



Information content of accounting and Capital Market Development

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Submit: 15/05/2021 – Accept: 14/07/2021

ABSTRACT

An efficient capital market requires companies to provide quality financial information. It is also expected that with the development of the capital market, market participants pay more attention to the Information content of accounting. Therefore, the present study seeks to answer the question to what extent the Information content of accounting and capital market development are affected by each other? 207 companies were selected in the period of 2013-2019 using fixed and random effects method as well as generalized torque estimator (GMM) and with the help of Stata software, the research hypotheses have been tested. To measure market development, three variables of stock market size, activity volume and turnover ratio were used and to calculate the Information content of accounting the model of Kevin et al. [29] has been used. The results of examining the hypotheses showed that both the variables of capital market development and the Information content of accounting have a positive effect on each other. Also, the development of the market in the past one and two periods has had a significant and positive effect on the development of the capital market in the current period, while the Information content of accounting of the past one and two periods do not have a significant impact on the content of current accounting information.

Keywords:

Information content of accounting, capital market development, generalized torques

1. Introduction

Financial information released by companies is a key source of capital market participants' decision-making. Because this information reduces information asymmetries between managers, investors, legislators and other stakeholders; Therefore, transparency in financial reporting enables investors, creditors and contributors in the market to assess the company's financial condition. In other words, transparent financial information can help companies achieve good investment opportunities and improve the supervisory role of managers by reducing information asymmetry. Achieving this goal requires that the information has the necessary quality and transparency [1]. Financial information plays an important role in facilitating the flow of financial resources into companies and is considered one of the most important decision-making criteria of financial providers [2]; however, the important point in this regard is the transparency of financial information published by companies. On the other hand, there is a kind of confusion and ambiguity in the field of stock market information efficiency about who knows and who makes decisions. The managers of the firm who make the investment decision do not have a formal role in the stock market as involved and knowledgeable individuals, but because the firm and its shareholders are sensitive to the value of its stock, the managers tend to Inform the stock market about the progress of the firm so that the above market is informed about their success [2]. In the absence of complete transparency in financial reporting, managers are given the opportunity to hide negative information within the company in order to maintain their jobs and professional credibility. Hence, this negative information accumulates within the company. When the mass of accumulated negative information reaches its peak, it becomes impossible and costly to maintain it for a longer period of time. As a result, a mass of negative information entering the market at once leads to a lack of market development [3]. Financial markets affect economic growth through several channels. First, the presence of financial intermediaries distributes the risk. Despite the financial market, the invested funds are excluded from long-term investment projects, which leads to a slowdown in economic growth. The capital market, by raising its funds and presenting them to investors, enables long-term investment. Overall, the liquidity risk and

productivity risk faced by micro-investors are varied. The capital market allows investors to participate in a large number of firms, and by diversifying the facilities of financial intermediaries, encourages the economy to invest in high-risk projects, which in turn stimulates economic growth. Second, financial intermediaries improve the allocation of resources between different projects by obtaining information. The presence of asymmetric information requires research. The firm may have projects to implement but do not provide investors with useful information about its implementation requirements; Therefore, obtaining information will be costly for investors. The capital market provides the conditions for investors to obtain the information needed to invest. Third, the capital market improves corporate control. The stock market provides mutual benefits between managers and business owners. Fourth, the capital market creates appropriate savings mobility. The capital market collects micro-capital and invests it in appropriate locations. Fifth, it increases the financial market specialization. Specialization reduces transaction costs and increases economic growth [4]. Considering that the role of information in society has become more important; Therefore, information providers, especially accountants, must be providers of advanced and quality information so that their services have buyers at higher prices, otherwise they will not have a place in the future. The existence of an advanced financial system goes. Financial markets are considered the mastermind of the economic system and the main decision-making center, because in practice, an efficient financial system provides a potential incentive for economic agents to enter financial markets to accept risk and achieve a reasonable return on financing and investment. Today, an advanced financial system is recognized as a cornerstone of most economies around the world, and to a large extent this issue has attracted the attention of most economists. In general, the activities of advanced financial markets include a wide range of financial decisions that are made by economic policy makers through the adoption of various monetary and fiscal policies to improve the entire economic cycle [5]. Stock markets boost economic growth by providing regular information about companies. Proper and easy dissemination of information affecting the prices and dividends of accepted companies raises the level of research and development, which in turn increases economic

growth. In other words, obtaining information about companies will be costly for investors if there is asymmetric information. The stock market provides the conditions for investors to obtain the information needed to make an investment [6]. Levin and Thorsten [7] put forward several views in this context: The first view states that the capital market improves long-term economic growth. In the second view, market liquidity plays an important role in economic growth. Liquidity in the capital market can provide good sources for investment and lead to the creation of permanent assets through the issuance of shares. In the second view, the long-run relationship between the capital market and economic growth is questionable. In one view, market development leads to speed and facilitation of its further development in the coming years, and in another view, the assumption of further development is not to the current development situation but to macroeconomic factors and the development of other parallel markets. It depends more on the state of the international economy. Of course, whether the capital market under study is in a developed country or a developing country and the type of national economy and political relations are theoretically the main and effective factors in the future development of the capital market.

So far, this issue has not been studied in the Iranian capital market, so both methods are examined in order to achieve a more comprehensive view. Regarding the Information content of accounting, the same view can be taken that increasing the Information content of accounting a group of companies will cause other companies to increase the quality of their information content in the long run due to increasing expectations of capital market participants. But on the other hand, the Information content of accounting can have a different quality of the information in each financial period and there is no reason for its quality to improve in each period and it is even possible that its quality will decrease [8]. Therefore, in this research, we examine both static and dynamic methods, so that in the end, by comparing the results, we can obtain a more complete analysis of companies' behavior. Finally, based on the research findings, conclusions and suggestions will be made.

2. Theoretical foundations and research background

2.1. Information content of accounting and capital market development

Transparency plays an important role in improving and increasing the efficiency of market information. Fluctuations in risk associated with decision-making and market participants' confidence in the flow of company-related information can be improved by increasing the transparency of market information [9]. Even if not all market participants are aware of the transparency of the information provided, creating a general atmosphere of trust in the market based on the transparency of the information provided and passing them through formal filters that provide relative confidence in their transparency will increase and improve capital market efficiency. The results of many studies have shown that if all conditions are the same, investors will prefer a stock that has higher liquidity and the information transparency has the capacity to improve liquidity. Also, many researchers have come to the conclusion that accounting figures and information can affect the value of the company and its cost of capital by affecting various aspects of liquidity [10].

2.2. Research background

Adimo and Vinfered [11] have examined the relationship between stock price information content and dividend changes. The results of this study show that private information on stock prices has been an important determinant of dividend policy and dividend changes. Ben-Nasr and Abdullah [12] examined the relationship between stock price information content and labor investment efficiency. The results of their research showed that stock information content has a significant positive relationship with investment efficiency. Ayadi et al. [13] in a study examined the relationship between financial market development and economic growth in Mediterranean countries. The results of model estimation showed that bank credits granted to the private sector and bank deposits have negative effects on the economic growth of Mediterranean countries. Stock market size and stock liquidity, especially in small enterprises, have a positive effect on the economic growth of Mediterranean countries. Olayinka et al. [14] examined the importance of the value of accounting

information content using balanced data for pre-IFRS and post-IFRS. And improved the relationship between earnings value, cash flow, book value and net income as a result of IFRS approval. Omokhudu and Ibadin [15] examined the value relationship of accounting information content and reported that income, dividends and cash flow were statistically significantly related to share price. Mironiuc et al. [16] also showed that the information content of Romanian accounting variables has increased since the adoption of international accounting standards in 2011. Zuo [17] in examining the effect of stock price information content on the amount of future disclosure of information shows that stock price information content has an impact on the company's future disclosure process. Givoly et al. [18], studying the importance of the value of accounting information, firmly stated that the view of the importance of the Information content of accounting from the perspective of shareholders is not the same as that of debt holders. They stated that changes in the Information content of accounting should be considered over time based on the needs of debt holders. Because the content of information to debt holders has increased over time. They attributed the increased content reported to debt holders to changes in credit risk and other reporting factors. Ahmadi and Bouri [19] in studying the content of financial information showed that income and book value are significantly related to the value of the company as well as the value of the company's shares. Mofidabadi et al. [5] designed a mixed model of financial decisions for the development of Iranian financial markets (Case study: Iranian capital market). The results showed that each of the mixes of financial decisions of the government, companies and households has a significant impact on the development of the Iranian capital market. As a result, it will increase participation in Iran's financial markets. Malek Najad et al. [20] examined the role of financial market development in the form of money market and capital market on the economic growth of selected developing countries. The results show a significant and positive effect of the capital market on the economic growth of developing countries and the effect of the money market on the economic growth of these countries is not significant. In this study, the effects of inflation and government spending on economic growth were tested and examined. Based on

the estimated results, it can be said that inflation and government spending have had a significant and negative effect on economic growth in these countries.

2.3. Research Hypotheses

Hypothesis 1: The Information content of accounting has a significant impact on the development of the capital market in the long run and based on static models.

Hypothesis 2: The Information content of accounting has a significant impact on capital market development in the long run and based on dynamic models.

Hypothesis 3: Capital market development has a significant impact on the Information content of accounting in the long run and based on static models.

Hypothesis 4: Capital market development has a significant impact on the Information content of accounting in the long run and based on dynamic models.

2.4. Research variables and how to measure research variables

The following model is used to test the research hypothesis:

$$\begin{aligned} SMS_{i,t} = & \beta_0 + \beta_1 RET_{i,t} + \beta_2 INFLATION_{i,t} \\ & + \beta_3 EGR_{i,t} + \beta_4 SIZE_{i,t} \\ & + \beta_5 LIQ_{i,t} + \beta_6 PRO_{i,t} + \beta_7 LEV_{i,t} \\ & + \beta_8 INS_{i,t} + \beta_9 IND_{i,t} + \beta_{10} MB_{i,t} \\ & + \varepsilon_{i,t} \end{aligned}$$

$$\begin{aligned} MA_{i,t} = & \beta_0 + \beta_1 RET_{i,t} + \beta_2 INFLATION_{i,t} \\ & + \beta_3 EGR_{i,t} + \beta_4 SIZE_{i,t} \\ & + \beta_5 LIQ_{i,t} + \beta_6 PRO_{i,t} + \beta_7 LEV_{i,t} \\ & + \beta_8 INS_{i,t} + \beta_9 IND_{i,t} + \beta_{10} MB_{i,t} \\ & + \varepsilon_{i,t} \end{aligned}$$

$$\begin{aligned} TR_{i,t} = & \beta_0 + \beta_1 RET_{i,t} + \beta_2 INFLATION_{i,t} + \beta_3 EGR_{i,t} \\ & + \beta_4 SIZE_{i,t} + \beta_5 LIQ_{i,t} \\ & + \beta_6 PRO_{i,t} + \beta_7 LEV_{i,t} + \beta_8 INS_{i,t} \\ & + \beta_9 IND_{i,t} + \beta_{10} MB_{i,t} + \varepsilon_{i,t} \end{aligned}$$

Independent variable: Content of financial statement information (Ret) according to research by Kevin et al. [29]:

$$Ret_{it} = \beta_1 + \beta_2 earn - lmv_{it} + \beta_3 dearn - lmv_{it} + \beta_4 mv - ps_{it} + \beta_5 asset - ps_{it} + \beta_6 liab - ps_{it} + \beta_7 mv - lbv_{it} + \beta_8 bv - lbv_{it} + \beta_9 earn - lbv_{it} + \beta_{10} accr - lmv_{it} + \beta_{11} dca_{it} + \beta_{12} dcash_{it} + \beta_{13} dcl_{it} + \beta_{14} dstd_{it} + \beta_{15} dtp_{it} + \beta_{16} dep_{it} + \beta_{17} cfo - lmv_{it} + \varepsilon_{it}$$

RET is the adjusted return on shares after the end of the fiscal year, which can be calculated as follows:

$$R_{it} = (pdf_{e_{it}} + eps_{it} + adp_{it} + bps_{it}) / fp_{it}$$

R stock return rate, first period and end price difference (pdf_e), cash dividend (eps), pre-emptive rights (adp), bonus stock benefits (bps), share price first period (fp) EARN_LMV. Earnings before contingencies, indicated by the initial stock market value in year t. DEARN_LMV Change in earnings before contingencies, as shown by the stock market value at the beginning of year t. MV_PS market value per share at the end of year t; ASSETS_PS value of each share of assets at the end of year t; LIAB_PS Value per share of book liabilities at the end of year t; MV_LBV The stock market value at the end of the year is determined by the book value of the equity at the beginning of year t. BV_LBV value of equity at the end of fiscal year t; EARN_LBV Unexpected earnings, as determined by the book value of equity at the beginning of year t; ACCR_LMV Accruals assigned at the beginning of year t of the stock market value. Where DCA represents a change in current assets, DCash is the change in cash, DCL is the change in current debt, DSTD is the change in current debt, DTP is the change in tax payable and DEP is the cost of depreciation. And CFO_LMV is cash from operating activities determined by the stock market value at the beginning of the year. The absolute amount of waste associated with the model reflects the content of the financial information.

Dependent variable: capital market development. To measure the development of the capital market, various indicators are used, which are defined in the following definition of indicators:

Stock market size (SMS): has been measured as the ratio of the value of issued shares to GDP [21,22].

Volume of activity in the stock market (MA): is measured as the ratio of the value of stocks traded in the stock market to GDP [21,22].

Turnover Ratio (TR): This rate is equal to the total value of the shares traded in the stock market liquidity (current market value). The higher the index, the lower the transaction cost. In fact, the turnover ratio shows the ratio of exchange to the size of the stock market [22].

Control variables

Inflation Rate (INFLATION): is equal to the country's inflation rate in the current period [21,22].

Economic Growth Rate (EGR): is equal to the ratio of changes in GDP growth rate Compared to the first period to the rate of GDP in the current period [21,22].

Company Size (SIZE): is equal to the natural logarithm of the book value of total assets at the end of the year Financial.

Company Liquidity (LIQ): equal to the ratio of total current assets to total current liabilities of the company at the end of the financial year.

Company Profitability (PRO): Equivalent to the ratio of net profit to total assets of the company at the end of the fiscal year.

Company Leverage (LEV): Equivalent to the ratio of total liabilities to total balance sheet assets of the company at the end of the fiscal year.

Board Independence (IND): Equivalent to the ratio of non-executive directors to total board members at the end of the fiscal year.

Market value to Book (MB): equal to the ratio of stock market value to book value of the company's equity at the end of the fiscal year.

3. Research method

In terms of method, this research is in the category of descriptive research and terms of purpose is in the category of applied research and its design is using the post-event approach. Regarding the link between the Information content of accounting and capital market development, the assumption of market efficiency has been accepted. In this research, the generalized torque (GMM) method has been used to find the relationships between financial information content and capital market development. In this study, the period 2019-2013 has been considered for review. The active companies listed on the Tehran Stock Exchange constitute the statistical population of the present study. Due to some inconsistencies between members

of the community, the following conditions were considered for selecting the research sample and the sample was selected in the following purposeful way: The sample should not include companies such as financiers, investment and insurance. Sample companies have a fiscal year ending at the end of the calendar year (March 20). The data of the research variables are available for the target companies. The company's shares have been traded during the years of the research period and the symbol has not stopped for more than 6 months.

Fixed or random effects method is used to study long-term effects based on static models. Finally, the GMM method is used to investigate the long-term effects based on dynamic models. In the following, the contents in this regard are presented. The tests used are described separately. Chow test: It is used to estimate the composite data model in panel or combined. Hausman test: used to estimate the method of fixed or random effects and if the data are panel, Fisher test: used to fit the regression model and if the calculated significance level is less than 0.05, then the regression model It is statistically significant. Durbin-Watson

test: used to check the independence of the error components of the model and if the value obtained for this test is between 1.5 to 2.5, the assumption of error independence is accepted. Used to examine the determinants of independent and control variables and the higher the value obtained for this test, the higher the independent and control variables have a determining power.

4. Research Findings

The results of the reliability of the research variables at the level of companies are presented in Table 1. Levin, Lin and Chu tests were used to determine the reliability of research variables. The results of this test indicate that the variables were at a stable level during the research period because the probability value for the test was less than 5%.

As can be seen in Table 2, the results of the Jarque-Bera Test statistic indicate the normality of dependent and independent variables during the research period.

Table 1. Stationarity test of research variables

Levin, Lin & Chu Probability of statistics	Levin, Lin & Chu Statistics value	observations	Symbol	Variable
**0.000	-26.287	1242	TR	Turnover ratio
**0.000	-15.064	1242	MA	Activity volume
**0.000	-38.022	1242	SMS	Stock market size
**0.000	-2.128	1242	RET	Information content of accounting
**0.000	-10.490	1242	SIZE	size of the company
**0.000	-24.412	1242	LIQ	Liquidity
**0.000	-14.199	1242	PRO	Profitability
**0.000	-2969.37	1242	LEv	Financial Leverage
**0.000	-0.570	1242	INS	Institutional ownership
**0.000	-0.825	1242	IND	Independence of the board
**0.000	-30.432	1242	MB	Market value to the office
**0.000	-32.602	1242	EGR	Economic Growth Rate
**0.000	-29.796	1242	INFLATION	Inflation

** Significance at 95% confidence level, * Significance at 90% confidence level (because all are significant at 95% level)

Table 2. Data normality test

Probability of statistics	Statistics value	observations	symbol	Variable
**0.000	11372.12	1242	TR	Turnover ratio
**0.000	1739.174	1242	MA	Activity volume
**0.000	105.853	1242	SMS	Stock market size
**0.000	981.626	1242	RET	Information content of accounting
**0.000	160.972	1242	SIZE	size of the company

Probability of statistics	Statistics value	observations	symbol	Variable
**0.000	3152.916	1242	LIQ	Liquidity
**0.000	14982.30	1242	PRO	Profitability
**0.000	69896.13	1242	LEv	Financial Leverage
**0.000	517.283	1242	INS	Institutional ownership
**0.000	74.399	1242	IND	Independence of the board
**0.000	121.782	1242	MB	Market value to the office
**0.000	8919.967	1242	EGR	Economic Growth Rate
**0.000	120.271	1242	INFLATION	Inflation

** Significance at 95% confidence level, * Significance at 90% confidence level because everyone is significant at 95% level

4.1. Determining the type of test and method of analysis

Chow test and F-Limer statistic were used to determine the method of using composite data and to determine whether they are homogeneous or heterogeneous. The statistical hypotheses of this test are as follows:

Hypothesis zero: Integrated data

Hypothesis one: Panel data

If the results of this test are based on the use of data as panel data, one of the fixed or random effects models should be used to estimate the research model. To choose one of these two models, the Hausman test must be performed.

Hypothesis zero: Random effects

Hypothesis one: Fixed effects

Therefore, if the probability value of the statistical level is 5%, the use of integrated data method is excluded. Otherwise, if the significance level is more than 5%, it is appropriate to use the integrated data method, if the combined data model is not selected against the combined data.

Table 3. Chow test results to determine whether the sections are homogeneous or heterogeneous

Chow test result	Probability of statistics F	F	Pattern under review
Integrated data is appropriate	0.905	0.357	The first model
Integrated data is appropriate	0.901	0.365	The second model
Integrated data is appropriate	0.902	0.363	The third model
Integrated data is appropriate	0.902	0.362	The fourth model

The result of Chow test shows that the probability obtained for F statistic in the research model is more than 5%. Therefore, to test these hypotheses, the data are used in all models in combination.

4.2. Test results of the first and second hypotheses

The regression model of the combined data for the static model related to the first hypothesis is as follows:

$$SMS_{it} = \alpha_1 + \beta_1 Ret_{it} + \beta_3 Control\ variabls_{it} + \varepsilon_{it}$$

$$TR_{it} = \alpha_1 + \beta_1 Ret_{it} + \beta_3 Control\ variabls_{it} + \varepsilon_{it}$$

$$MA_{it} = \alpha_1 + \beta_1 Ret_{it} + \beta_3 Control\ variabls_{it} + \varepsilon_{it}$$

The regression model (GMM) for the dynamic model related to the second hypothesis is as follows:

$$SMS_{it} = \alpha_1 + \beta_1 SMS_{it-1} + \gamma_1 SMS_{it-1.t-2} + \beta_2 Ret_{it} + \beta_3 Control\ variabls_{it} + \varepsilon_{it}$$

$$MA_{it} = \alpha_1 + \beta_1 MA_{it-1} + \gamma_1 MA_{it-1.t-2} + \beta_2 RET_{it} + \beta_3 Control\ variabls_{it} + \varepsilon_{it}$$

$$TR_{it} = \alpha_1 + \beta_1 TR_{it-1} + \gamma_1 TR_{it-1.t-2} + \beta_2 Ret_{it} + \beta_3 Control\ variabls_{it} + \varepsilon_{it}$$

The first and second interruptions of market development are also included in the model.

Table 4. Test results of the first and second hypotheses

Capital market development based on the dependent variable of market size(SMS)					
STATIC MODEL (Fixed / Random Effects Model)		DYNAMIC MODEL (SYS-GMM)		symbol	Variable
t Statistics	Coefficient	Coefficient	z Statistics		
-2.667	-0.933	0.564	1.429	C	Constant
		0.556*	0.611	Smst-1	Development of the previous year
		1.053*	0.194	Smst-2	Developed two years ago
1.526	1.457*	0.753*	0.715	RET	Information content of accounting
1,102	0.215	-0.219	-0.017	SIZE	size of the company
0.708	* 0.771	0.044 *	0.027	LIQ	Liquidity
2.306	0.308 *	.554*	1.413	PRO	Profitability
-1.458	-0.714 *	-2.765*	-0.895	Lev	Financial Leverage
-0.373	-0.024	-0.698	-0.043	INS	Institutional ownership
0.343	0.003	0.743	0.250	IND	Independence of the board
7.394	0.459	-0.017	-0.0003	MB	Market value to the office
-0.293	-0.001	-0.273	-0.012	EGR	Economic Growth Rate
0.826	0.022	1.712	0.613	INFLATION	Inflation
0.163		R MSE	17.191	Sargan Statistics	
0.617		The coefficient of determination	0.513	Sargan Statistical significance	
		Durbin-Watson	1300.31	Wald Statistics	
19.165		Statistics F	0.000	Wald significance level	
0.000 *		Statistical significance test F			
Capital market development based on the dependent variable of activity volume (MAT)					
0.077	2.288	0.081	2.115	C	Constant
		-0.015*	-0.269	mat-1	Development of the previous year
		0.033*	1.345	mat-2	Developed two years ago
0.086*	3.219*	0.0208*	2.151 *	RET	Information content of accounting
0.012	0.801	-0.0008	-0.240	SIZE	size of the company
0.013	1.607*	0.022*	0.981	LIQ	Liquidity
-0.095	-2.964*	0.002*	0.463	PRO	Profitability
-0.0008	-0.387*	-0.015*	-0.905	Lev	Financial Leverage
-0.005	-0.376	-0.014	-0.197	INS	Institutional ownership
0.0001	0.032*	0.012*	0.712	IND	Independence of the board
-0.006	-0.314	-0.035	-0.377	MB	Market value to the office
0.002	0.509*	0.0008*	0.232	EGR	Economic Growth Rate
-0.013	-0.740 *	0.023*	1.042	INFLATION	Inflation
0.564		R MSE	11.828	Sargan Statistics	
0.509		The coefficient of determination	0.0.000	Sargan Statistical significance	
		Durbin-Watson	34.561	Wald Statistics	
17.89		Statistics F	0.000	Wald significance level	
0.000 *		Statistical significance test F			
Capital market development based on the dependent variable turnover ratio (TR)					
0.012	0.801	0.086	3.219	C	Constant

Capital market development based on the dependent variable of market size(SMS)					
STATIC MODEL (Fixed / Random Effects Model)		DYNAMIC MODEL (SYS-GMM)		symbol	Variable
<i>t</i> Statistics	Coefficient	Coefficient	<i>z</i> Statistics		
		0.013 *	1.607	trt-1	Development of the previous year
		0.095	2.964	trt-2	Developed two years ago
0.077	1.721	0.0008	0.387 *	RET	Information content of accounting
-0.017	-1.146	0.005	0.376	SIZE	size of the company
-0.011	-0.566	0.0001 *	0.032	LIQ	Liquidity
0.158	2.404 *	0.006	0.314	PRO	Profitability
-0.0007	-0.189 *	-0.007*	-0.955	Lev	Financial Leverage
0.022	0.850	-0.006	-0.142	INS	Institutional ownership
0.003	0.624	-0.0006	-0.168	IND	Independence of the board
-0.015	-0.837	0.024	0.807	MB	Market value to the office
0.074	1.231	0.002	0.455	EGR	Economic Growth Rate
-0.010	-0.326	-0.010	-0.507	INFLATION	Inflation
0.172		R MSE	23.563	Sargan Statistics	
0.637		The coefficient of determination	0.541	Sargan Statistical significance	
		Durbin-Watson	13.093	Wald Statistics	
26.258		Statistics F	0.000	Wald significance level	
0.000 *		Statistical significance test F			

Note that ** and * are statistically significant at the levels of 0.05 and 0.01, respectively.

Considering the results and positive effects of accounting information content on capital market development in both static and dynamic modes, it can be said that accounting information content has significant long-term effects on capital market development. Transparency in the financial reporting of investors, creditors and participants enables the market to assess the financial condition of the company. Also noteworthy is the significant impact of the past year and two years of market development on the development of the current year. Theoretical literature shows that financial information published by companies is the main source of decision making for capital market participants; Because this information reduces information asymmetries between managers, investors, legislators and other stakeholders; But what matters is that it is not just the quantity of information that is disclosed; But the quality and transparency of information published by companies is more important; In other words, in such a situation, corporate transparency plays an important role. Transparent financial information is able to reduce the information asymmetry, lead companies to achieve

good investment opportunities and improve the supervisory role of managers [11]. Therefore, the results of the present study are consistent with the results of the research of Mohammadi et al. [11], Adimo and Vinfered [11], Mironiuc et al. [16], Pradhan et al. [23]. In addition, according to the results of the majority of models, the two variables of profitability and liquidity have had a positive and significant effect on market development, while financial leverage plays a negative and significant role in the development of Iran's capital market.

4.3. Test results of the third and fourth hypotheses:

The regression model of the integrated data for the static model related to the third hypothesis is as follows:

$$Ret_{it} = \alpha_1 + \beta_1 Sms_{it} + \beta_3 Control\ variables_{it} + \varepsilon_{it}$$

$$Ret_{it} = \alpha_1 + \beta_1 MA_{it} + \beta_3 Control\ variables_{it} + \varepsilon_{it}$$

$$Ret_{it} = \alpha_1 + \beta_1 TR_{it} + \beta_3 Control\ variables_{it} + \varepsilon_{it}$$

The regression model (GMM) for the dynamic model related to the fourth hypothesis is as follows:

$$Ret_{it} = \alpha_1 + \beta_1 Ret_{it-1} + \gamma_1 Ret_{it-1,t-2} + \beta_2 SMS_{it} + \beta_3 Control\ variables_{it} + \varepsilon_{it}$$

$$Ret_{it} = \alpha_1 + \beta_1 Ret_{it-1} + \gamma_1 Ret_{it-1,t-2} + \beta_2 MA_{it} + \beta_3 Control\ variables_{it} + \varepsilon_{it}$$

$$Ret_{it} = \alpha_1 + \beta_1 Ret_{it-1} + \gamma_1 Ret_{it-1,t-2} + \beta_2 TR_{it} + \beta_3 Control\ variables_{it} + \varepsilon_{it}$$

Also, the first and second breaks of accounting information content are included in the model.

Table 5. Test results of the third and fourth hypotheses

Accounting Information Content (RET)					
In terms of turnover ratio as an independent variable of market development (TR)					
STATIC MODEL Fixed / Random Effects Model		DYNAMIC MODEL (SYS-GMM)		Symbol	Variable
Statistics t	Coefficient	Coefficient	Statistics z		
0.017	0.225	3.834	2.693	2.693	2.693
		0.218	2.089	2.089	2.089
		0.145*	1.830	1.830	1.830
0.853	3.506*	0.004 *	1.013	1.013	1.013
2.044	6.858*	0.001*	1.387	1.387	1.387
5.182	2.583*	0.105*	2.090	2.090	2.090
-0.032	-0.709	-0.066	-0.949	0.949-	0.949-
0.006 *	2.170	0.345*	2.967	2.967	2.967
-0.040	-0.329	-0.209	-3.472	-3.472	-3.472
0.202	3.265*	2.046*	3.019	3.019	3.019
2.176	2.911	5.717	2.395	2.395	2.395
0.861	3.543	0.0003	0.133	0.133	0.133
-2.036	-6.856	-0.0003*	-1.096	1.096-	1.096-
0.163		R MSE	17.191		17.191
0.521		The coefficient of determination	0.604		0.604
		Durbin-Watson	16,063		16,063
5.236		Statistics F	0.000		0.000
0.000		Statistical significance test F			2.693
Accounting Information Content (RET)					
In terms of market size as an independent variable of market development (SMS)					
0.018	1.048	0.002	0.145	C	Constant
		0.078	5.088	ret-1	Previous year content
		0.001	0.820	ret-2	Content two years ago
0.021	5.809*	0.0008*	0.335	Sms	Capital market development
0.002	2.042*	0.069*	2.374	SIZE	size of the company
0.001	0.455*	0.172*	8.048	LIQ	Liquidity
0.134	4.536	0.012	0.685	PRO	Profitability
0.053	1.394	0.076 *	4.949	Lev	Financial Leverage
0.0004	1.622*	0.0006*	0.491	INS	Institutional ownership
0.003	2.616	0.001	0.487	IND	Independence of the board
0.001	0.502*	0.063*	2.168	MB	Market value to the office
0.082	2.766*	0.105 *	1.312	EGR	Economic Growth Rate
-0.083	-1.400 *	-3.144 *	-1.721	INFLATION	Inflation
0.765		R MSE	13.127		Sargan Statistics

0.413		The coefficient of determination	0.000	Sargan Statistical significance	
		Durbin-Watson	51.614	Wald Statistics	
4.536		Statistics F	0.000	Wald significance level	
0.000 *		Statistical significance test F			
Accounting Information Content (RET)					
In terms of activity volume as an independent variable of market development (MAT)					
0.015	0.893	0.164	3.049	C	Constant
		0.105	0.521	ret-1	Previous year content
		0.003	0.798	ret-2	Content two years ago
0.002	0.636 *	0.021 *	2.259	Ma	Capital market development
0.021	2.242 *	3.42 *	0.352	SIZE	size of the company
3.21	0.356 *	0.047 *	1.927	LIQ	Liquidity
-0.048	-1.933	0.166	3.100	PRO	Profitability
0.083	2.473 *	0.109 *	0.777	Lev	Financial Leverage
-0.024	-0.373	0.003	0.784	INS	Institutional ownership
0.003	0.343 *	0.021 *	2.225	IND	Independence of the board
0.459	7.394	3.39	0.355	MB	Market value to the office
-0.001	-0.293	-0.048	-1.958	EGR	Economic Growth Rate
-0.022	-0.826 *	-0.167*	-3.076	INFLATION	Inflation
0.172		R MSE	23.563	Sargan Statistics	
0.214		The coefficient of determination	0.471	Sargan Statistical significance	
		Durbin-Watson	1,853	Wald Statistics	
26.194		Statistics F	0.000	Wald significance level	
0.000 *		Statistical significance test F			

Note that ** and * are statistically significant at the levels of 0.05 and 0.01, respectively.

In order to benefit from the results, it can be said that the development of the capital market has a positive effect on the Information content of accounting. This confirmation is confirmed in both static dynamics models. From the theoretical point of view of Fadaei-Nejad and Farahani [24], Arab Kish and Ranjbar [25], Adimo and Vinfered [11], Maio and Philip [30], Mohammad Shahbaz and Talat [26], Mironiuc et al. [16] Be. Because financial accounting information is the product of the company's accounting and reporting system that measures and discloses little information about the company's financial condition. Financial reporting, through the transparent disclosure of corporate financial information, can reduce information asymmetries, optimally allocate resources (making the right choice instead of making the wrong choice), and improve the performance of the company. Also, the quality of accounting information of previous periods (based on the first and second breaks) does not affect the quality of the content of current accounting

information, which indicates that capital market participants rely on companies in the past to provide appropriate Information content of accounting. The content of their accounting information may not be reliable in the present period. Also, in most research models, the results have a positive and significant effect on company size, liquidity, financial leverage and board independence on the quality of accounting information content produced. Also, with the increase of the inflation rate, which is a macroeconomic variable, the quality of accounting information decreases significantly.

5. Conclusions

In the capital market, information is one of the valuable and main resources and plays a very important role in integrating and making the market competitive. Also, lack of information increases the cost of exchanges and the inability of the market to

allocate resources optimally. According to the results of this study, the development of the Iranian capital market has a significant relationship with the Information content of accounting, which indicates that financial information providers rely more on improving the content of their accounting information for appropriate financing, which can be a strong point for the market. Capital considered. The macroeconomic variable of inflation rate in all models significantly affects the Information content of accounting and a higher inflation rate reduces the quality of the Information content of accounting produced [31]. According to the results of research, capital market development has a positive effect on the Information content of accounting, which means that the more developed the capital market, the more transparent the Information content of accounting and the higher the quality of the present research with the results of research, Adimo and Vinfered [11], Mironiuc et al. [16], Pradhan et al. [23] are consistent. The Information content of accounting provided by companies simultaneously has a positive effect on the development of the capital market in terms of size, the volume of activity and turnover ratio. This means that investors have reacted quickly to the increase in information transparency in the capital market, and this increase in investor confidence leads to more market entry, increased market liquidity and increased financing for companies, and thus increased market efficiency [27]. If an economy does not have efficient financial markets, there is always the risk that small capital can be transferred to unproductive investments as opposed to productive capital, leading to a waste of resources and reduced economic growth [28], which means simultaneous impact. The positive Information content of accounting confirms the development of the market. Therefore, the more transparent the dissemination of information in societies, the greater the possibility of making informed decisions by investors, and this leads to more growth and development of the capital market. The results of this study also showed that the development of the capital market in the current year is affected by the level of development in the previous one and two years, while the quality of information content in previous financial periods have no significant effect on the quality of accounting information in the current period. Also, the liquidity variable has a positive and significant effect on the development of the capital market as well as the

quality of accounting information, while according to the results of most models, financial leverage has a positive effect only on the Information content of accounting but significantly prevents market development. . Among the variables of corporate governance, the independence of the board of directors causes the production of better quality accounting information content. Larger companies also offer better quality accounting information. In this research, three variables have been used to measure market development and a computational model for the quality of accounting information content, which suggests that in future research, other proxies can be used for this purpose. It is also suggested to focus more on the effects of macroeconomic variables and corporate governance on the two main research variables.

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