwhile, managers' incentives to pursue their personal interests in earnings management prevent auditors from achieving their goals (McNickels & Stubben, 2008).

The earnings management philosophy is to take advantage of the flexibility of standard accounting methods and accepted accounting principles. Of course, various interpretations that can be derived from the implementation methods of an accounting standard comprise other reasons for the existence of earnings management. This flexibility is the main reason for the diversity of accounting methods. Highly flexible standard interpreting reduces the data integrity presented in the financial statements. Principles of compliance and conservatism can also lead to earnings

management. According to Gatschu (1986), the company must increase the earnings of the first quarter of its fiscal year without adding to cash balance and using only accrual accounting methods of accounting of amortization, investment tax exemptions, and capitalization of interest cost. The company's executives have emphasized that this is done to provide more realistic and comparable financial statements of the company with other companies in the same industry. Financial analysts and auditors view this phenomenon as an "accounting trick", while all of these measures have been taken within the framework of accepted accounting principles. Research shows that corporate executives intentionally manipulate reported earnings by choosing their own accounting policies to change accounting estimates and accruals to achieve their desired goals (Miller and June, 2001).

Financial analysts expect companies to catch up to their forecasts and lack contradiction, this is especially true for companies that are more reliable. Financial analysts and investors will be very unhappy with the deviation between the predicted and actual values (Coolingwood, 2001). These contradictions are more commonly used with respect to earnings management. In the negative contradiction, earnings owners consider earnings management as fraud, while in the positive contradiction, earnings management is considered as a problem-free action at the discretion of the management (Friedson and Alvarez, 2002). "Despite the fact that most people see smoothing as an abuse of flexibility in reporting, we believe that smart managers, whose goal is to increase the value of their companies, increase the value of the company under legal and accounting requirements (Kirschenheiter and Melumad, 2002). On the contrary, if the data presented in the financial statements are changed to the earnings owners' detriment, management fraud is considered for self-purposes.

Hant, Moyer, and Shelvin (1997) examined whether management discretion applied to earnings management affects firm value. Their research findings indicated that showing a lower figure for earnings from deferred items increases the market value of capital. Obviously, when subjective management opinions reduce earnings, the integrity of the data presented in the financial statements will be affected. Playing with "financial figures" (a name sometimes used for earnings management) can have a very negative effect during discovery. "Using earnings

management accounting, management can change the perceptions of others about the performance of their company. Assessing the firm's profitability may be misinterpreted and lead to inadequate pricing of debt and equity. When mistakes are discovered, the company will no longer gain market confidence, which will cause a sharp decline in the price of debt securities and capital "(Mulford and Comiskey, 2002).

In order for reported earnings to assist users in evaluating a company's performance and profitability, and for stakeholders and investors to rely on earnings information to estimate their expected returns, the quality of the information must be such as to enable evaluating the past performance and be effective in measuring the potential for profitability and predicting future activities. Therefore, in addition to the fact that the reported earnings figure is important for investors and affects their decisions, the feature of earnings management as one of the dimensions of earnings information is of particular interest to investors.

In this regard, forming an approach in accounting with the subject of critical accounting can be a turning point in earnings management and quality of financial reporting of different companies. Critical accounting refers to an approach to accounting that raises a question beyond the application of a particular method in accounting. Critical accounting theorists seek to draw attention to points that were legitimized by routine and repetition. Therefore, the present study attempts to design and propose a comprehensive model for managing the earnings of economic enterprises in the country with a critical approach.

Theoretical foundations of research

"Earnings reporting" is one of the items in the financial statements used as a measure of the performance and profitability of a for-profit unit. Calculating the net earnings of a for-profit unit is influenced by accounting methods and estimates. Managers' authority in using the principles of realization and conformity, estimation and forecasting, as well as applying methods such as changing the method of valuation of goods inventory, goodwill amortization, current or capital cost, accepting research and development costs and determining the cost of doubtful debts are among the issues that managers can do to change earnings. On the one hand, due to the greater awareness of managers about the company's situation, it is expected that information will be

prepared and presented in a way that reflects the company's situation in the best way. On the other hand, for reasons such as maintaining in the company, receiving rewards, etc., the management of the for-profit unit, willingly or unwillingly, may make the company's situation favorable by manipulating earnings. Under such circumstances, the real earnings is inconsistent with the earnings reported in the financial statements and an event called earnings management occurs.

Providing a correct definition of earnings management in the accounting literature is difficult because the line between earnings management and financial fraud is not clear. Also, the structure of audit management is multidimensional but invisible; therefore, it is difficult to measure. Because many factors affect audit management, determining a framework for determining audit management is an important issue (Mojtahedzadeh and Aghaei, 2004). One of the main purposes of setting accounting standards is for users to be able to make relatively relevant and accurate decisions based on financial statements. Therefore, the accounting profession needs a way of reporting where interests of all users are properly observed. In addition, in order to achieve specific goals that logically serve the interests of certain individuals, managers may report earnings in a way that is inconsistent with the general interests of users. Auditors have a duty to verify the accuracy of financial statements by examining the compliance of financial statements with the framework specified in accounting standards. This is while the flexibility of accounting standards in some cases to choose the accounting method has emphasized the professional judgment of accountants. In fact, the problem arises from the fact that earnings management sometimes leads to misleading financial statements, while financial statements can be within the framework of accounting standards and auditors cannot complain about the statements in this regard.

Therefore, the present study aims at developing a model for earnings management. The importance of developing such a model stems from the fact that the existence of such a model for earnings management helps managers and other users of financial statements to assess the profitability situation and make better economic decisions. This model provides a benchmark for influencing users' decision-making based on an indicator called the earnings management index.

2. Research methodology

The present research bases the key assumption of grounded theory methodology about the nature of reality for the present research design. Similar to other qualitative studies, this study assumes that reality is nothing but the product of the perception of the participants in the study. Thus, this research does not consider reality as a unit and considers itself obliged to follow the fact that there is a number of participants in a reality research for a single phenomenon. The assumption of the reality multiplicity aids the researcher to identify how people perceive and view the reality under study. Consequently, this assumption challenges the researcher's perceptions, views, orientations, and assumptions about the accuracy of a subject. Of course, this does not mean that the researcher should doubt his or her experiences or beliefs. Rather, the researcher must deal with the phenomena in a way that protects the reality desired by the participants in the research. From a participant's point of view, reality provides only and only that participant with insight into the phenomenon under study. However, these unique and completely personal views of the world often have commonalities and overlaps that ultimately allow the formation of a theory (Geoffrey, 2006, quoted in Foukerdi, Rahim, 2011). In this research, the individual views of the participants in the research lead to the establishment of a basis for understanding and presenting the design of an earnings management model based on critical thinking.

Population and statistical sample

In this study, presenting earnings management model based on critical thinking has been selected as the case study. According to its thematic scope, the statistical population of this research includes CEOs, deputies and experts in the field of auditing companies and certified accountants who have been selected by chain-referral method. The sampling method is snowball (chain-referral). Snowball sampling is a sampling method in which sample units provide information not only about themselves but also about other units of society (Status Corbin, 2008). In this way, in an initial interview, we often start with a key informant and then ask that person to introduce us to

friends, acquaintances or people who may be suitable for the interview.

Data collection and analysis

During the research, all managers of knowledge-based companies were selected as the research theoretical population. Due to the high ability of the interview tool to inform the researcher of the real views and opinions of the participants in the research, in-depth interview tools were used to collect the data required for the research. In this regard, interviews were conducted with CEOs, deputies, as well as experts in the field of knowledge-based companies. Because the research platform allowed the researcher to discuss research questions with participants in real-world context, this platform was considered useful for conducting such interviews. The qualitative-inductive method of grounded theory (including open coding, axial coding and selective coding) was used to analyze the data obtained from the interviews. To test the accuracy of different coding, textual data mining technique was used. The output of this method is a theory that allows the presentation of an earnings management model based on critical thinking.

Description of statistical population

In this study, the inclusion criteria were:

- 1) Academic degree; those with a Master's degree or higher in accounting, financial management, financial engineering, and the like were selected;
- 2) Organizational position; Senior managers in top management positions in the field of earnings management and accounting.
- 3) Service history; Those with a service record of at least 10 years or more were selected.
- 4) Scientific knowledge; In terms of knowledge, they must have books and articles in the field of research.
- 5) Place of service; University professors and senior managers with key positions were selected.

After determining the categories, it comes to build the overall class structure of the theory provided in Table 12.

Table 1. Security code of expert Interview

No.	Responder	Academic degree	Organizational position	Years of service	Scientific knowledge
1	A	Ph.D.	Faculty and Senior manager	24	Books and articles
2	B	Masters	financial manager	27	History of management and financial execution
3	C	Ph.D.	Financial Studies Researcher	23	Books and articles
4	D	Ph.D.	financial deputy	27	History of management and financial execution
5	E	Masters	financial manager	22	Financial and executive history
6	F	Ph.D.	General Manager of Finance	35	History of management and financial execution
7	G	Ph.D.	financial manager	32	Books and articles
8	H	Masters	Financial Manager (Senior Financial Advisors Group)	34	Books and articles
9	I	Ph.D.	General Financial Manager	25	Books and articles
10	J	Ph.D.	financial manager	26	Financial history, books and articles

3. Research Findings

In this section, we dealt with the relationship between the concepts extracted from the interviews (initial coding) and the basic foundations of research (providing a model of critical thinking-based earnings management) and tried to create a comprehensive,

complete and integrated relationship between these categories so that through these shaped main categories and classes we develop axial coding and finally present our desired model in the field of providing an earnings management model based on critical thinking.

Table 2. Secondary coding of the first interview

Categories (Subcategory)	Conceptual codes	Secondary codes
Corporate governance	Managers' Rewards	Change in the structure of paying dividends to the CEOs
	Shareholders' rights	Number of major shareholders
		Concentration of ownership in the hands of some unscrupulous and weak people
Managers' Ownership	Using agency theory in determining the ownership of companies	
Corporation characteristics	size of the company	Company size
	Growth and investment	activities in the company and its affiliates needs capita
		The average growth rate of the working industry
Financial reporting methods	Financial Ratio	Return on assets - and function in company
Environmental factors	tax laws	Tax breaks granted to some businesses
audit quality	Audit tenure period	The number of consecutive years that auditing firms audit a client

Table 3. Secondary coding of the second interview

Categories (Subcategory)	Conceptual codes	Secondary codes
Corporate governance	size of the board of directors	The number of members in the Board of Directors
		The structure of the Board of Directors
	Changing managers	Excessive changes in company managers lead to poor quality
	Shareholders' rights	Existence of shareholders with high control right over the company
Characteristics of the board of directors		Existence of correct flow of information among board of directors

Categories (Subcategory)	Conceptual codes	Secondary codes
Corporation characteristics	Company's debt	Existence of many debts in companies has wasted the earnings Changes in the current interest of the company debts
	Growth and investment	Change in company profitability
Financial reporting procedures	Standard-based methods	How to determine the path of smoothing real dividends
	Accounting methods	amortization costs per year
audit quality	Audit size	History and brand of the auditing company

Table 4. Secondary coding of the third interview

Categories (Subcategory)	Conceptual codes	Secondary codes
Corporate governance	Shareholders' rights	The earnings per share of the company is determined for its shareholders Existence of preferred shares in the company's stock portfolio
	Characteristics of the Board of Directors	Formation of the charter of non-specialized committees in the board of directors
Corporation characteristics	size of the company	The size of the company and the number of main shareholders
	Company's debt	Changes in debts
Characteristics of managers	Desirability	Determining appropriate behavior to determine earnings
Financial reporting procedures	Financial Ratio	Financial leverage and how to use it
Environmental factors	tax laws	Determination of option outstanding
	The economic situation	The economic downturn and its involvement in the company's growth
audit quality	Audit effort	Quality and manner of audit

Table 5. Secondary coding of the fourth interview

Categories (Subcategory)	Conceptual codes	Secondary codes
Corporate governance	Shareholders' rights	Criteria for changes in non-cash working capital
	Control processes	Using the Sarbanes school in achieving the goals of internal control of companies
	Managers' ownership	Separation of ownership from management in companies plays an important role in increasing productivity and profitability
Corporation characteristics	size of the company	Company size and tax rate
	Growth and investment	Growth of the company in the direction of profitability
Financial reporting methods	Financial Ratio	Capital return and quality ratio
	Accounting methods	Using the cost price method in accounting documents
audit quality	Audit size	Because of the large number of well-known auditor clients, they do not have to worry about losing their jobs
	Audit effort	Companies are more likely to report abnormal accruals of earnings with an incremental effect compared to that of decreasing
	Audit fee	The amount of non-credit services
Capital market stimuli	Capital increase and stock issue	Desirability in achieving a certain price when raising capital and issuing stocks

Table 6. Secondary coding of the fifth interview

Categories (Subcategory)	Conceptual codes	Secondary codes
Corporate governance	Shareholders' rights	Public ownership of the company by the people
	Managers' ownership	Existence of pyramidal structures in the management of the organization
Corporation characteristics	size of the company	Company size
	Growth and investment	Profitability changes
		Sales growth
Financial reporting methods	Financial Ratio	Return on assets
	Accounting methods	Reduction of wrong classification errors
audit quality	Industry related expertise	Creating constructive ideas to help (create value-added) to the clients
		Providing new perspectives or approaches to the issue - that employers face in their respective industries
	Auditing knowledge	Paying special attention to case analysis in the company
Capital market stimuli	Achieving earnings-based goals	Paying attention to profitability curves and lines

Table 7. Secondary coding of the sixth interview

Categories (Subcategory)	Conceptual codes	Secondary codes
Corporate governance	Changing managers	The formation of default risk due to many changes in the management body of the company
	Shareholders' rights	Institutional owners and internal auditors
	company's performance	Operational and content performance of companies
Characteristics of managers	Risk aversion	Culture of avoiding uncertainty
	Individual characteristics	Individualism culture
		male or female - oriented culture
audit quality	Auditing knowledge	Class conflict and conflict of interest
		Power distance culture
	Audit tenure	While, if the auditor is an industry expert, earnings management will increase as the tenure increases
Capital market stimuli	Achieving earnings-based goals	Transparency in financial reporting
	Existence of motivation to achieve goals	Motivations for earnings management

Table 8. Secondary coding of the seventh interview

Categories (Subcategory)	Conceptual codes	Secondary codes
Corporate governance	Managers' reward	Designing an appropriate reward system for managers in order to prevent financial misconduct
	Changing managers	Changes in management
	Control processes	Preparing and adjusting appropriate and accurate procedures for performing internal controls in the company
		Implementing the Kosovo standard system for auditing companies
	Managers' ownership	Existence of pyramidal structures in the management of the organization
Corporation characteristics	Supervising and monitoring the performance of executive managers	Determining control procedures on the performance of executive managers
	Growth and investment	Specific earning parameters in the company for the relevant industry
Financial reporting procedures	company's performance	Company operational performance
	Financial Ratio	Return on assets
audit quality	Accounting methods	How to calculate the depreciation of the company's machinery and equipment
	Audit management	Accuracy of information reported by auditors

Table 9 .Secondary coding of the eighth interview

Categories (Subcategory)	Conceptual codes	Secondary codes	
Corporate governance	Shareholders' rights	investors maintain and emphasize poverty	
Characteristics of managers	Self-confidence	Creating an atmosphere of trust and confidence in executives	
	Risk aversion	Over - confidence of managers	
	Individual characteristics	Type of institutional / individual ownership	
Environmental factors	Government support	Protecting the consumer and public Government support	
	social factors	Civil rights	
	social factors	Legitimizing specific social structures	
	Political processes		Critical discourse analysis
			Assassination of political leaders
			Political process
	Capital market regulations	Rules of the Exchange and Securities Organization	
	Setting new rules	Establishing new rules in the field of investment and profitability	
The economic situation	Division of wealth among different social classes		

Table 10 .Secondary coding of the ninth interview

Categories (Subcategory)	Conceptual codes	Secondary codes
Corporate governance	Shareholders' rights	Increasing the wealth and interests of capitalists leads to the elimination of weak groups
	Characteristics of the board of directors	Multiple non-executive board of directors in companies
Corporation characteristics	Organizational Structure	Recognizing the broad layers of structures
	company's performance	There are specific parameters for each company to calculate
Characteristics of managers	Major	The field of study of managers related to auditing and accounting
	Individual characteristics	Realism
Financial reporting procedures	Standard-based methods	False and unscientific knowledge of accounting topics
Environmental factors	Government support	Government support for capitalists
	social factors	Social Issues
The economic situation	Economic and social changes	
Audit quality	Industry related expertise	Human is a creative, autonomous and critical being
	Audit fee	Ethical problems of the audit profession
	Auditing knowledge	
		Lack of knowledge of problems

Table 11 .Secondary coding of the tenth interview

Categories (Subcategory)	Conceptual codes	Secondary codes
Corporate governance	Managers' reward	Increasing the rewards of the board of directors and CEOs and at the same time the CEOs of the companies
	Shareholders' rights	Ownership of shareholders who do not have a physical presence in the company
	Control processes	Existence of audit and internal control unit in the company
	Supervising and monitoring the performance of executive managers	
		Management structure in order to prevent financial frauds

Categories (Subcategory)	Conceptual codes	Secondary codes
Characteristics of managers	Adherence to commitments	Management fraud for one's own individual purposes
	Risk aversion	Use a variety of optional tools to reduce volatility
	Lack of self-confidence	We are still unaware of accounting information
Financial reporting procedures	Audit reporting	Significant changes that cause the audit report - the
Environmental factors	Labor Law	Familiarity with the rules and regulations related to labor law
audit quality	Industry related expertise	Specialty - oriented
	Audit rotation	Long-term presence of the auditor with the client
	Auditing knowledge	Discover important and significant distortions
Capital market stimuli	cost management	Tax transfer this year to next year

Table 12 .forming the general classes of categories

The main classes	Categories (Subcategory)
Corporate governance	<ul style="list-style-type: none"> ✓ size of the board of directors ✓ Managers' reward ✓ Changing managers ✓ Shareholders' rights ✓ Characteristics of the board of directors ✓ Control processes ✓ Managers' ownership ✓ Supervising and monitoring the performance of executive managers
Corporation characteristics	<ul style="list-style-type: none"> ✓ size of the company ✓ Corporate debt ✓ Growth and investment ✓ Organizational Structure ✓ company's performance ✓ self-confidence ✓ Adherence to commitments ✓ Field of study ✓ Risk aversion ✓ Lack of self-confidence ✓ Desirability ✓ Individual characteristics
Financial reporting methods	<ul style="list-style-type: none"> ✓ Financial Ratio ✓ Standard-based methods ✓ Accounting methods ✓ Audit reporting ✓ Financial Ratio
Environmental factors	<ul style="list-style-type: none"> ✓ Government support ✓ social factors ✓ Political processes ✓ Labor Law ✓ tax laws ✓ Capital market regulations ✓ Setting new rules ✓ The economic situation
Audit quality	<ul style="list-style-type: none"> ✓ Audit size ✓ Industry related expertise ✓ Audit effort ✓ Audit rotation ✓ Audit fee ✓ Auditing knowledge ✓ Audit tenure period ✓ Audit management
Capital market stimuli	<ul style="list-style-type: none"> ✓ Capital increase and stock issue ✓ Achieving earnings-based goals ✓ cost management ✓ the presence of motivation to achieve goals

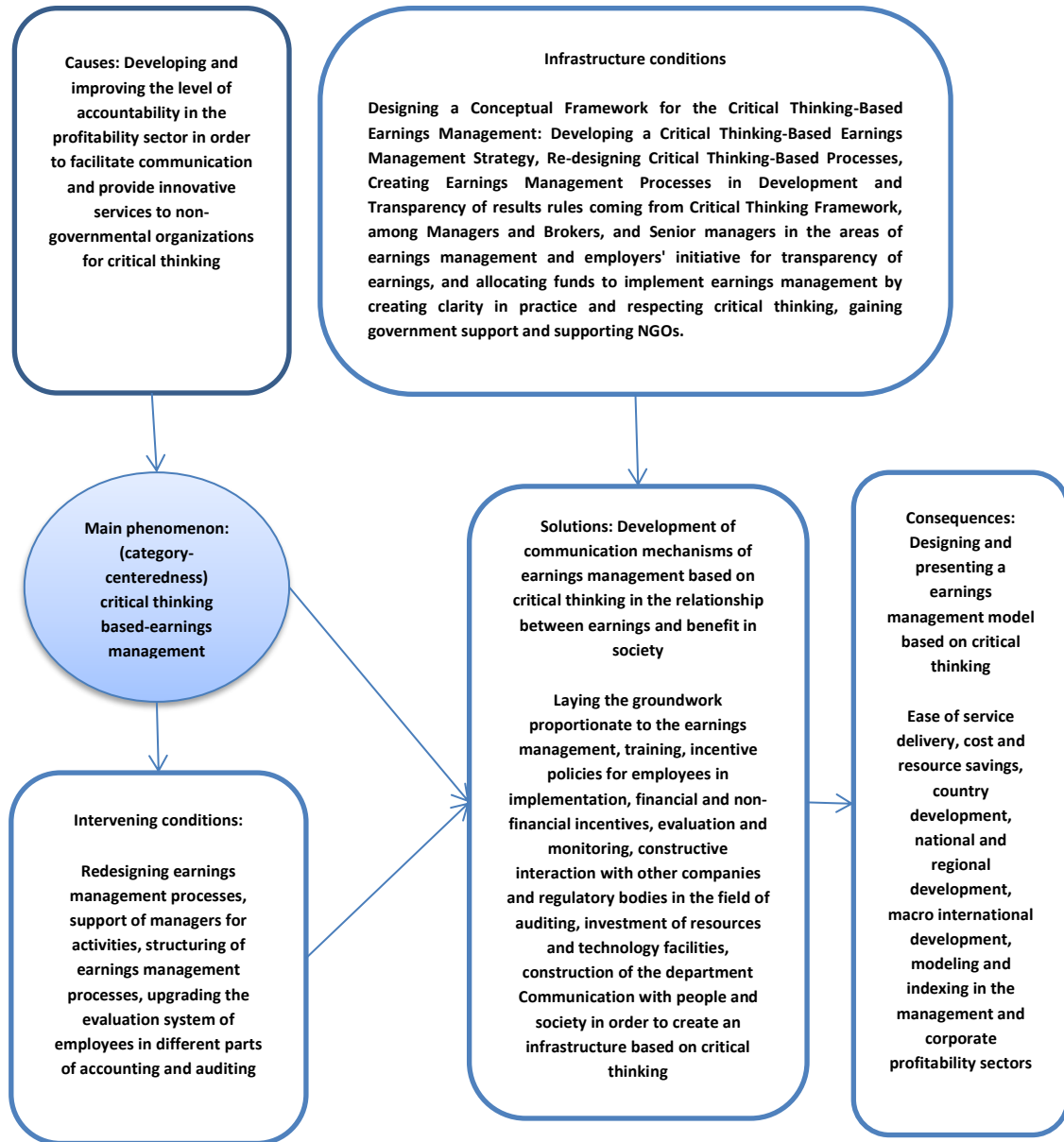


Figure 1. Research model based on critical thinking approach

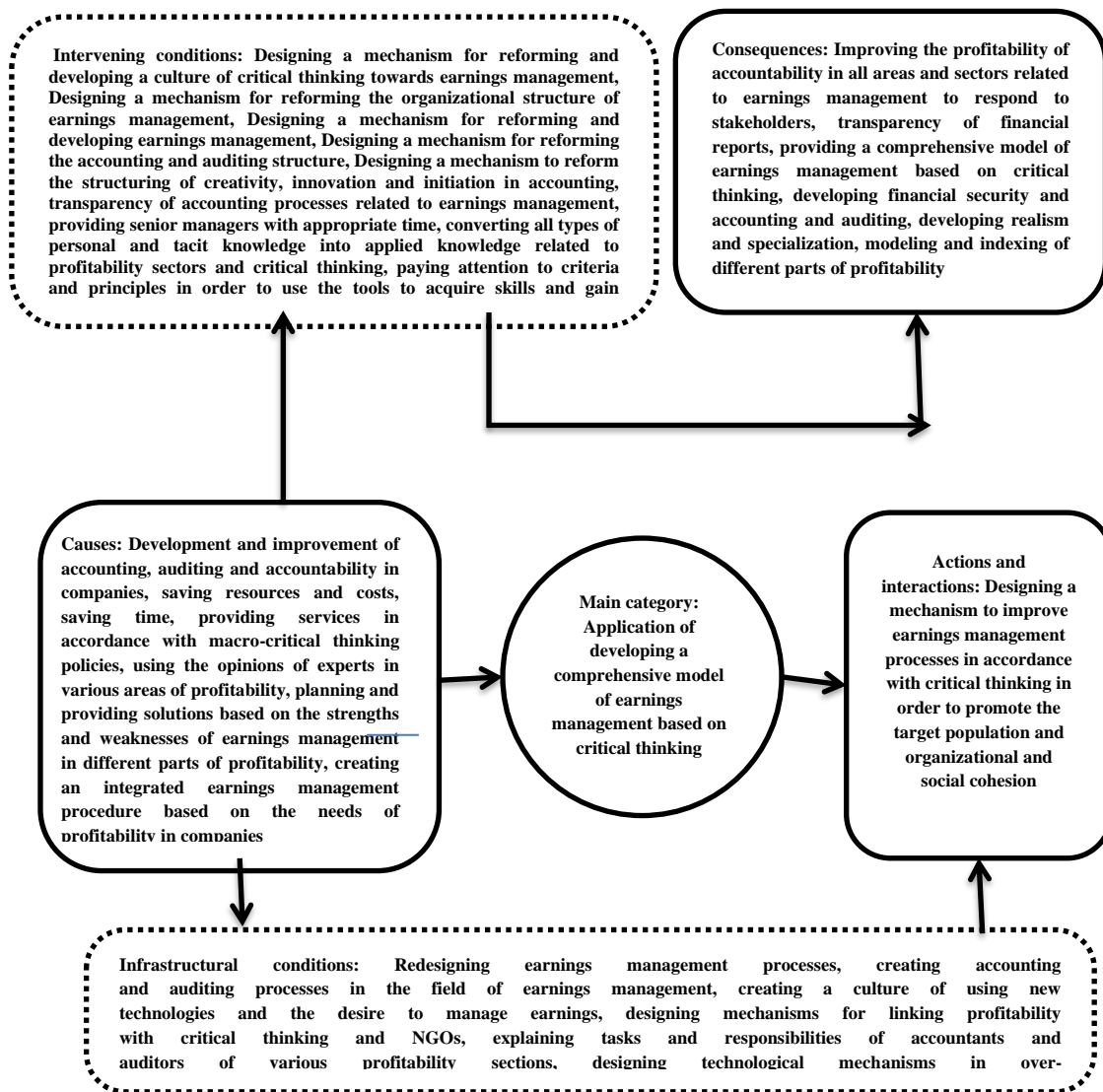


Figure 2: The final framework formed by the critical approach

Discussion and conclusion

Critical thinking in accounting can be stated in the emergence of qualitative characteristics of accounting information, namely, impartiality, objectivity, and honest expression existing within the conceptual framework of financial reporting in most countries. Critical researchers believe that these features somehow legitimize the activities of business units that provide information. From the point of view of critical thinking, accounting creates this legitimacy by determining information that is not important for

measurement and disclosure, i.e. accounting first poses a problem and then solves it, but not solving a designed problem (Nikoomaram and Banimahd, 2009). Eventually, critical thinking is the rational reasoning of what people believe and what they do.

Having extracted the concepts and categories by the coding conducted in the grounded theory method, the researcher attempted to provide a conceptual framework based on the models of earnings management developed by previous researchers so that after developing a framework and its comprehensive

review, be able to use it as a basis for developing and explaining the conceptual model. To this aim, the main findings of the research are presented in two parts: conceptual framework (theoretical literature and research literature) and conceptual model (interviews and experts). Before investigating the two sections introduced, it should be stated that the proposed model improves earnings management and critical thinking, because in this model, in addition to putting special emphasis on factors such as corporate governance (as in the view of Kurdistani et al. (2013), Dechow and Schrand (2010), Nitkin, (2007), Corporation characteristics (consistent with the views of Dechow et al. (2010), Chan et al. (2006) and inconsistent with those of Nissim and Penman (2006), Financial Reporting Methods (consistent with the findings of research conducted with Hassas Yeganeh et al. (2010), Levine and Smith (2011) and Kurdistani et al. (2010), environmental factors (DeAngelo et al. (1986), Doyle and McVay (2007) and Bartov (1993), audit quality (as stated by thinkers such as Chen et al. (2005), Chambers and Payne in 2008), capital market drivers (such as De-Jun (2009), Suh (2010), Gholamrezaei and Mafi (2014) have also considered the context and structure of earnings management based on the parameters taken into account for proper earnings management. Also the existence of earnings management in the profitability sector increases the profitability of the accounting and auditing sector and leads to the acceptance and popularity among members of society in contrast to the traditional accounting and auditing system in the profitability sector, which is discussed in detail in the current research and the proposed model.

5.2.1. Conceptual framework for presenting a comprehensive model of critical thinking-based earnings management

❖ Answering the main question: What is the presentation of a comprehensive model of critical thinking-based earnings management?

Category-centeredness: Identifying the elements of critical thinking-based earnings management model, the researcher's emphasis in this section is on efficient use of the concept of critical thinking-based earnings management model and believes that without using critical thinking-based earnings management, progress in accounting and auditing principles and development of methods related to this sector and the popularity and

acceptance of the transparency and accountability sector will not be accepted in the target population. In addition, the researcher explains how the correct application of earnings management in the profitability sector accelerates these procedures.

Causes: Based on the researcher's theoretical and operational studies conducted using the interview: These conditions lead to the creation and development of category-centeredness phenomenon, which includes: development and upgrading of the country's accounting and auditing system, ease of communication and providing services to people and society in relation to the macro policies of society in the field of earnings management, using the opinions of accounting experts and auditors in relation to the subject, attention to supervision and optimization in various sectors of profitability, the importance of service delivery achievements for the growth and development of the country and especially in the field of earnings management, assessing the current individual and organizational knowledge of accountants and auditors, planning and providing solutions based on the strengths and weaknesses appropriate to earnings management in critical thinking to achieve development at the national and international levels, creating integrated earnings management procedures based on the needs of the accounting and auditing sections to provide to the NGO and population sectors and accountability based on critical thinking for transparency and accountability to the public mind (related to the program policy determination class, vision and goals), planning and providing solutions based on strengths and weaknesses proportionate with earnings management in the profitability sector to achieve transparency and improve performance at various levels of the company and organization, establishing an integrated management procedure based on the needs of the corporate profitability sector, people and society is an important component in the profitability sector, and are one of the most important causes and effects of providing this framework in the field of earnings management in the profitability sector.

Intervening conditions: According to the researcher's theoretical and operational studies using interviews: These are general conditions that form a set of mediating variables where strategies are also affected by them. They have the following sub-categories: redesigning organizational processes in the

development of earnings management, managers' support of the organization from the correct processes of earnings management in various areas of profitability, structuring personal knowledge and creativity and innovation in the organization, structuring innovation and improving the staff and managers' evaluation system. Transparency of organizational processes related to profitability management, reviewing organizational processes involved in the development of earnings management, the role of accountants and auditors and managers in planning and providing a friendly open space to support creative, innovative people in relation to earnings management, providing appropriate time to employees to implement earnings management based on critical thinking and paying attention to managers in using the tools to gain skills and experience related to earnings management and profitability structuring of companies and organizations are the most important factors pertaining to the profitability sector in line with the promotion of organizations and companies. The researcher also states that the mentioned mechanisms are the most important mechanisms obtained from the current research and adds that in this regard, there are other different mechanisms avoided from being expressed within the framework. He also emphasizes that without the implementation of the stated mechanisms, it will not be possible to develop a framework for the implementation of earnings management in the profitability sector.

Infrastructural conditions: Based on theoretical and operational studies of research conducted using interviews: Designing a conceptual framework for critical thinking-based earnings management. The specific conditions affecting actions and interactions are called the governing context. These conditions are constituted by a set of concepts and categories or contextual variables and in the introduced model include: redesigning earnings management processes with a critical thinking approach in the profitability sector, creating a culture of using new technologies and the desire to innovate in the implementation of earnings management, paying special attention to managers with skills and experience, paying special attention to managers and experts who provide experience, clarifying rules related to earnings management, clarifying critical thinking culture development program, clarifying long-term plans of different parts of profitability, explaining duties and

responsibilities, facilitating the interaction of senior managers with experts in different parts of earnings management of profitability sector, creating flexibility in implementing earnings management in different parts of profitability in the field of earnings management are quite important. In this section, in addition to the above, the design of technological, financial and legal mechanisms were also discussed and the researcher stated the need for research on objectives, effective communication between different profitability sectors and related financial and tax laws and government roadmap in this regard.

Actions and interactions: Based on theoretical and operational studies of the research using interviews: This section aims at modifying the earnings management processes in accordance with the profitability sector. The researcher believes that there won't be sufficient efficiency without formulating an earnings management cycle in the profitability sector, as well as designing and presenting an earnings management model based on critical thinking, which includes: the level of participation of managers in different sections of accountants and auditors who unanimously work in the implementation plan of earnings management and understanding in responsibility and control by all managers and employees involved in the development of earnings management in the field of profitability, monitoring and evaluating profitability feedback by senior managers and experts in accounting and auditing, promoting and disseminating innovation and creativity among employees in the field of earnings management, encouraging to participate in executive and practical programs of earnings management among the relevant employees in the form and framework developed and relying on the necessary responses to critical thinking.

Consequences: Based on theoretical and operational studies of the research using interviews: Some categories represent the results and consequences that result from the adoption of strategies. In the present study, designing and presenting an earnings management model based on critical thinking, documenting and recording knowledge by all accountants and auditors of the organization, facilitating the provision of services to citizens, saving costs and resources, country progress, development and prosperity of the country, enhancing the freedom of expression of people in line with

critical thinking, senior managers' attention to the internal and external environment of profitability and documenting and recording knowledge by them, as well as facilitation of providing services to citizens, saving costs and resources of the country as the result of actions and interactions created and influenced by the category-centeredness is the prevailing context and conditions of intervention that includes several factors, including: accounting development and auditing security, macro and international development, modeling and indexing of various profitability sectors, social prosperity of accounting and auditing services, tax exemptions granted to some of businesses, the existence of the correct flow of information among the board of directors, determining the appropriate behavior to determine earnings, tax exemptions granted to some businesses, the existence of the correct flow of information among the board of directors, change in company profitability, determining appropriate behavior to determine the earnings, quality and how to perform the audit, the company's growth towards profitability, return on assets, profitability changes, attention to profitability curves and lines, special attention to case analysis in the company, reduction of errors due to misclassifications, financial reporting transparency, culture of uncertainty avoidance, determining control procedures over the performance of executive managers, preparing and setting appropriate and accurate procedures for internal controls in the company, critical discourse analysis, consumer and public protection, legitimizing specific social structures, setting new rules in the field of investment and profitability, creating an atmosphere of trust and confidence in executive managers, realism, professionalism, detection of important and significant distortions, familiarity with the laws and regulations pertaining to the law, which will be fully discussed below.

5.2.2. What is the conceptual model of critical thinking-based earnings management?

❖ Answer to the question: (Using interviews with expert and its analysis) What are the dimensions and components of designing and presenting a critical thinking-based earnings management model?

This section deals with the ultimate goal of the current research, i.e. designing and presenting a critical thinking-based earnings management model. The

researcher believes that, according to the research, in achieving the goals of earnings management in different sectors, especially profitability and various areas of accounting and auditing, which is in line with the general principles of earnings management, it will not be possible or achievable. In other words, the researcher believes that in the field of earnings and auditing, success can be achieved in this field by constructive interaction with profitable organizations and industries, and other organizations related to auditing who are decision makers and are active in this field and provide the infrastructure of technologies and techniques that provide service to the public in connection with the registration and recording of corporate accounts and in order to inform. They will achieve this important goal by presenting a development model for a critical thinking model based on critical thinking, which we will fully describe in the following steps of the model introduced by the researcher.

- **Evaluation and monitoring of earnings management:** Earnings management processes with a critical thinking approach and evaluations of senior managers and experts in a timely manner, specialized workshops for employee awareness, control systems involved in the learning of senior managers and employees in the areas of profitability of maintaining intellectual capital of different parts of profitability, keeping experiences and practical skills in memory of different parts of profitability in the field of earnings management, proper selection of intellectual force, practical training, institutionalization of lessons learned, use of appropriate technology tools in accessing implementation the principles of earnings management, identifying strategies for quick access to people for transparency with a critical thinking approach, speed in acquiring, creating and transferring individual and organizational knowledge and turning it into creativity and innovation in the fields of implementation for earnings management.

- **Structural culturalization and culturalization in the areas of earnings management:** In the proposed model, the researcher is the basis of the employer's commitment to the ethical and cultural characteristics at the time of concluding the contract, and the factor of special attention. In cultures where betrayal and deception are not acceptable, people usually try to give each other their full information and after accepting the work and

concluding the contract, try to conduct the accepted work in a desirable way. In other words, in such cultures, the problems of moral hazard, information asymmetry, and work ethic are less common. But when there is an ethical risk, for coordination between the goals of the employer and the CEO, introduced by the basis of the earnings management model as more important and necessary than the policy and regulations and technology context, and believes in appropriate culture in profitability in organizations and it will not be possible to continue the path in any way, unless the government agencies make an earnings in different sectors. In order to achieve this important goal, the researcher suggests holding training courses at different levels of accounting and auditing organizations, as well as creating a cultural value system to manage earnings for different parts of profitability.

- **Development of standards, regulations and writing regulations:** In this step, the researcher proposes developing a coherent framework of standards, regulations and applicable regulations in various parts of earnings management. According to the researcher, after proper culturization, creating a guiding framework in achieving the goal will be crucial. One of the purposes of financial statements is to provide useful information regarding judgement about the ability of management in terms of the optimal use or effectiveness of the company's resources and to direct performance in order to achieve the initial goal of the company to return the highest amount of cash to owners over time. Earnings reporting can be used as a tool for management to plan for the future. In this model, the researcher introduces the development of the structure and procedures of profitable sectors related to earnings management, development of evaluation indicators of activities to earn earnings management, first development of knowledge strategies and finally standardization of knowledge processes in the field of earnings management in various profitable sectors to accelerate achieving goals. In the developed model, it should be developed and adjusted for each step of developing an earnings management model based on critical thinking in different parts of profitability and practical mechanisms, so that they can be used in different situations in developing a critical thinking based earnings management model. Earnings management model strategies in different areas of profitability is

part of the concept of developing earnings management in different areas of profitability, which will be more complete if analyzed by a network of professors, faculty members and experts in different areas of accounting and auditing and other stakeholders. Also, analyzing the strengths and weaknesses of threats and opportunities of different sectors of profitability and society is one of the factors for the success of earnings management implementation. The following questions should also be asked to analyze and evaluate the earnings management implementation network in different areas of profitability: What activities do different stakeholders do and what is the relationship between them? How much is the power of individuals and organizations to control the key activities, resources, or capabilities needed to execute strategies? How is earnings management organized? And it should examine the barriers to earnings management as well as legal, regulatory and structural barriers in various areas of profitability.

- **Strategy design:** In the fourth step of the model, the researcher separately states the strategies and motivational mechanisms and believes that this step is vital in the participation of different parts of profitability in the field of earnings management that it should be addressed separately. The researcher's strategies in this section are the organizational structure of legalism and capital market regulations and expert participation which pertains to the profitability sector and society.

- **Designing the base and infrastructure and implementation of earnings management:** Based on the results of current research, the researcher based on the main activities of this sector in the design of mechanisms for discovering and creating earnings management in profitability, redesigning earnings management processes, creating innovative processes of innovation and earnings management. Creating a culture of using new technologies and the desire for innovation in the implementation of earnings management, designing communication mechanisms and profitability transparency with stakeholders in order to pay attention to critical thinking, designing communication mechanisms and clarifying financial calculations and responding to stakeholders and critics made, designing technological and up-to-date mechanisms for financial transparency, designing legal mechanisms, designing financial mechanisms,

explaining duties and responsibilities of employees in different parts of earnings management and profitable sectors introduces the social security.

- **Optimal design of earnings management processes:** In developing this part of earnings management, the researcher introduces her own model suitable for implementation in the profitability sector, and the researcher states that considering the wide participation of people in the field of earnings management in the profitability sectors as well as the different levels of knowledge of the participants, the stages of the earnings management cycle in different parts of profitability should be clearly and unambiguously explained and developed, therefore, presented a model of critical thinking-based earnings management. Knowledge targeting, according to the researcher the first step to earnings management in developing an initiative for this issue is to determine the purpose of the knowledge. This goal should be clearly and comprehensibly stated by all people in the relevant field. Exploration and identification of knowledge is the second step in the cycle, in which it is necessary to explore knowledge in accordance with the targeting (related to the knowledge of accountants and auditors). The profitability section for efficient and optimal use should be organized so that it can be easily accessed if needed and all stakeholders can be informed of the results and at the same time can easily express their corrective opinions. The combination and development of knowledge in relation to the profitability sector and its management in society to the transfer of knowledge in developing and presenting an earnings management model based on critical thinking in the profitability sector and at this stage is crucial and necessary that any challenge in it will make the implementation cycle of earnings management in the profitability sector a major problem, and the reason is quite clear, that without the dissemination of knowledge during the design and implementation of earnings management model in the profitability sector, it will not be possible to improve productivity and development. Understanding knowledge by all circles related to earnings management, if not properly understood by people, the next stage of the cycle, i.e. the application of knowledge will be difficult, knowledge cannot be published to maximize its efficiency in the chain of initiative and creating correct accounting and auditing principles. The application of knowledge and

creativity to increase productivity in relation to the profitability sector, the target population and services in the field of earnings management plays an important role. The earnings management evaluation used in different parts of profitability should be modeled by evaluation indicators. Also, based on the goals set in relation to meeting the needs of the profitability sector, the population and services should be evaluated.

- **Human resource:** Due to the specialization of work and also the need for specialized human resources, the presence of experienced and skilled people in the field of earnings management in the profitability sectors is one of the requirements for earnings management to start and continue the activity. They should also hire people who have expertise and work experience be in earnings management and hold in-service training courses, hold specialized conferences, conclude internal and external contracts with various companies and organizations that have implemented earnings management. Finally, they should adopt and establish mechanisms to attract and retain skilled and experienced people in the field of earnings management in the profitability sector.

- ❖ **Creating a competitive advantage:** Providing an earnings management model can be a source of competitive advantage at different levels of accounting and auditing in organizations and companies, and this is something other than the current position of the profitability sector, which is to develop an earnings management model in the sector. Profitability can be provided by creating a competitive advantage and a platform for modeling and indexing at the national and international levels.

The present study only discussed the presentation of critical thinking-based earnings management model. Thus, in order to complete the earnings management model in the profitability sector, researchers can investigate other components in order to apply it in accounting and auditing and the target population.

- Appropriate culturization in order to accept the earnings management model
- Feasibility study and creation of appropriate solutions for the implementation of earnings management and attention to critical thinking.
- Conducting this research in other methods (other than The Grounded Theory), for example, quantitative or survey method.

- Investigating the challenges in the above cases in the barriers to the earnings management model in the profitability sector.
- Comparative comparison of the model presented in the current research with other models of earnings management in the economy and capital sector with other organizations and companies providing earnings management in the country can also be considered as topics for future research.

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