



Designing an Accounting Information Value Relevance Model Based on Earnings Selectivity and Valuation

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ABSTRACT

Studies indicate that investor behavior plays a crucial role in equity valuation. Accordingly, their investment decisions are primarily based on accounting earnings information, which can influence stock price and return fluctuations. The main objective of this research is to design an accounting information value Relevance model based on the valuation and earnings selectivity approach. To identify and categorize influential variables affecting accounting information value, opinions from fundamental analysts in the market (as executive experts) and academic experts were considered. Specifically, 120 fundamental analysts contributed to determining the initial variables, and 28 academic experts helped in selecting variables suitable for preliminary models. Moreover, to develop an optimized and localized model, data from 170 publicly traded companies on the Tehran Stock Exchange between 2014 and 2023 were analyzed. The findings show that out of 28 surveyed variables (from fundamental analysts' perspectives), only 23 were deemed essential. Among these, 15 variables (from academic experts' perspectives) were validated and categorized within the framework of valuation and earnings selectivity. Additionally, the optimized models indicate that in the first model (dependent variable: price), four variables were added, and in the second model (dependent variable: return), eight additional variables were introduced compared to the initial model.

Keywords: Accounting Information Value Relevance Model, Earnings Valuation, Earnings Selectivity

1. Introduction

Economic development today depends on access to financial resources and investment by companies, which requires appropriate financial reporting. Investors will only invest in an economic entity when they have sufficient information, and this information is provided through financial reporting (Anandarajan and Hassan, 2010). Financial reporting reveals the resource allocation and profitability of companies, and accounting standards seek to prepare financial statements that facilitate informed decision-making without misleading users (Baker and Jeffrey, 2007). According to Martinez and Dumer (2012), two very important characteristics that make the content of accounting information useful are relevance and reliability. These two characteristics are called primary qualities. Accounting information that is relevant and reliable is more effective in economic decision-making. However, it is difficult to assess these two characteristics separately because: 1- These criteria are contradictory. 2- There is no quantified concept to measure them. 3- Their assessment is subjective and depends on the judgment of individuals. In other words, financial reporting standards do not set a specific limit for "relevance" or "reliability", which makes the analysis of these characteristics complex and dependent on the interpretation of users (Becker et al., 2012). The Financial Accounting Standards Board believes that the decisions of investors and creditors have a wider impact on the allocation of economic resources of a country than other external groups (Barres et al., 2008). From the perspective of users, several factors affect the value of accounting information, including: information reliability, the scope of information distribution, the use of information, the relevance of information in decision-making, and whether the information reported is about the current situation or is dedicated to the strategies and behaviors of other individuals and groups. Does it take into account the interests and preferences of individuals and groups, economic resources, production functions, or market characteristics, such as price and quality? These are examples that affect the economic importance of information (Barth et al., 1998). However, according to existing research, one of the most important factors in investors' behavior in relation to the use of financial information is "information related to the accounting profit of the economic unit". In this regard, according to the theory

The recently proposed "valuation and selectivity" are factors related to accounting profit (Lalvania and Chakraborty, 2024). Therefore, financial analysts need financial statement figures, especially "accounting profit", to successfully predict the future performance of companies. The better the reported profit can explain changes in the stock market value, the higher the value relevance and selectivity for investors in predicting stock prices and returns (Barth et al., 2001). On the other hand, the existence of information asymmetry puts ordinary people's capital at risk in the capital market. Also, if the aforementioned information is related to the profit of the economic unit, this issue is exacerbated (Bayat et al., 2015). Accordingly, since investors and creditors are considered as the two main groups of external users of financial information, one of the basic tasks of management and accounting systems is to provide relevant and appropriate information to these two groups. Therefore, special attention to their information needs within the framework of qualitative characteristics of information is essential (Dasgiri and Khodabandeh, 2003). Therefore, considering that the value of accounting information has become a vital issue for the economic unit, this article, after presenting the theory and related arguments in line with the main issue, attempts to design a model for the value measurement of accounting information based on the Earnings Selectivity and Valuation approach.

Theoretical foundations

Accounting research focusing on the perspective of investors is considered the starting point of studies in this area, because capital market activists are among the main users of financial statement information. Francis and Schipper (1999) have introduced four key approaches to examine the characteristics related to the value of accounting information: a) Fundamental analysis approach of the relevance of the value of accounting information, b) Predictability approach of the relevance of the value of accounting information, c) Informational approach of the relevance of the value of accounting information, d) Measurement approach of the relevance of the value of accounting information (Barth, 2013). The first approach in the value measurement of accounting information is fundamental analysis. According to this approach, accounting information, by revealing hidden values, causes a change in the direction of stock prices with

the market. One of the key assumptions in this approach is that the market is not perfectly efficient, so the consequence is that investors can achieve abnormal returns (Bolo et al., 2014). In the second The interpretation of the value measurement of accounting information, which is mainly in the field of fundamental research, is that it is considered relevant values that can be used to assess the future value of the company and predict future returns, hence it is relevant information that can be used to predict profits, cash dividends of stocks and future cash flows (Barth et al., 2001). The third interpretation of the value measurement of accounting information is that information is considered as relevant values that are used by investors in stock pricing. In the third interpretation, assuming that the capital market has the necessary efficiency, it is examined whether investors actually use accounting information in their decisions (Bisland, 2009). The fourth approach to studying the relevance of the value of accounting information is considered with the view of accounting as an accurate measurement tool. In this approach, unlike the information view, it is assumed that 1- investors do not use information optimally. 2- data are received with delay or incompleteness. In this view, it is concluded that if an accounting item (or other items) has a reliable relationship with market criteria (stock market return or price), accounting measures and figures record and aggregate information load (Ball and Sadka, 2015). Therefore, in this approach, the value of accounting information can be defined as the ability to explain accounting figures in stock prices and returns. On the other hand, as mentioned earlier, one of the most important figures in financial statements for financial analysts and investors is "accounting profit". In general, the examination of the information content of accounting profit in previous research has been influenced by classical assumptions of economics and finance, based on rational behavior of investors and market efficiency (Callen et al., 2008). Given that a company's future profitability depends largely on its current reported earnings, it is expected that after the announcement of the economic unit's earnings, trading in the company's shares will be affected, which can lead to changes in the price and return on the shares (Davis, 2002). Accordingly, the usefulness of the information provided in accounting earnings is called the "information content of accounting earnings". One of the most important criteria for measuring the

usefulness of the information provided in accounting earnings is the extent to which investors' beliefs and expectations are revised, which first leads to judgments (regarding the valuation and selectivity of earnings) and ultimately to their decision-making (Venter et al., 2011). In the world of financial management and Accounting, valuation and earnings selectivity are two key concepts. Earnings valuation means determining the financial value of earnings from business activities, while earnings selectivity refers to the ability of accounting information to influence decision-making and the allocation of economic resources (Schiman and Gunter, 2013).

According to Zhang and Lu (2021), examining earnings selectivity before valuing earnings is more important for investors. Because in the first place, investors should ensure the accuracy and non-deviation of the reported accounting earnings figures, and in the next step, they should examine the explanatory power of the reported accounting earnings items in the future performance of the economic unit. In order to make optimal decisions regarding investment in the economic unit (Lalvania and Chakraborty, 2024).

Earnings valuation models are important tools in financial analysis that help investors and analysts determine the intrinsic value of company stocks based on accounting earnings and cash flows. These models use financial data and future forecasts to evaluate and analyze the financial performance of companies and lead to investment decisions (Schiman and Gunter, 2013). In general, according to the earnings valuation theory, the most important features of earnings valuation include sustainability, predictability, and timeliness of earnings. These features are actually the analysis of accounting earnings figures in order to identify the future performance status of the economic unit so that more details of the future economic status of the company can be examined based on them (Hanover et al., 2015). One of the most important aspects of earnings valuation models is to pay attention to the life cycle of companies. Research has shown that the information content and valuation of earnings and cash flows (in relation to identifying the value of accounting information) can differ in the stages of the company's life cycle. In this regard, for companies that are in the maturity and growth stages, indicators related to the characteristics of their profit valuation indicate the desired future performance of the

economic unit, but companies in decline do not have quality indicators to show the desired future performance (He et al., 2014). On the other hand, profit selectivity refers to the flexibility of managers in using different accounting methods and procedures to report the company's profit (Hu et al., 2011).

This concept indicates the ability and willingness of managers to manipulate financial information in order to achieve specific goals such as achieving profitability targets, improving the company's financial image to investors and financial analysts, and providing performance-based rewards (Kothari et al., 2006). Earnings selectivity generally means the use of accounting tools, judgments, and estimates by managers to change reported financial results. These changes may include changes in the timing of income and expense recognition, choosing different depreciation methods, and manipulating financial reserves. Often, the purpose of these actions is to create an apparent and temporary improvement in profitability in the first perspective, and to secure short-term financing in the shortest possible time in the second perspective (McVay, 2006). In general, the types of earnings selectivity are divided into two general categories: 1- Opportunistic earnings selectivity and efficient earnings selectivity. In opportunistic earnings selectivity, managers opportunistically manipulate information items related to accounting earnings in order to achieve personal goals such as increasing bonuses, maintaining job positions, or increasing stock value (with an opportunistic goal). This type of earnings selectivity can lead to a decrease in the quality of financial reports and create misleading information for investors (Schmeling, 2009). However, in efficient earnings selectivity, managers use accounting flexibility to better convey information and reduce unnecessary fluctuations in financial reports. The goal of this type of earnings selectivity is to provide a stable and predictable picture of the company's financial performance that can help investors make better decisions (Gill and Rooney, 2009). According to various studies, several factors can affect the willingness and ability of managers to use earnings selectivity, including financial incentives, market pressures, governance structures, and accounting laws and regulations (Sun et al., 2011). Also, given that profit selectivity can have several positive and negative consequences. On the one hand, it can be

used to increase transparency and accuracy in financial information, and on the other hand, it can be used opportunistically and to achieve the personal goals of managers. In both outcomes, the economic unit faces issues such as an increase (decrease) in investor confidence, financial and legal risks, and instability in company valuation (Bisland, 2009). Considering the arguments of

The importance of accounting information value in investment decisions is discussed, and this article, with an emphasis on the classification and identification of influential variables (based on valuation theory and profit selectivity), presents an optimized and native model for the value measurement of accounting information. Accordingly, the background of the subject is explained, and the research method and questions are explained. Then, using statistical tests, the research data are analyzed so that the accounting information value measurement model based on valuation theory and profit selectivity is provided to users.

Research Background

Francis and Schipper (1999) study on the relevance of accounting information value to the measurement approach does not require the assumption of market efficiency. In other words, these studies do not require the assumption that the market value of stocks is real and is estimated without any bias. The only assumption required in this research is that stock prices (or stock returns) reflect the group beliefs of investors. Dunnett et al. (2004) concluded that the decline in accounting information content may be driven by non-information-driven transactions in the stock market rather than a decline in accounting information content itself. They argue that although the value relevance of accounting information has declined over time, not all of this decline should be attributed to accounting measurement effects, but rather a large part of the decline in the value relevance of accounting information is due to the behavioral effects of investors, which have increased over time. Anandarajan and Hassan (2010) also examined the value relevance of accounting information in the capital markets of a number of African countries. Their results showed that accounting information of companies that follow international standards is more relevant than that of companies that adhere to local standards. Quinn et al. (2013) concluded that increases

and revisions in value relevance are more common in smaller companies. Companies with lower growth rates and companies with more tangible fixed assets and revisions in value relevance in booming stock markets are usually less visible. Cronell et al. (2017) concluded that shareholder sentiment has a positive and significant effect on stock prices. However, information High-quality accounting can reduce the size of this effect.

The results also indicate that high investor sentiment increases their optimism about the future profitability of companies and their willingness to buy stocks. Susanto and Wijaya (2022) examined the effect of annual report readability and value relevance of accounting information on agency costs with analyst coverage as a moderating variable. The sample used in this study was 263 observations of the Kompas100 index. The results show that a decrease in asset turnover ratio indicates longer reports with poor readability and increased agency costs. Lalvania and Chakraborty (2024) in a study titled Value Relevance of Accounting Earnings Information as Effective Factors for Investors found that 1- Earnings information is very useful for investors with diversified portfolios. 2- When grouping stocks based on profitability, size, and profit value, a strong relationship has been observed between accounting profit items with returns and stock prices, and this relationship is stronger for large and valuable companies than for small companies. Naderi Noor-eini and Ashari (2015) concluded in a study titled The Effect of Accounting Information Quality on Stock Price Adjustment Delay that the lack of complete information potentially delays timely price adjustment and is associated with late stock price adjustment. Low quality of accounting information is likely to be associated with uncertainty about stock valuation parameters, which itself indicates the lack of complete information. Accounting quality has a negative and significant relationship with stock price adjustment delay. Ahmadpour and Hadian (2015) studied changes in the relevance of accounting information in a study. They examined the relevance of accounting information using four models in 2970 observations over an eighteen-year period (1996 to 2013). Their research results indicate that the relevance of balance sheet information has been on a growing trend since the first accounting standards were developed, and there is an inverse and significant relationship between

relevance and company size, a direct and significant relationship between relevance and company growth, and an inverse and significant relationship between relevance and company debt.

Etemadi and Babaei (2018) studied the value relationship and accounting information in a study. In this study, they used price regression to study the value relationship of balance sheet figures and return regression to study the value relationship of profit and loss figures. The coefficient obtained from the second regression measures the sensitivity of price to profit, which is called the profit response coefficient. Value relationship is a characteristic of It is a qualitative aspect of profit that other characteristics affect its improvement or decline, so both accounting information and behavioral aspects of investors can affect this relationship. Esmaeili et al. (2018) studied agency costs and the value of accounting information in a competitive market.

To examine the hypotheses of this study, data from 90 companies listed on the Tehran Stock Exchange were examined over a six-year period from 2010 to 2015. The findings of this study show that if there is agency costs for a competitive market product, the value of accounting information does not decrease, which is due to the ability of owners to access accounting information in competing companies. Fazlzadeh et al. (2022) examined the effect of investors' tendencies on the reaction coefficient to accounting earnings empirically, considering the evidence of previous research on differences in reactions to accounting earnings news. Their research results, based on data from 100 companies active in the Tehran Stock Exchange during the years 2010 to 2017, show that current and future accounting profits have a positive and significant effect on stock returns, but investor preferences can reduce the reaction coefficient to current profits. Further studies also indicate a negative effect of investor preferences on the coefficient of cash and accrual components of future profits reflected in current stock returns. Saadat (2023) conducted a study to investigate the effect of the relevance of accounting information value on the relationship between financial reporting readability and agency costs. This study was conducted for 125 companies on the Tehran Stock Exchange during the years 2016 to 2019. The findings indicate that the readability of financial reports and the relevance of accounting information value have a negative and

significant effect on agency costs. Also, the relevance of accounting information value has a negative and significant effect on the relationship between financial reporting readability and agency costs. Izadinia and Mohammadi (2024) studied the effect of separating stable and unstable components of profit in conservative and non-conservative companies on the value relevance of accounting information. This study was conducted for 103 companies during the years 2006 to 2011. The findings indicate that separating stable and unstable profit separation in conservative companies does not create a significant difference in the value relevance of accounting information. However, in non-conservative companies, this relationship is significant.

Research Questions

Narulia and Don Soruto's (2018) research, based on the efficient market hypothesis, shows that in an efficient market, information is quickly reflected in stock prices and no individual can earn a higher return than the accepted risk in the long run. The findings indicate that accounting profit has information content and professional accountants and financial analysts play a key role in its accurate measurement and dissemination (Jung and Lin, 2019). Accounting information helps investors correctly assess the value of the company and predict future stock returns. Also, the relevance of accounting information increases the effectiveness of economic decisions (Liston, 2016). Since accounting profit is one of the most important figures in financial statements, the main measure of its usefulness is the degree of change in investors' beliefs and expectations and, as a result, their reaction in investment decisions (Aghaei and Sajjadpour, 2011). Given the complexity of the concept of valuation and earnings selectivity and its role in financial reporting and management decisions, understanding this concept and the factors affecting it can contribute to the transparency and quality of financial reports. Accordingly, the present study raises the following questions:

Question (1): What are the factors affecting the valuation of accounting information based on the theory of valuation and earnings selectivity?

Question (2): What is the model for measuring the value of accounting information based on the theory of valuation and earnings selectivity?

Research Method

In general, the present study, according to Malcolm Smith (2003), is an experimental, survey, and qualitative research (valuing accounting information). This study is also applied in terms of purpose and Excel spreadsheets were used to summarize the required data and calculations, and the latest versions of Eviews and Spss software were used for final analysis. Given that the main goal of this study is "to achieve a model for measuring the value of accounting information based on the valuation and earnings selectivity approach." First, it is used to determine the variables (based on accounting profit) that affect the value relationship of accounting information from the perspective of fundamental analysts in the market and capital, and then The opinions of academic experts are also used to categorize and identify variables related to "valuation and earnings selectivity". At this stage, after obtaining variables related to valuation and earnings selectivity, optimal and local modeling is carried out using the tests available in stepwise regression. It should be noted that at this stage, 120 fundamental analysts in the market and capital (as representatives of investors in the stock exchange market) are asked for their opinions on 28 variables (explanations are included in the questionnaire for each variable so that the respondent does not have any ambiguity regarding the variables). Also, at this stage, the opinions of 28 academic experts are used to categorize and identify variables related to "valuation and earnings selectivity" so that ultimately, after obtaining the desired variables, optimal and local modeling is carried out.

Statistical population of the study

In general, the statistical population of this study consists of three groups: 1- The first group consists of executive experts, which means fundamental analysts in the market and capital. It should be noted that no specific method was used to select executive experts, and individuals were selected purposefully or judgmentally. This sampling technique is often used in populations that are difficult to access. 2- The second group consists of academic elites, which also includes faculty members (accounting and financial management departments with a scientific rank higher than associate professor) of universities who are experts in the theoretical literature of the study and have official and published research in the field of the

dimensions of the present study. 3- The third group of the statistical population of the study consists of all companies listed on the Tehran Stock Exchange and the OTC, for which the following adjustments have been made for its selection. 1- The companies' fiscal year ends at the end of March; 2- During the time frame of the study, they have not stopped operating and have not changed their fiscal period; 3- Due to information limitations, they are not part of the over-the-counter primary market companies; 4- They are not part of investment (holding) and financial intermediation (leasing and banking) and insurance companies; 5- During the research period, there was no trading break of more than six months and their information was available for at least one year. After applying the above adjustments, 170 companies were included in the statistical population of this research. The research time scope is 10 financial periods (from 2014 to 2019) and 1170 years - the company. The data was collected using the new Rahavard software and the information published by the companies on the KADAL network and the archive of transactions of the Stock Exchange Organization.

Research variables

In this study, to present a "model for measuring the value relationship of accounting information based on Earnings Selectivity and Valuation", initially 28 variables (changes in profitability, gross, net and operating profit margins; changes in expected profitability growth; earnings per share (EPS); dividends paid per share (DPS); operating profit to sales ratio; net profit to working capital ratio; P/E ratio to net profit growth rate; realized profit to expected profit; return on equity rate; return on assets rate; fluctuations in operating cash flow to fluctuations in operating profit; correlation between accruals and operating cash flow; accruals quality; profit stability; profit predictability; profit variability; profit value content; profit response coefficient; matching costs with revenues; profit timeliness; conditional profit conservatism; unconditional profit conservatism; total accruals-based management; discretionary accruals-

based management; real profit management; efficient and opportunistic accruals-based profit management; smoothing and finally profit classification) were selected based on theoretical foundation studies. It was selected using the field method. As mentioned earlier, in order to obtain the initial influential variables (in order to present the accounting information value relationship model) from the perspective of fundamental analysts in the market and capital (as representatives of investors in the stock exchange market), 23 variables were identified from the perspective of fundamental analysts at this stage.

In this regard, variables that were not necessary from the perspective of fundamental analysts include "changes in expected profitability growth, the ratio of net profit to working capital, the matching of costs with revenues, conditional profit conservatism, and profit management based on efficient and opportunistic accruals". In the following, the identified variables were presented to the experts for consultation, so that at this stage, they could categorize and identify variables related to "valuation and earnings selectivity". At this stage, out of the 23 variables examined by the experts, 15 variables were identified in the direction of "valuation and earnings selectivity". It should be noted that in identifying the desired variables by experts, two basic points were considered. 1- The identified variables should be based on new, emerging phenomena and at the same time understandable to investors. 2- The selected variables should be consistent with the inference from accounting data and the basis for selecting variables should not be based solely on the output of accounting data, as in previous models. Of course, it should be noted that variables which was previously based on the output of accounting data and is available in the initial models and assuming the existence of these variables, variables related to "valuation and selectivity of earnings" are to be added to the initial models. In the following, based on Table (1), the names of the identified variables, their measurement method and the category in which they are placed are presented as follows.

Table (1) Variables identified by the elite and their measurement method

ردیف	نام متغیر	نحوه محاسبه متغیرهای شناسایی شده
1	Operating cash flow fluctuations to operating profit fluctuations (ROCFOP)	The following ratio is used to calculate this variable: $\text{Rocfop} = \frac{\sigma\text{CFO}}{\sigma\text{OI}}$ In the high ratio, σCFO indicates the standard deviation of operating cash flow and σOI indicates the standard deviation of operating profit over 5 years. This variable indicates the quality of earnings. The higher the value of this index, the higher the quality of earnings and vice versa (Bani Mahd et al., 2016).
2	Correlation between accruals and operating cash flow (CORRL_TA_CF)	One of the simplest measures of earnings management is the correlation coefficient between accruals and operating cash flow. This index was presented by Lewis et al. (2003). The following relationship is used to calculate this variable: $\text{CORRL_TA_CF} = P(\text{TACC \& CFO})$ In this equation, TACC represents accruals and CFO represents operating cash flow. According to this index, if there is a negative correlation between accruals and operating cash flow, it indicates earnings management (ibid.).
3	Accrual quality (AQ)	The Dicho-Dicho model (2002) is used to calculate this variable: $\Delta\text{WC it} = \beta_0 + \beta_1 \text{CFO it-1} + \beta_2 \text{CFO it} + \text{CFO it+1} + \varepsilon \text{ it}$ In the above model, WCA represents the net change in non-cash working capital in year t (current year) compared to year t-1 (previous year). CFO also represents the operating cash flow, which is presented in the above model in year t-1 (previous year), year t (current year), and year t+1 (next year). In fact, the error values in the model indicate abnormal figures related to the dependent variable that cannot be controlled and predicted. The higher the model error value for the company in the year under review (year-company), the lower the ability to convert accruals into cash and, as a result, the lower the quality of accruals (ibid.).
4	Profitability (SOP)	In general, profitability means the repeatability and durability of profits in future years. To calculate this variable, the Penman and Zhang (2002) and Francis et al. (2002) models are used: $\text{E it} = \beta_0 + \beta_1 \text{E it-1} + \varepsilon \text{ it}$ In this model, E it represents net profit in the current year and E it-1 represents net profit in the previous year. Rolling regression is used to calculate this variable over the last 5 years. In general, the closer the value of β_1 is to 1, the greater the stability and quality of profits (same source).
5	Profitability predictability (PRED)	One of the criteria for profit quality is profit predictability, this concept means the ability to use profit information to predict future information. In this regard, future information can be profit or operating cash flow. The following model is used to calculate this variable: $\text{CFO it-1} = \beta_0 + \beta_1 \text{E it} + \varepsilon \text{ it}$ In this model, CFO it-1 represents operating cash flow in the current year and E it represents net profit in the current year. In this model, the criterion for predicting profit is the standard deviation (ε). It should be noted that rolling regression is used to achieve the aforementioned criterion over the last 5 years. The higher this value, the lower the predictability of profit, and vice versa (same source).
6	Profit variability (CHANGEABLE)	In general, profit variability or volatility is also one of the criteria for profit quality. This variable means the dispersion of profit values over a period of time. The following model is used to calculate this variable: $\text{E it} = \beta_0 + \beta_1 \text{E it-1} + \varepsilon \text{ it}$ In this model, E it represents net profit in the current year and E it-1 represents net profit in the previous year. High error values (ε) in this model indicate greater variability or volatility of profit and lower profit quality (same source).
7	Profit response coefficient (REAC_COE)	In general, the profit response coefficient is an index for determining the responsiveness of stock returns (prices) to changes in company profits. The following model is used to calculate this variable: $\text{R it} = \beta_0 + \beta_1 \text{E it} + \beta_2 \Delta\text{E it} + \varepsilon \text{ it}$ In this model, R it represents stock returns, E it represents net profit in the current year and E it Δ represents changes in net profit compared to the previous year. The higher the β_1 value obtained from the model's estimation in observations, the higher the response coefficient and profit quality (same source).
8	Timeliness of earnings (TIME_E)	One of the important characteristics for the relevance of earnings is the timeliness of earnings reports. Earnings are informational in nature and are made available to investors on time. Earnings timeliness is determined through the Kothari and Zimmerman model (1995) as follows: $\text{R it} = \beta_0 + \beta_1 \Delta\text{NI it} + \beta_2 \text{NI it} + \varepsilon \text{ it}$

ردیف	نام متغیر	نحوه محاسبه متغیرهای شناسایی شده
		In this model, R it represents stock returns, NI it Δ and NI it represent changes in net income for the current year (compared to the previous year) and net income for the current year, respectively. In general, the criterion for earnings timeliness is the adjusted coefficient of determination (R2). Accordingly, the higher the value of R2, the greater the timeliness of earnings reports (same source).
9	Unconditional Earnings Conservatism (CON_GIVO)	One of the tools used in earnings management is unconditional earnings conservatism. In this study, the Giulio and Hein (2000) model is used to calculate this variable as follows. Conservative Non-Operating Earnings Index = (Total Liabilities)/(Total Assets)*(-1) This model states that the growth of accruals over several long-term financial periods indicates the application of earnings conservatism. Therefore, the more accruals are created during the year, the less conservatism has been applied. In other words, a conservative approach in financial reporting is always associated with non-recognition or delay in the recognition of accruals (ibid.).
۱۰	Total Accruals-Based Management (ATBM)	The first earnings management measure was presented by Healey (1985) based on accruals. He used total accruals to measure earnings management. In this regard, the "difference between operating profit and operating cash flow" is used to calculate accruals (ibid.).
11	Management based on discretionary accruals The Jones Adjusted Model (EM_ADJJO)	for calculating earnings management is presented below from the Jones Adjusted Model (1985), with the addition of a variable by Decho et al. (1995). In this method, after an estimation step and calculating the coefficient values (β_1 , β_2 , β_3), the residual value for each company-year (ϵ) is calculated. $TACC_{it}/A_{it-1} = \beta_0 + \beta_1 (1/A_{it-1}) + \beta_2 (\Delta REV - \Delta REC_{it}/A_{it-1}) + \beta_3 (PPE_{it}/A_{it-1}) + \epsilon_{it}$ Where: TACC = operating profit minus cash flow from company i's operations in year t. ΔREV = change in cash sales revenue of company i in year t (year-over-year) ΔREC = change in accounts receivable of company i in year t (year-over-year) PPE = total property, plant and equipment of company i in year t A = assets of company i calculated for year t-1 Higher values of discretionary accruals (model error value or ϵ) indicate greater evidence of earnings management. The absolute value of discretionary accruals multiplied by -1 is used to calculate earnings management (ibid.).
12	Management based on discretionary accruals Kothari model (EM_KOT)	Another model in relation to the calculation of earnings management is the use of the model of Kothari et al. (2005). The following model is also fitted like the above model, with the difference that it has an additional variable called ROA (return on assets). $TACC_{it}/A_{it-1} = \beta_0 + \beta_1 (1/A_{it-1}) + \beta_2 (\Delta REV - \Delta REC_{it}/A_{it-1}) + \beta_3 (PPE_{it}/A_{it-1}) + \beta_4 (ROA) + \epsilon_{it}$ The method of calculating the ROA variable is to use the ratio of net income to total assets. In this model, higher values of discretionary accruals (the model error value or ϵ) indicate evidence of greater earnings management (ibid.).
13	Real Earnings Management (ERM)	In this study, the model presented in the research of Badavar Nahandi and Taghizadeh Khanghah (2013) is used to calculate real earnings manipulation. 1) Abnormal operating cash flow (Cfo): Similar to the research of Roykozi (2006), Zhang (2008) and Yu (2008), the following model is used to estimate abnormal cash flow (ABCFO), so that to calculate this criterion, the absolute value of the residual of the estimated model at the level of the total data is used for each year-company (another additional explanation is that once this model is estimated at the level of the total data and then using the obtained coefficients (β_0 , β_1 , β_2 , β_3), the residual value for each year-company (ϵ) is calculated): $CF_{it}/A_{it-1} = \beta_0 + \beta_1 (1/A_{it-1}) + \beta_2 (S_{it}/A_{it-1}) + \beta_3 (US_{it}/A_{it-1}) + \epsilon_{it}$ 2) Abnormal production costs (Prod Cost): Similar to the research of Roykozi (2006), Zhang (2008) and Yu (2008) use the following model to estimate production, such that the residual of this model (ABPROD) is considered as a measure of abnormal production. To calculate this criterion, similarly to the previous case, the absolute value of the estimated residual model is used at the level of the aggregate data, at the level of each year-company: $PROD_{it}/A_{it-1} = \beta_0 + \beta_1 (1/A_{it-1}) + \beta_2 (S_{it}/A_{it-1}) + \beta_3 (US_{it}/A_{it-1}) + \beta_3 (US_{it-1}/A_{it-1}) + \epsilon_{it}$ Unusual discretionary expenses (DisExp): To calculate this criterion, similarly to the previous case, the absolute value of the estimated residual model is used at the level of the aggregate data, at the level of each year-company: $DISX_{it}/A_{it-1} = \beta_0 + \beta_1 (1/A_{it-1}) + \beta_2 (S_{it-1}/A_{it-1}) + \epsilon_{it}$ where: CFO _{i,t} = operating cash flow of company i in year t. A _{i,t-1} = Assets of firm i in year t-1. S _{i,t} = Sales of firm i in year t.

نحوه محاسبه متغیرهای شناسایی شده	نام متغیر	ردیف																								
$\Delta Si,t$ = Sales of firm i in year t minus Sales of firm i in year $t-1$. $PRODi,t$ = Production of firm i, which is equal to the sum of cost of goods sold and change in inventory. $DISEXPi,t$ = General and administrative expenses, distribution and selling expenses of firm i in year t. After fitting all three models and obtaining their index (the absolute value of the estimated residual model), in the next step, based on the models of Cohen et al. (2008), Cohen and Zarvin (2010), and Zhao et al. (2012), a comprehensive model for real earnings management was used, the calculation method of which is as follows: $REM\ it : -Abn\ Cfo\ it + Abn\ Prod\ Cost\ it - Abn\ DisExp\ it$ where: (Abn Cfo it): abnormal operating cash flow (Abn Prod Cost it): abnormal production costs (Abn DisExp it): abnormal discretionary costs It should be noted that the higher the value of the aforementioned index (REM), the greater the profit management, and the lower the value, the less the profit management (Badavar Nahandi and Taghizadeh Khanghah, 2018).																										
In this study, the McVey (2006) model is used to calculate the profit classification change. It should be noted that Saghaei and Jamalianpour (2018) also used the same model in their study. The operational definition of the model is presented below. The amount of unexpected main profit E_t and the changes in unexpected main profit V_t are used to measure the profit classification change. For this purpose, the relevant models are used to estimate the expected basic profit and changes in it: Relationship number (1) $CE\ it = \beta_0 + \beta_1 CE\ it-1 + \beta_2 ATO\ it + \beta_3 ACC\ it-1 + \beta_4 ACC\ it + \beta_5 \Delta SALE\ it + \beta_6 NEG_ \Delta SALE\ it + e\ it$ Relationship number (2) $\Delta CE\ it = \lambda_0 + \lambda_1 CE\ it-1 + \lambda_2 \Delta CE\ it-1 + \lambda_3 \Delta ATO\ it + \lambda_4 ACC\ it-1 + \lambda_5 ACC\ it + \lambda_6 \Delta SALE\ it + \lambda_7 NEG_ \Delta SALE\ it + e\ it$ All equations related to measuring the level of classification change are fitted at the "market industry category" level and the remaining terms are considered as the level of classification change. It should be noted that after obtaining the remaining terms, we encounter positive and negative values. Accordingly, the higher the residual value of the model, the greater the "change in profit classification" and vice versa. The variables used in the above-mentioned equations are as follows. Table (2) Variables used in profit classification change models <table> <tr> <th>Measurement method</th><th>Variable symbol</th><th>Row</th></tr> <tr> <td>CE it Core profit, which is net income minus cost minus general, selling and administrative expenses divided by net income</td><td>CE it</td><td>1</td></tr> <tr> <td>ΔCE it Changes in core profit, which is: $CE_{it} + 1 - CE_t$</td><td>ΔCE it</td><td>2</td></tr> <tr> <td>UE_CE it Extraordinary core profit or loss (residual of the first equation)</td><td>UE_CE it</td><td>3</td></tr> <tr> <td>UE_ ΔCE it Changes in extraordinary core profit or loss (residual of the second equation)</td><td>UE_ ΔCE it</td><td>4</td></tr> <tr> <td>ATO Net operating asset turnover ratio, in which net operating assets are the sum of operating assets minus operating liabilities. Operating assets are equal to the sum of assets minus cash and short-term investments. Operating liabilities are equal to total assets minus total liabilities minus the book value of common and preferred stock and minority interest.</td><td>ATO</td><td>5</td></tr> <tr> <td>ACC Operating accruals are equal to operating profit or loss minus net operating cash flow.</td><td>ACC</td><td>6</td></tr> <tr> <td>$\Delta SALE$ Percentage change in revenue from the previous period. It should be noted that the reclassification is based on two approaches: "unexpected core profit" and "unexpected core profit changes", and accordingly, given that these two approaches are completely consistent in terms of statistics and research literature. Therefore, the first approach is used in this study.</td><td>$\Delta SALE$</td><td>7</td></tr> </table>	Measurement method	Variable symbol	Row	CE it Core profit, which is net income minus cost minus general, selling and administrative expenses divided by net income	CE it	1	ΔCE it Changes in core profit, which is: $CE_{it} + 1 - CE_t$	ΔCE it	2	UE_CE it Extraordinary core profit or loss (residual of the first equation)	UE_CE it	3	UE_ ΔCE it Changes in extraordinary core profit or loss (residual of the second equation)	UE_ ΔCE it	4	ATO Net operating asset turnover ratio, in which net operating assets are the sum of operating assets minus operating liabilities. Operating assets are equal to the sum of assets minus cash and short-term investments. Operating liabilities are equal to total assets minus total liabilities minus the book value of common and preferred stock and minority interest.	ATO	5	ACC Operating accruals are equal to operating profit or loss minus net operating cash flow.	ACC	6	$\Delta SALE$ Percentage change in revenue from the previous period. It should be noted that the reclassification is based on two approaches: "unexpected core profit" and "unexpected core profit changes", and accordingly, given that these two approaches are completely consistent in terms of statistics and research literature. Therefore, the first approach is used in this study.	$\Delta SALE$	7	Profit Classification (ECS)	14
Measurement method	Variable symbol	Row																								
CE it Core profit, which is net income minus cost minus general, selling and administrative expenses divided by net income	CE it	1																								
ΔCE it Changes in core profit, which is: $CE_{it} + 1 - CE_t$	ΔCE it	2																								
UE_CE it Extraordinary core profit or loss (residual of the first equation)	UE_CE it	3																								
UE_ ΔCE it Changes in extraordinary core profit or loss (residual of the second equation)	UE_ ΔCE it	4																								
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The following ratio is used to calculate the profit smoothing variable:	Profit Smoothing (IS)	15																								

ردیف	نام متغیر	نحوه محاسبه متغیرهای شناسایی شده
		Profit Smoothing Index = ((Profit Standard Deviation)/(Cash Flow Standard Deviation)) Profit means profit before extraordinary items that is first adjusted using the total assets at the beginning of the year, and cash flows mean operating cash flows that are adjusted using the total assets at the beginning of the year. The smaller the ratio, the more profit smoothing (more profit management) and the larger it is, the less profit smoothing (less profit management) (Gunter et al., 2009).

Finally, based on the variables listed in the table above and the following models, which have previously been interpreted as initial models, native modeling is carried out with the aim of optimization. In general, the value or relevance of accounting information is in two forms: 1- Value relationship of balance sheet figures and 2- Value relationship of profit and loss figures (Etemad and Babaei, 2018). Each of the aforementioned models in the initial state is as follows. 1- In order to calculate the "value correlation of balance sheet figures", the price model is used:

$$P_{it} = \beta_0 + \beta_1 BVPS_{it} + \beta_2 EPS_{it} + \beta_3 CFOPD_{it} + \varepsilon_{it}$$

P_{it} : The company's stock price in year t

$BVPS_{it}$: Book value divided by the number of shares in year t

EPS_{it} : Earnings per share in year t (or after-tax income divided by the number of shares in year t)

$CFOPD_{it}$: Operating cash flow divided by the number of shares in year t

2- In order to calculate the "value correlation of profit and loss figures" (the relevance of the value of accounting information based on profit and loss figures), the return model is used:

$$R_{it} = \beta_0 + \beta_1 EAR_{it} + \varepsilon_{it}$$

R_{it} : The company's stock return in year t+1

EAR_{it} : Net profit divided by total assets in year t

According to Feltham and Olson (1995), both models are used to measure the "value relevance of accounting information". Accordingly, according to Susanto and Wijaya (2022) in each of the presented models, the basis or index of "value correlation (relevance) of accounting information" in fiscal year t is equal to R^2 for each year-company during the period t-5 to t.

Therefore, the higher the R^2 value obtained (for each year-company), the greater the value of accounting information in that year and for that company is desirable, and vice versa. In order to achieve the native model, the incremental variables in Table (1) are added with the aim of achieving the optimal model.

Research findings

The findings in this study include descriptive statistics and inferential statistics, the results of which are presented below.

Descriptive Statistics Results of the Research

As mentioned earlier, the statistical population of this study generally includes 1- executive experts, 2- academic elites, and 3- companies listed on the Tehran Stock Exchange. The following are the demographic descriptive statistics of executive experts and academic elites, and finally the descriptive statistics related to the variables of the initial models and the identified variables (regarding placement in the models) as follows:

Table (3) Demographic Descriptive Statistics Results of Executive Experts

Frequency Percentage	Frequency	Variable	Frequency Percentage	Frequency	Variable
۵۷/۵	۶۹	Fundamental	۸۱/۷	۹۸	Male
۴۲/۵	۵۱	Fundamental and Technical	۱۸/۳	۲۲	female
۷/۵	۹	5 to 10 years	۲۵	۳۰	Bachelor's Degree
۴۴/۲	۵۳	11 to 15 years	۵۶/۷	۶۸	Master's Degree
۴۸/۳	۵۸	16 years and above	۱۸/۳	۲۲	Degree Ph.D

Descriptive Demographic Descriptive Statistics of Executive Experts (Fundamental Market and Capital Analysts) in Table (3) shows that 120 executive experts were surveyed. Accordingly, most of the selected experts had a Master's degree and were male in terms of gender. In addition, most of the selected experts use the fundamental analysis method and their experience is over 16 years.

Descriptive demographic statistics of academic experts in Table (4) show that of the 28 experts surveyed, all

of them had a PhD degree and an associate professor rank or higher, and most of them had 26 years and above in terms of work experience and were between 56 and 60 years old. It should also be noted that in terms of gender, 71.4 percent of experts are male and 28.6 percent are female. The descriptive statistics of the variables identified for inclusion in the initial models are presented below.

Table (4) Results of descriptive demographic statistics of academic elites

Frequency Percentage	Frequency		Variable	Frequency Percentage	Frequency		Variable
7/1	2	40 to 45 years	Age of experts	71/4	20	Male	Gender
21/4	6	46 to 50 years		28/6	8	Female	
32/1	9	51 to 55 years		21/4	6	15 to 20 years	Work experience of experts
39/4	11	56 to 60 years		32/1	9	21 to 25 years	
				46/5	13	26 years and above	

Table (5) Descriptive statistics related to the variables of the initial models

Erection	Skewness	Standard Deviation	Minimum	Maximum	Median	Mean	Variable
52/471	5/893	31258/59	678/000	393250/0	7490/000	17728/89	Company stock price (P)
2/316	0/971	0/617	-1/450	4/372	0/234	0/313	Company stock return (R)
116/998	8/079	3607/640	-7275/706	67666/98	2017/482	2941/282	Book value per share (BVPS)
423/313	15/627	2184/943	-3621/000	64395/00	483/000	1007/464	Earnings per share (EPS)
162/717	8/939	2028/149	-4037/895	46392/84	379/092	901/111	Cash Flow from Operating Activities (CFOPD)
2/371	0/214	0/156	-0/981	0/710	0/127	0/149	Earnings Ratio (EAR)

Table (6) Descriptive statistics of variables identified for inclusion in initial models

Erection	Skewness	Standard Deviation	Minimum	Maximum	Median	Mean	Variable
13/568	2/897	1/774	0/096	10/746	1/209	1/702	Operating Cash Flow Fluctuations to Operating Profit Fluctuations (ROCFOP)
2/414	0/816	0/009	-0/990	0/901	-0/082	-0/386	Correlation between Accruals and Operating Cash Flow (CORRL TA CF)
12/648	-2/007	0/129	-0/884	-0/000	-0/104	-0/134	Accruals Quality (AQ)
7/008	1/091	1/073	-2/226	0/218	0/412	0/042	Profit Stability (SOP)
7/112	-1/700	0/079	-0/010	-0/040	-0/086	-0/109	Earnings Predictability (PRED)
10/901	2/900	0/104	0/000	0/840	0/081	0/110	Earnings Variability (CHANGEABLE)
11/013	0/883	11/680	-40/096	09/466	0/026	0/110	Earnings Reaction Coefficient (REAC COF)
1/923	-0/391	0/289	0/010	0/998	0/648	0/096	Earnings Timeliness (TIME_E)
4/000	-0/102	0/141	-0/048	0/473	-0/030	-0/038	Conditional Earnings Conservatism (CON GIVO)
0/077	0/224	0/140	-0/018	0/620	0/029	0/037	Total Accruals Management (ATBM)
10/112	-2/207	0/140	-0/886	-0/000	-0/099	-0/140	Adjusted Jones Model Discretionary Accruals Management (EM_ADJJO)
11/208	-2/347	0/120	-0/812	-0/000	-0/089	-0/122	Kotari Model Discretionary Accruals Management (EM_KOT)

Erection	Skewness	Standard Deviation	Minimum	Maximum	Median	Mean	Variable
ε/λγξ	-./γξγ	./γξγ	-./γξγ	./λγγ	././γλ	././.	Real Earnings Management (ERM)
λ/γξγ	././ξξ	././λξ	-././ξξ	././ξ	-././ξ	-././ξ	Earnings Classification (ECS)
γ././.	γ/γξγ	./γξξ	././.	γ/γξγ	γ./.	γ/γξγ	Earnings Smoothing (IS)

According to Tables (5) and (6), the number of observations per year-company based on the combined data was 1700 observations (170 companies and 10 years). According to descriptive statistics, the above indicators can be divided into central indicators (mean and median), dispersion (standard deviation), skewness and kurtosis coefficients, and other indicators (maximum and minimum). Regarding the negative skewness coefficient of some variables, it can also be said that this indicates the existence of a rightward skewness and the tendency of these variables to smaller values. Also, the positivity of the kurtosis coefficients indicates that they are higher than the normal distribution and the data is concentrated around the mean. In the following, the frequency of variables affecting the value of accounting information from the perspective of executive experts is presented as follows.

Results of inferential statistics for factors affecting the valuation of accounting information (first question)

Given that the first question claimed to identify factors affecting the valuation of accounting information based on the theory of Earnings Selectivity and Valuation. Accordingly, in the first stage, the frequency of responses to questions related to variables affecting the value of accounting information from the perspective of executive experts is presented, and finally, using the Kendall coefficient, the degree of consensus among academic elites regarding the categories (Earnings Selectivity and Valuation) and variables affecting the valuation of accounting information is determined.

Frequency of respondents (executive experts) to variables affecting the value of accounting information: Table (7) summarizes the descriptive statistics of the responses to questions related to variables affecting the value of accounting information from the perspective of executive experts.

Table (7) Frequency of respondents (executive experts) to variables affecting the value of accounting information

Standard deviation	median	Average	Not at all essential	Slightly essential	Somewhat essential	Essential	Very essential	variables affecting the value of accounting information	Rank
././.	ο	ε/οξο	-	-	-	ξξξ/ξ	ξοξ/γ	Changes in profitability, gross, net and operating profit margins	1
./γξλ	γ	γ/ξγξ	ξξγ/γ	ξξο/.	ξγ/γ	-	-	Changes in expected profitability growth	2
./γ./ξ	ξ	ξ/λξγ	-	ξγ/γ	ξξλ/γ	ξξγ/ξ	ξξο/.	Earnings per share (EPS)	3
./λλγ	ξ	ε/οξο	-	ξξ/γ	ξξο/.	ξξο/γ	ξξο/γ	Earnings per share (DPS)	4
γ././.	ξ	ξ/λξγ	-	ξξξ/ξ	ξξγ/γ	ξξγ/ξ	ξξλ/γ	Operating profit to sales ratio	5
./γξγ	γ	γ/ξογ	ξξγ/ξ	ξξγ/ξ	ξγ/γ	-	-	Net profit to working capital ratio	6
γ././λ	ξ	ξ	-	ξγ/γ	ξξγ/γ	ξξγ/γ	ξξγ/ξ	P/E ratio to net profit growth rate	7
./λογ	ξ	ε/οξγ	-	ξγ/γ	ξγ/γ	ξο./.	ξξγ/γ	Realized profit to forecasted profit	8
./ογγ	ο	ε/οξο	-	-	ξξ/γ	ξξγ/ξ	ξογ/γ	Return on equity	9
./γξγ	ο	ε/εξξ	-	-	ξγ/γ	ξξγ/γ	ξογ/γ	Return on assets	10
./γξγ	ξ	ξ/γξξ	-	ξξ/γ	ξξξ/ξ	ξξξ/ξ	ξγγ/γ	Operating cash flow fluctuations to operating profit fluctuations	11
./ογγ	ο	ε/οξγ	-	-	ξξ/γ	ξξο/γ	ξγ./γ	Correlation between accruals and operating cash flow	12
γ/γξ.	ξ	ξ/ξγξ	ξξλ/γ	-	ξγ/γ	ξξγ/γ	ξξγ/γ	Accrual quality	13
./γξγ	ξ	ξ	-	-	ξξλ/γ	ξξγ/γ	ξξλ/γ	Profit sustainability	14
./οολ	ο	ε/γξξ	-	-	ξξ/γ	ξξλ/γ	ξγγ/γ	Profit predictability	15
./γγξ	ε/ο	ε/ξξγ	-	-	ξξγ/γ	ξξγ/γ	ξο./.	Profit volatility	16
./γξγ	ξ	ξ/γξξ	-	ξγ/γ	ξξγ/ξ	ξξγ/ξ	ξξγ/γ	Value Content of Earnings	17
./γλ.	ε/ο	ε/ξογ	-	ξξ/γ	ξγ/γ	ξξγ/ξ	ξο./.	Earnings Response Factor	18
./γξλ	γ	γ/ξγξ	ξξγ/γ	ξξο/.	ξγ/γ	-	-	Cost-to-income Matching	19

Standard deviation	median	Average	Not at all essential	Slightly essential	Somewhat essential	Essential	Very essential	variables affecting the value of accounting information	Rank
0.772	3	3.178	-	2/7	10/7	0.0	20/7	Earnings Timeliness	20
0.033	1	1.280	20/0	21/3	2/7	-	-	Conditional Earnings Conservatism	21
0.970	3	3.807	-	-	03/7	7/1	29/3	Unconditional earnings conservatism	22
0.717	3	3.928	-	2/7	17/9	6.0/7	17/9	23 Total accruals management	23
0.907	3	3.892	-	7/1	28/7	22/1	22/1	Discretionary accruals management	24
0.903	3	3.778	-	10/7	28/7	22/9	17/9	Real earnings management	25
0.417	1	1.213	78/7	21/3	-	-	-	Efficient and opportunistic accruals management	26
0.772	3	3.778	-	2/7	29/3	22/9	13/3	Earnings classification	27
0.887	3	3.200	-	7/1	7/1	29/3	27/3	Smoothing	28

Below is the relevant Kendall coefficient for determining the level of consensus among academic elites based on Table (8).

Since the Delphi stage was repeated twice, agreement was achieved between the elites in the second round (Kendall coefficient = 0.772). This level indicates a high level of consensus in the respondents' opinions to

determine the variables and identify the categories related to "benefit valuation and selectivity". It should be noted that the way to categorize the variables related to "benefit valuation and selectivity" is as described in Table (9). According to the table below, it can be said that the researcher has achieved the results of the first phase of the research.

Table (8) Results of the Kendall coefficient test to examine the level of consensus among academic elites

(Second stage)	(First stage)	Number of experts (27 people)
0.772	0.778	Kendall coefficient
37.0/122	11/089	Chi-square coefficient
178	178	Degrees of freedom
0.000	0.778	Confidence interval

Table (9) Results of the identified variables and how to categorize the variables related to "valuation and selectivity of earnings"

Variables identified in each category	Variable classification order	rank
Fluctuations in operating cash flow to fluctuations in operating profit, accrual quality, earnings stability, earnings predictability, earnings variability, earnings response coefficient and earnings timeliness	Variables related to valuation of earnings	1
Correlation between accruals and operating cash flow, unconditional earnings conservatism, total accruals-based management, discretionary accruals-based management (modified Jones and Kothari models based on modeling findings), actual earnings management, earnings classification and earnings smoothing	Variables related to selectivity of earnings	2

Results of inferential statistics for modeling the value measurement of accounting information (second stage)

The results of modeling the value measurement model of accounting information based on the theory of Earnings Selectivity and Valuation are included in Table (10). Tests related to the analysis of the type of model fit (F-limer and Hausman test) and regression assumptions, including tests of collinearity, normality of residuals and heteroscedasticity of variance, were also performed, and the final model was presented according to the most desirable fit in terms of

statistics. It should be noted that, according to the output obtained, the regression models related to the value measurement of accounting information related to the aforementioned theories are linearly significant and their explanatory power is acceptable at the level of the entire sample.

Table (10) Results of modeling the value measurement of accounting information

Results of the value model (relevance) of accounting information with the dependent variable of stock return (R) or so-called value relationship of profit and loss figures.			Results of the value model (relevance) of accounting information with the dependent variable of stock price (P) or so-called value relationship of balance sheet figures		
F-limer significance level (0.000)		Value of the F-limer test statistic (304.649)	F-limer significance level (0.000)		Value of the F-limer test statistic (31.442)
Hausman significance level (0.000)		Value of the Hausman test statistic (2741.849)	Hausman significance level (0.000)		Value of the Hausman test statistic (43.550)
(0.000)		F-statistic (Significance level)	(0.000)		Statistic F (Significance level)
182.265			76.956		
0.661		(Coefficient of Determination)	0.422		(Coefficient of Determination)
2.045		Durmian Statistic Watson	1.835		Durmian Statistic Watson
Significance Level	Regression Coefficient	Initial and Identified Independent Variables in the Model	Significance Level	Regression Coefficient	Initial and Identified Independent Variables in the Model
0.000	0.470	Earnings Ratio (EAR)	0.000	0.112	Book Value Per Share (BVPS)
0.000	0.188	Unconditional Earnings Conservatism (CON_GIVO)	0.000	0.116	Earnings Per Share (EPS)
0.000	0.001	Earnings Reaction Coefficient (REAC_COEF)	0.000	0.203	Operating Cash Flow (CFOPD)
0.000	0.300	Earnings Classification (ECS)	0.000	0.122/0.6	Unconditional Earnings Conservatism (CON_GIVO)
0.000	0.112	Earnings Timeliness (TIME_E)	0.000	0.107	Earnings Response Coefficient (REAC_COEF)
0.000	0.268	Earnings Predictability (PRED)	0.000	0.39/0.60	Earnings Timeliness (TIME_E)
0.000	0.444	Correlation between Accruals and Operating Cash Flow (CORRL_TA_CF)	0.000	0.000	Discretionary Accrual Management, Jones Adjusted Model (EM_ADJJO)
0.000	0.417	Discretionary Accrual Management, Kothari Model (EM_KOT)			
0.000	0.327	Earnings Variability (CHANGEABLE)	0.000	0.606/0.692	Fixed Value
0.000	0.203	Fixed Value			

Given that the fixed-time effects model is used by default to test research models, in this regard, the F-limer test is used first to determine whether the panel (combined) or pooled method should be used. Also, given that the significance level of the F-limer statistic is less than the acceptable error level (5 percent), the panel model is preferable to the pooled model. Therefore, in order to confirm the use of the fixed-time effects model, the fixed-effects model must be tested against the random effects model. For this purpose, the Hausman test is used. Since the significance level of the Hausman statistic is less than the acceptable error level (5 percent), the fixed-effects regression method is preferable to the random-effects regression method. In the following, based on the results of the F-statistics of the research models, the significance level of this test is below 5 percent. Therefore, the regression has explanatory power. The coefficient of determination of the models also indicates that 42.2 and 66.1 percent of the changes in the dependent variables (stock price and return) are explained by the variables entered in the

model, respectively. Also, considering that the value of the Durbin Watson statistic of the model is between 1.5 and 2.5 (1.835, 2.045), it can be said that the problem of autocorrelation of the residuals does not exist in the model. One of the important points in achieving the above models is that management based on discretionary accruals is one of the variables that has been approved by the academic elite for classification (in the form of profit selectivity). In this regard, according to the modeling results, for the first model (with the dependent variable of price), the mentioned variable has been finally approved based on the "modified Jones model" and for the second model (with the dependent variable of return) based on the "Cothari model". Considering that it was claimed in the second question, an attempt is made to present a value measurement model of accounting information based on the theory of Earnings Selectivity and Valuation. Therefore, according to the results in Table (10), the models for measuring the value (relevance) of

accounting information with the dependent variables of stock price and return are presented as follows.

First model:

$$P_{it} = \beta_0 + \beta_1 BVPS_{it} + \beta_2 EPS_{it} + \beta_3 CFOPD_{it} - \beta_4 CON_GIVO_{it} + \beta_5 REAC_COF_{it} + \beta_6 TIME_E_{it} - \beta_7 EM_ADJJO_{it} + \varepsilon_{it}$$

The second model:

$$R_{it} = \beta_0 + \beta_1 EAR_{it} - \beta_2 CON_GIVO_{it} + \beta_3 REAC_COF_{it} - \beta_4 ECS_{it} + \beta_5 TIME_E_{it} + \beta_6 PRED_{it} + \beta_7 CORRL_TA_Cf_{it} - \beta_8 EM_kot_{it} - \beta_9 CHANGEABLE_{it} + \varepsilon_{it}$$

It should be noted that in both models above, the basis for measuring the "value (relevance) of accounting information" is based on R^2 during the period $t-5$ to t , as in the initial models (Feltham and Olson, 1995; Susanto and Wijaya, 2022). Therefore, the higher the R^2 value obtained (per year-company), the higher the value of accounting information in that year and for that company is desirable, and vice versa.

Conclusion and Suggestions

The main objective of this research is to "achieve a model of accounting information value relationship based on Earnings Selectivity and Valuation". For this purpose, it was first used to determine the variables (which are based on accounting profit) that affect the value relationship of accounting information from the perspective of fundamental analysts in the market and capital, and then it was used to categorize and identify variables related to "Earnings Selectivity and Valuation" from the perspective of academic experts. At this stage, after obtaining the variables related to Earnings Selectivity and Valuation, optimal and native modeling was carried out using the tests available in stepwise regression.

In general, several studies have concluded that accounting information contained in financial statements is able to explain the trend of changes in stock prices and returns. In this regard, the variables identified in this study are no exception. This study has attempted to provide a model for identifying the value of accounting information in order to increase the value content (relevance) of accounting information "using valuation theory and Earnings selectivity". The results of the research indicate that out of the 28 variables surveyed by fundamental analysts, only 23 were necessary, and out of these 23 variables, only 15 variables were approved and categorized by the

academic elite in line with "Earnings Selectivity and Valuation." The results of the optimal models show that in the first model (with the dependent variable of price), 4 variables and in the second model (with the dependent variable of return) 8 variables were added compared to the initial model, which is followed by first analyzing the effects of the initial variables and in the next step, examining the effects of the 8 added variables (compared to the initial model) on The dependent variables of stock price and return are discussed. In line with the research results, given that the book value of stocks reflects the historical cost on the balance sheet, in countries with inflationary economies, this variable does not indicate the return and market price of the company's stock.

Therefore, if this variable always explains the market value of the company by taking measures (including revaluation of assets), it will lead to an increase in information content. In addition, given that the earnings per share ratio is calculated by dividing the profit by the number of shares issued by the company, it is one of the financial statistics that is generally of interest to investors and financial analysts and is often used to assess profitability and risk related to profit, as well as to judge the forecast of stock prices and returns. On the other hand, the net profit ratio or return on assets rate is also one of the ratios that shows the ability of companies to create added value using existing resources, so this variable is also one of the variables that is used in investors' decisions to rank securities. Finally, among the variables included in the initial models, operating cash flow is also a financial measure that shows the amount of cash generated or consumed (in the business) by the main operations in a specific period. In general, an increase in operating cash flow is the result of the company's income-generating activities. Accordingly, an increase in the

values of this variable also leads to an increase in the value content (relevance) of accounting information for investors. The results of the findings related to the role of the initial variables are consistent with the theoretical foundations mentioned in the research of Sibel (2013), Cronell et al. (2017), Susanto and Vijaya (2022), Etemadi and Babaei (2018), and Dastgir and Rastegar (2011). Regarding the variables of predictability, response coefficient, and timeliness of earnings, it can be said that since the relationship between accounting figures and stock value or returns can be examined in different time horizons, the value of the business unit is equal to the present value of future cash flows or profits. In this regard, the aforementioned qualitative indicators have the ability to explain the value or return of stocks if they are presented correctly and qualitatively so that investors can predict the future value of the company with those variables. Also, the stability and non-variability of profits are also indicators that help investors in evaluating the future profits of the company, so investors should pay more attention to the stable part of profits than to the unstable part of profits in estimating and analyzing the future status of the company. The results of the findings related to the role of variables related to the theory of profit valuation, with the results and theoretical foundations of the reference The results of the research by Scheiman and Gunter (2013), Coronel et al. (2017), Lalwaniya and Chakraborty (2024), Bayat et al. (2015), Etemadi and Babaei (2018), and Hashemi Bahrman and Bani Mahd (2015) are consistent. On the other hand, regarding the conservatism index, it can be said that although this variable has negative effects on stock value or returns based on the final model, accounting standards developers consider conservatism as a tool for reducing agency costs (related to information asymmetry). Conservatism, through rapid identification of bad economic news compared to good economic news, leads to limiting managers in opportunistic behaviors, increasing the quality of accounting information disclosure, changing the transaction behavior of uninformed investors, and

reducing uncertainty about the value of the company. On the other hand, in relation to earnings management items (including management based on discretionary accruals, profit classification and correlation between accruals and operating cash flow), it can be said that managers use their authority to

opportunisticly manage earnings to make the business unit's situation appear favorable, so in some cases, reported earnings may be an unreliable measure for examining the business unit's performance. In relation to the aforementioned concepts, management tries to manipulate the amount and manner of presenting earnings. This, in turn, increases information asymmetry and the problem of incorrect selection and leads to the company's stock market value and return being affected. In this regard, limiting managers' use of earnings management tools leads to an improvement in the qualitative level of information disclosure and an increase in the value content (relevance) of accounting information. The findings related to the role of variables related to the theory of earnings selectivity are consistent with the results and theoretical foundations mentioned in the research of Venter et al. (2011), Susanto and Vijaya (2022), Lalwaniya and Chakraborty (2024), Etemadi and Babaei (2018), and Izadinia and Mohammadi (2014). In relation to the research results, it is recommended that company managers pay special attention to items related to accounting earnings (including valuation and earnings selectivity) because these items can better demonstrate to investors the company's ability to earn profits and optimally utilize the resources available in the company's main operations. It is recommended to policymakers and supervisory institutions, including the Tehran Stock Exchange, to use the known segments and components in the identified models to rank the value levels of accounting information of companies active in the capital market, because this can have informational content for the capital market, and in the absence of high-quality disclosure of known items related to valuation theory and profit selectivity, the tools To force companies to use the law. It is also suggested to the developers of requirements and standards, such as the Audit Organization, based on the results of this research, to develop relevant standards to increase the value content (relevance) of accounting information for companies "using the theory of Earnings Selectivity and Valuation" and try to move companies towards the expected and desired situation. Finally, for future research, it is suggested that a similar study be conducted over a longer period by identifying more financial items such as company size, industry type, economic indicators (exchange rate and inflation), etc.

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