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Research Paper

Investigating the Relationship between Political Uncertainty and Market Irregularities: With Emphasis on the Risky Information Environment

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ABSTRACT

Financial statements prepared by an entity in addition to accounting standards are affected by a variety of internal and external factors, one of the important and significant external factors is political uncertainty. Also, investors and managers are always faced with uncertainty in the information environment, which uncertainty can be due to factors such as the synchronization of stock returns, extraordinary fluctuations in stock returns, and the number of equations. The purpose of this study is to investigate the political uncertainty caused by the size of the firm under the influence of a risky information environment, the irregular behavior of accruals anomaly, and the anomaly behavior of the cost of normal stock equity of companies. For this purpose, the data of 99 companies listed on the Tehran Stock Exchange and Iran TSETMC during the years 2009 to 2019 were examined and tested through combined data. The results showed that the political uncertainty caused by the firm size affected the concurrency stock returns with the optional accrual anomaly behavior and the cost of normal stock equity behavior of companies has a positive and signification relationship. The results also showed that the political uncertainty caused by the firm size is affected by the extraordinary fluctuation of stock returns with the optional accrual anomaly behavior and the cost of normal stock equity behavior of companies has a positive and signification relationship. In addition, the political uncertainty caused by the firm size is affected by the number of equations with the optional accrual anomaly behavior and the cost of normal stock equity behavior of companies has a positive and signification relationship.

1 Introduction

Market anomalies occur when investors do not distinguish between operating cash flows and accounting adjustments (operating accruals) in their valuations. In this study, the market anomaly is examined according to the two concepts of the anomaly of optional accruals and the anomaly of the cost of normal stock equality. Regarding the concept of anomaly accruals, Sloan [1] states that investors estimate future

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returns based on past information, and when future profits are declared, the amount of those profits will be lower or higher due to the reverse movement of accruals than investors' expectations, and in a way, it surprises investors [2]. Zhang [3] described the incorrect pricing of accruals as the incorrect reaction of investors to changes in accruals, including the overreaction to the stability of accruals and the investment of accruals [4]. Pantzalis and Park [5] believe that an important part of incorrect stock pricing can be due to the lack of transparency at the firm level.

In relation to normal stock equity cost, investors with respect to information risk, liquidity risk, bankruptcy risk, Corporate cash flow risk, Innovation risk, agency risk and systematic or beta risk ahead, shape their expected returns. Therefore, companies always tend to keep their cost level of equity lower than the industry average because the high cost of equity of the company from the average industry will not be cost-effective for companies and in the competitive market will continue to operate [6]. Therefore, any decision that results in the firm's cost of equity being higher than the industry average is an anomaly of the normal stock market rules and causes an anomaly in the cost of normal stock equity. In previous research, market anomalies were examined from the perspective of investors' behavior in relation to stock price changes [7], Zach [8] and Shi and Zhang [9]. But what has not been explored in previous research is the discussion of the information environment and political uncertainty in creating a market anomaly. The financial statements prepared by an entity, in addition to accounting standards, are affected by a variety of internal and external factors. One of the important and significant factors is the political relations of business units [6] The literature review shows that companies have a strong desire to build relationships with the government; because these relationships can have many benefits, such as easier access to foreign financing; reduce taxes and tariffs and improve growth opportunities and reduce the risk of bankruptcy, which ultimately improve the company's performance. Instead, companies may share the benefits of these connections with the government.

This type of economic context at the community level is called relationship-based economics, which has its own characteristics and features. Therefore, it can be said that in relationship-based economic systems, political communication is an important source of value for companies with relationships, and companies with political relationships are more easily accessible sources of capital and other benefits through their communication. In contrast, political communication can lead to consequences such as high financial leverage, lower profit sharing, higher capital expenditures, lower investment surpluses and poor performance [10]. Critics argue that firms with political connections sacrifice significant resources for low profits, which in turn diminishes the benefits of political communications and weakens the firm's performance [11]. In this regard, the theory of political economy states that understanding the relationships between economic, social and political groups in order to understand the changing characteristics of business units is necessary. According to this theory, accounting information is provided only to support influential groups in the social, political and economic spheres. Information with which those in power can use and act for their own benefit. Accordingly, the larger the size of the companies, the managers of those companies tend to transfer the reported income from the current period to future periods in order to reduce the political costs that are imposed on them due to the company's political views [12]. In relation to the political hypothesis, increasing political communication leads to weakening the mechanisms of the governance system and the performance of the company, weakening of governance mechanisms leads to a decrease in the quality of financial reporting and reduces the quality of reporting and information transparency leads to increased information asymmetry and agency conflicts escalate. In our country, the government has prevented the uncontrolled increase in the price of their

products by providing government currency to large companies. On the other hand, it makes the company's products more competitive. The government does not enter directly into the import debate in this way. Thus, the political relationship between the government and large corporations, which means political hypothesis, causes the company to increase its revenues and stock prices, and ultimately increase the return of shareholders. Conversely, if large corporations do not enter into these political connections and are deprived of government support, a reverse flow of returns occurs, causing sharp fluctuations in corporate returns, and indicating political uncertainty.

On the other hand, investors and managers are always faced with uncertainty in the information environment. In fact, environmental uncertainty is an integral part of the economic environment. Changes in stock prices, changes in commodity prices, the success of economic activity, the profitability of companies, and the like are all influenced by a number of factors that cannot be spoken of with complete certainty before they occur. Uncertainty in the market causes factors such as the coincidence of returns, extraordinary fluctuations of returns and a number of equation to indicate a risky information environment. These components can affect the future of the company and its share in the stock market. Having a risky information environment in the market will have undesirable collective and individual consequences such as minimal investor participation, high transaction costs, diluted markets and reduced trading profits. In addition, the information environment influences stock price behavior. Concurrency stock returns, extraordinary fluctuations, and the number of equations can indicate a high-risk and low-risk information environment. And may cause stock prices to be different from what should be if there is information [13]. These adverse effects are exacerbated, especially around periods of information dissemination, when the interests of informed traders are expected to be greater, in the worst case, it can lead to a complete collapse of the market [10]. Improving the company's information environment and high information transparency leads to investor confidence and thus increases the diluted company's stock. A risky information environment causes corporate executives to be reluctant to continue in management or to change their accounting policy decisions.

Thus, the information environment has a negative impact on political confidence. In the sense that a risky information environment creates political uncertainty. On the other hand, political uncertainty leads to the stock market anomaly. The more riskier the information environment, the stronger the link between political uncertainty and market anomaly. Therefore, this study seeks to ask whether political uncertainty, under the influence of a risky information environment, has a significant effect on stock market anomaly behavior. Today, political relations and influence not only affect the financial situation of enterprises, but also the motivation of managers in relation to financial reporting and preparation of financial statements. Finally, it causes significant differences in the quality of the financial statements of companies with political relations compared to companies without political relations. Also, in today's turbulent world, where organizations and societies are facing dramatic environmental and technological changes, and consequently global trade and globalization, the ability to achieve the desired and expected level of performance is in a haze of ambiguity. In this way, what can guarantee the growing and growing life of companies is the existence of a powerful and efficient management system as well as the existence of high-quality information. Given that the goal of most companies is to maximize the wealth of shareholders and in order to achieve this goal, efforts are made to make appropriate decisions and policies. Among these, the availability of information is a key factor in the efficient allocation of productive resources and is also essential for optimal investment decisions for investors. The results of this study can be useful in reducing the occurrence of financial crises in the economy.

2 Literature Review

2.1 Market Anomaly

In modern behavioral finance theories, it is assumed that investors, especially inexperienced investors, systematically make mistakes in stock pricing. Therefore, this will be separate from the application or non-application of earnings management to the normal or abnormal components of accruals. Accordingly, unusual accruals lead to incorrect pricing of securities; in a way, the wrong reaction of investors to changes in accruals causes Shares of companies with different volumes of accruals to be incorrectly valued, more or less than actual. Therefore, in order to experimental understand the wrong pricing due to the behavior of investors or due to the behavior of managers (earning management), it is necessary to have a model with an appropriate ability to predict abnormal accruals. Accrual anomalies are reported to be associated with incorrect pricing with abnormal accruals. Accrual anomaly means a negative relationship between accruals and future stock returns. Francis et al [14] stated that in order to show the market anomaly, the lack of transparency in reported profits leads shareholders to want to take higher risks. As a result, the cost of the company's normal stock equity increases. Therefore, companies tend to lower the cost of their normal stock equity than the industry average to maintain the company's competitiveness. Conversely, if the cost of normal shares of companies increases in future periods, it indicates an anomaly in the market. Boubakri et al. [15] showed that firms with political connections have lower normal stock costs compared to other firms.

Desai et al. [16] found that anomaly accruals are not reduced at the overall level of accruals by taking into account sales growth. Also, anomaly accruals remain at the level of total items, taking into account the ratio of book value to the capital market. Chan et al [17] studied the low quality of accounting information and after introducing Financial Reporting Standard No. 3, reported a significant decrease in the ability to predict negative returns due to accruals. The results of their research showed that changing the rules to improve the quality of accounting information can reduce the incorrect pricing of securities in the capital market. Fama and French [18] presented the effect of accruals as one of the most pervasive returns irregularities. The ability of accruals to predict returns is not justified by criteria such as beta, firm size, book value to market value ratio, and cash flow to price ratio. Zhang [3] in his studies showed incorrect pricing of accruals and Investors' incorrect reaction to changes in accruals, including excessive reaction to the stability of accruals and investment of accruals. Pantzalis and Park [5] also showed that a significant part of incorrect stock pricing can be due to a lack of transparency at the firm level. In other words, the ambiguity of investors outside the company about the future cash flow of the company increases when they have limited access to information or when the information of shareholders is of lower quality than people inside the company.

Therefore, the more important the information available to investors about the company's future cash flows, the greater the degree of market price deviation from the intrinsic price. Thus, as corporate political connections increase, the cost of equity decreases. In other words, political communication can be considered an important factor in relation to the cost of stock equity. Shahriary and Salim [14] in their study of incorrect pricing of abnormal accruals showed that the market underestimates the continuity of cash flows from operating activities and lowers it. Conversely, the market overestimates the continuity of normal and abnormal accruals and prices them high. Also, Mojtahedzadeh and Ghodrati [2] showed that earnings accruals have an effect on stock returns and consequently companies' prices, and there is a negative relationship between earnings accruals and stock returns.

2.2 Political Uncertainty

According to the political hypothesis, one of the main examples of the changes in wealth out of the company is the political costs that companies cause, to the costs of information, exchanges, and consultation by decision-making and legislative groups, the main of which are government agencies. This hypothesis states that some companies with specific economic characteristics are more subject to government fuel laws or other regulatory groups. Also, the political hypothesis strengthens the possibility of enacting new tax laws, which can lead to heavy tax costs for companies. As companies grow, so does their accountability, and corporate executives are exposed to a wide range of claimants. Some also believe that the larger the size of the company, the more meticulous the exposure. Large companies, on the other hand, are kind of implementers of government policies and are supported by the government because of this role. Therefore, it can be said that there is some kind of interaction between the government and large companies. In return for the implementation of its policies by large companies, the government has put various advantages, including profitable contracts, providing government currency, reducing customs tariffs, market access points, tax discounts, easier access to credit, government subsidies, etc. These companies also welcome this two-way interaction as they seek opportunities to grow or improve their current situation.

It can also be said that the government considers establishing relations with companies as a tool to control them [6]. Robert and Mark [19] showed that the costs imposed on companies are a function of their size because larger companies are always considered by politicians. And if these companies do not enter into successful political relations with the government, they will be deprived of government support and there will be sharp fluctuations in their returns. Therefore, the size of the company can create political uncertainty in large companies. Penn and Tian [20] also concluded in their research that political uncertainty may be associated with severe government intervention and deviation from the ultimate goals of the company. Therefore, in order to achieve the social or political goals that the government is interested in, senior executives of companies are forced to invest in unprofitable projects; Projects that are politically desirable but cause investment inefficiencies and poor company performance. Nevertheless, [21] showed that political communication has a negative effect on corporate relations. Lee and Wang [22], lower profit sharing, higher capital expenditures, over-investment and poor performance [10]. Fan et al [11] stated that companies with political connections sacrifice significant resources for low profits, which in turn deprives the benefits of political communication and weakens the company's performance. Chi & Gupta [23] also showed in their research that political communication not only affects the financial condition of enterprises but also affects the motivation of managers in relation to financial reporting.

2.3 Development Hypothesis

This is expected to ultimately lead to significant differences in the quality of the financial statements of companies with political affiliations compared to companies without political affiliations, and as a result affect the transparency of corporate information. Lee and Wang [22] concluded that political communication improves corporate performance through various channels such as facilitating access to bank loans and raw materials, easy regulation, and lighter tax payments. As a result, the quality of the information in companies with political information is lower than in other companies. These companies are prone to over-investment due to greater access to more free cash flows. As Watts and Zimmerman put it in their positivist hypothesis, the size of a firm often leads to political costs, especially if large firms

are highly profitable. At this point, managers will use methods to delay profits [4]. As Watts and Zimmerman put it in their affirmative theory hypothesis, the size of a firm often leads to political costs, especially if large corporations are highly profitable. At this point, managers will use methods to delay profits [18]. In addition, the size of the company is used as a factor in the availability of information. According to [20] understanding the company's stock return behaviors requires considering the role of quality in the company's internal information environment. As companies have a weak information environment, and in other words, information asymmetry increases, the incentive for opportunistic profit management will increase. On the other hand, from the shareholders' point of view, the information value of accrual figures will decrease in profit [17]. Synchronicity returns and extraordinary fluctuations and the frequency of transactions can indicate a risky information environment and may cause stock prices to differ from what would be required if the information were available. A high-risk information environment makes corporate executives reluctant to continue their managerial duties, so a high-risk information environment causes political uncertainty [21].

Lee and Wang [22] showed that in times of political uncertainty, decision-makers always they are facing a decrease in the supply of useful information by companies. Political uncertainty can also worsen the information environment by reducing the number of companies providing information. On the other hand, political uncertainty leads to stock market irregularities. When investors form their expectations of the company, they tend to overestimate the stability of accruals and underestimate the stability of cash flows. This causes stocks to be priced incorrectly [12]. As companies have a weak information environment, and in other words, information asymmetry increases, the motivation for opportunistic profit management will increase. On the other hand, from the shareholders' point of view, the information value of accrual figures will decrease in profit [11]. Zach [8] examined the relationship between concurrency returns and market responses to analysts' recommendations with changes in the simultaneous level of stock returns. They found that this relationship was inversely related to firm size due to the lack of information for smaller firms. Pantzalis & Park [5] examined the relationship between accruals and cash flow with the number of stock returns. According to their findings, there is a very positive relationship between the size of accruals and stock returns. Therefore, the first hypothesis is as follows:

- **Hypothesis 1:** Political uncertainty due to the size of the company under the influence of the concurrency of stock returns is effective on the anomaly behavior of companies' optional accruals.

According to Pantzalis & Park [5] the higher the return expected by investors, the higher the cost of capital and the more they should try to increase the wealth of their investors. Lee and Wang [22] have stated that Transparency of information leads shareholders to want to take risks with the lottery and consequently increase the cost of the company's capital. Zach [8] examined the relationship between the cost of capital expected by investors and the return on assets. The results of this study showed that in what case the assets are considered in general and if the assets are divided into two groups of operational and financial assets, the relationship between the return of each group of assets and the cost of capital expected by investors, will be significant and positive.

- **Hypothesis 2:** The political uncertainty caused by the size of the company under the influence of the concurrency of stock returns is effective on the anomaly behavior of the normal stock equity cost of companies.

A high-risk information environment causes the managers of companies to be reluctant to continue their managerial duties, so a high-risk information environment causes political uncertainty [6] On the other hand, political uncertainty leads to stock market irregularities. When investors form their expectations of the company, they tend to overestimate the stability of accruals and underestimate the stability of

cash flows. This causes stocks to be priced incorrectly [12]. Fan et al [11] in a study entitled Environmental uncertainty and managers 'use of optional accruals examined the relationship between environmental uncertainty and managers' use of accruals. The results of their research showed that with increasing environmental uncertainty, managers use optional accruals significantly. And in conditions of high uncertainty, managers use more optional accruals to reduce reported earnings fluctuations than unmanaged earnings.

- **Hypothesis 3:** Political uncertainty in order to the size of the company for the extreme fluctuation of stock returns is effective on the anomaly behavior of companies' optional accruals.

Francis et al [14] have argued that a lack of transparency in information leads shareholders to want to take a lottery risk and consequently increase the cost of the company's capital. Companies are trying to reduce the cost of capital. Financial theories assume that quality financial information reduces the cost of common stock. Research has shown that providing clearer information reduces information risk and information asymmetry [11]. On the other hand, paternal fluctuations in stock returns are the main cause of concurrency changes as well as changes in liquidity, and as a result, will increase investors' risk [6]. Robert and Mark [19] by examining the effects of the information environment and quality of disclosure on the cost of capital, found that changes in the quality of the information provided and the needs of the company's operating environment, lead to a change or adjustment of capital costs.

- **Hypothesis 4:** The political uncertainty caused by the firm size due to the extreme fluctuation of stock returns is effective on the anomaly behavior of the normal capital cost of companies.

Managers of companies tend to reduce the variability of reported profits, which causes information asymmetry between management and the investor. When information asymmetry is high, the volume of opportunistic profit management is likely to increase. [8] The more efficient the financial markets in terms of information, the less information asymmetry and the faster the distribution of information, the weaker the relationship between returns and trading volume is expected to be [12]. Shahriary and Salim [14] in a study examined the relationship between earnings management and information asymmetry in conditions of uncertainty. Their findings showed that there is a significant relationship between earnings management and information asymmetry and also environmental uncertainty undermines the relationship between earnings management and asymmetry. In another study, Chan et al [17] examined the determinants of information asymmetry using firm and market variables. Their findings showed that information asymmetry has a significant and negative relationship with the volume of stock transactions and the number of stock transactions and has a significant and positive relationship with the variables of the company's liquidity risk.

- **Hypothesis 5:** Political uncertainty regarding the size of the company due to the frequency of transactions affects the illegal behavior of companies' optional accruals.

Chan et al [17] showed that in times of political uncertainty, decision-makers are always faced with a decrease in the supply of useful information by companies. Political uncertainty can also make the information environment worse by reducing the number of companies providing information, while ambiguous information also increases the risk to investors. This risk, which is referred to as information risk, is priced by the market and has a significant correlation with the cost of capital [14]. Fan et al [11] examined the transparency of information at the expense of capital. Researchers have found that companies with high-profit transparency have lower capital costs.

- **Hypothesis 6:** The political uncertainty caused by the firm size due to the frequency of transactions affects the behavior of the ordinary capital cost of ordinary shares of companies.

3 Methodology

This research is in the group of interpretive-correlational research in terms of purpose, type of applied research and in terms of inference about research hypotheses. Also, since we will reach a conclusion by testing the research data relationships, which results in the confirmation or non-confirmation of the research hypotheses, the present study will be included in the group of positive accounting theories. To test the research hypotheses, the required information was collected from manufacturing companies operating on the Tehran Stock Exchange, whose fiscal year ended on March 20, their trading symbol did not stop for more than six months, and their shareholders' equity was not negative during the period 2009-2019. Due to the restrictions imposed, the research sample includes 99 companies.

3.1 Variables

3.1.1 Dependent Variables

Anomaly behavior of capital market (ABCM): In this study, the cost of normal stock capital (CNSC) and optional accruals (OA) are used to measure capital market anomaly behavior as follows. Cost of normal stock capital (CNSE): In this study, Olson and Jones's (2004) model was used to measure the cost of normal stock capital.

$$\mathrm{CNSE} = \mathrm{A} + \sqrt{\mathrm{A}^2 + \frac{\mathrm{EPS}_1}{\mathrm{P}_0}\left(\frac{\mathrm{EPS}_2 - \mathrm{EPS}_1}{\mathrm{EPS}_1} - (\mathrm{y} - 1)\right)} \quad (1)$$

A: is calculated based on Equation (2).

$$\mathrm{A} = \frac{1}{2}(\mathrm{y} - 1) + \frac{\mathrm{EPS}_1}{\mathrm{P}_0} \quad (2)$$

y: dividend growth percentage; EPS1: earnings per share of company i in year t + 1; P_0 stock price of company i in year t; EPS2: Earnings per share of company i in year t + 2. Shareholders rely on reported earnings to determine their expected rate of return, so the less transparent the reported earnings, the higher the risk that shareholders will incur and the higher the cost of normal stock capital. In this regard, in order to reduce the cost of ordinary shares of the company in future periods, management should disclose more transparent accounting dividends to prevent the occurrence of anomalies of normal stock cost. In this study, to determine the anomaly of the cost of normal stock capital based on equation (1), companies whose common stock cost has increased compared to the previous year is considered as irregular market and companies that have decreased compared to last year, for they considered the value zero.

Optional Accruals (OP): To determine the irregularity of companies' optional accruals, the absolute residual value of the regression estimated according to the model of McNichols [24] according to equation (3) is used. The excessive increase of optional accruals to the company's profit means accepting credit risk and indicates an anomaly in the market. In this study, if the companies' optional accruals are larger than the median, it was considered a market violation and the companies that had a decrease compared to the median were given a value of zero.

$$\mathrm{TACC}_{\mathrm{i.t}} = \beta_0 + \beta_1 \mathrm{CFO}_{\mathrm{i.t-1}} + \beta_2 \mathrm{CFO}_{\mathrm{i.t}} + \beta_3 \mathrm{CFO}_{\mathrm{i.t+1}} + \beta_4 \Delta\mathrm{REV}_{\mathrm{i.t}} + \beta_5 \mathrm{PPE}_{\mathrm{i.t}} + \varepsilon_{\mathrm{i.t}} \quad (3)$$

$\mathrm{TACC}_{\mathrm{i.t}}$: is the total accruals of the company i in fiscal year t, which is derived from the difference between operating profit and cash flow from the company's operations.

$\mathrm{CFO}_{\mathrm{i.t-1}}$: cash flow from Company i in fiscal year t-1; $\mathrm{CFO}_{\mathrm{i.t}}$: cash flow from Company i in fiscal year t; $\mathrm{CFO}_{\mathrm{i.t+1}}$: cash flow from Company i operations in fiscal year t + 1; $\Delta\mathrm{REV}_{\mathrm{i.t}}$: changes in Company i sales in fiscal year t; $\mathrm{PPE}_{\mathrm{i.t}}$: book value of tangible fixed assets of Company i in fiscal year t; $\varepsilon_{\mathrm{i.t}}$: remain company regression model i in fiscal year t.

In order to homogenize, all variables are divided by the total assets of the first period.

3.1.2 Independent variables

Political Uncertainty (PU): In this study, the size of the firm (SF) is used to measure political uncertainty as follows.

(FS): in this study, first, the natural logarithm of the total assets of Company i at the end of fiscal year t is calculated. Then, for values above the mean, a value of one is considered, which means political uncertainty. Zero is also considered for values below the median. Managers of large corporations are more likely than managers of corporate corporations to adopt lower reported net profit standards because the higher the profitability of large corporations, the higher the political costs.

3.1.3 Mediating variables

Capital market information environment (CMIE): in this study, to measure the capital market information environment, stock return synchronization (SRS), extraordinary stock return fluctuation (ESRF) and frequency of transactions (TURNOVER) are used as follows.

1) Stock return synchronization (SRS): Piotrowski's (2004) model is used to measure the synchronization of stock returns.

$$\text{Syn} = \text{Log}(\frac{R^2}{1-R^2}) \quad (4)$$

In equation (4), R2 is the adjusted coefficient of determination resulting from the changes of two factors, monthly market return and monthly industry return in three consecutive periods, which have their effect on the monthly stock return of companies according to equation (5).

$$R_{ft} = \beta_0 + \beta_1 R_{mt} + \beta_2 R_{it} + \varepsilon_{it} \quad (5)$$

R_{ft}: Company's monthly return in fiscal year t; R_{mt}: Monthly market returns of the company i in fiscal year t; R_{it}: Monthly returns of industry i in fiscal year t; ε_{it} : Remaining company regression model i in fiscal year t.

2) Extraordinary stock returns fluctuations (ESRF): The standard deviation of the remaining three years of equation (6) is obtained.

$$R_{it} = \beta_0 + \beta_1 R_{ft} + \beta_2 (R_{mt} - R_{ft}) + \varepsilon_{it} \quad (6)$$

3) A number of transactions (turnover): Three-year standard deviation of the number of transactions of the company i in fiscal year t.

3.1.4 Control variables

1) Financial leverage (FL): The ratio of total debt to total assets of Company i at the end of fiscal year t.
2) Return on Assets (ROA): Ratio of Net Profit + Cost of Interest + Tax on Total Assets of Company i in Fiscal Year t.
3) Market value to book value of equity (MB): The ratio of the market value of equity to the book value of equity at the end of the year.
4) Sales standard deviation (SSD): The three-year standard deviation of the ratio of sales revenue to total assets of Company i at the end of fiscal year t.

3.2 Model of research hypotheses

$$ABCOC_{i.t} = \beta_1 + \beta_2 UP_{i.t} + \beta_3 IE_{i.t} + \beta_4 UP \times IE_{i.t} + \beta_5 Controls_{i.t} + \varepsilon_{i.t}$$

4 Experimental results

In this study, descriptive and deductive statistics were used to analyze the information. In descriptive statistics, information about the mean, median, standard deviation, skewness, kurtosis, and minimum and maximum values of research variables about sample banks were calculated. In deductive statistics, linear test (variance inflation factor), mean variability test, Chow test, Hausman test and variance homogeneity test were used. Also, the generalized least squares regression method was used to reduce the effects of variance heterogeneity and valid tests such as Student's and Fisher's tests were used to determine the significance of regression coefficients and regression equation. In addition, the coefficient of determination was used to describe the changes of independent and control variables to the dependent variable and the Watson camera-test was used to examine the non-correlation of data. E-views software was used to analyze the data.

4.1 Descriptive statistics of research variables

The results in Table 1 show the descriptive statistics of the research variables

Table 1: Descriptive Statistics of Research Data

Research variables	ABCM	CNSC	FS	SRS	ESRF	Turn over	ROA	MB	SSD	FL
Mean	0.075	0.563	7.556	0.719	10.708	14.832	0.203	3.035	0.381	0.542
Median	0.041	0.000	6.966	0.505	6.856	0.000	0.176	2.528	0.285	0.550
The maximum amount	0.678	7.806	19.149	2.327	39.953	96.396	0.681	8.814	2.398	0.895
The minimum amount	0.000	0.000	0.000	0.000	0.000	0.000	-0.070	0.420	0.002	0.065
Standard deviation	0.105	0.956	7.617	0.753	11.712	24.853	0.126	1.810	0.346	0.176
skewness	2.376	3.779	0.037	0.268	0.542	1.494	0.896	1.222	2.425	-0.359
Kurtosis	10.690	22.528	1.057	1.436	2.043	4.154	3.933	4.219	1.805	2.509
Number of observations	594									

Table 1 shows the research variables that represent the descriptive parameters for each variable separately. In this table, the skewness coefficient is positive in relation to the major research variables, this indicates the presence of a skew to the right and the tendency of the variables to smaller values. The positive elongation coefficient also indicates that the distribution of variables is higher than the normal distribution and the data are more concentrated around the mean. The fact that the average value of the optional accruals variable is close to its minimum value indicates that managers have used less ability to exercise discretion to select accounting methods and related estimates. Given the values of the highest value, the lowest value and the average variable cost of common stock capital in the table above, the proximity of the average value to the lowest value indicates that the minimum rate of return that the company must earn to ordinary shareholders to preserved, small amounts.

4.2 Test results of the first and second hypotheses of the research

Hypothesis 1: Political uncertainty due to the size of the firm under the influence of the synchronization of stock returns is effective on the anomaly behavior of companies' optional accruals.

Hypothesis 2: The political doubt caused by the size of the firm under the influence of the coincidence of stock returns is effective on the anomaly behavior of the normal stock capital cost of companies. The results of the first and second hypotheses are presented in Table 2.

Table 2: Test Result of Regression Model of First and Second Research Hypotheses

$ABCOC_{i,t} = \beta_1 + \beta_2 AE_{i,t} + \beta_3 SYN_{i,t} + \beta_4 AE \times SYN_{i,t} + \beta_5 Controls_{i,t} + \varepsilon_{i,t}$						
Variable	Coefficient		t statistic		Possibility	
	OA	CNSE	OA	CNSC	OA	CNSE
Constant	0.002	0.413	0.132	4.271	0894	0.000
FS	-0.002	-0.001	-2.882	-0.348	0.004	0.727
SRS	-0.003	-.005	-0.414	-1.668	0.678	0.095
FS*SRS	0.001	0.109	2.693	2.628	0.007	0.008
FL	0.049	0.119	1.719	0.936	0.086	0.349
ROA	0.274	-0.257	6.700	-1.220	0.000	0.222
MB	-0.001	-0.011	-0.422	-0.933	0.672	0.351
SSD	-0.001	-0.067	-0.135	-1.238	0.892	0.251
BETA	-0.0009	-0.016	-0.597	-2.134	0.550	0.033
The coefficient of determination	0.117	0.033	F statistic		9.708	2.544
Adjusted coefficient of determination	0.105	0.020	F possibility statistic		0.000	0.009
Durbin-Watson Statistic	2.139	2.314				

The possibility of the F statistic is significant at the 5% error level and the assumption that the model is linear and significant is accepted. In the above table, the coefficients of determination are 0.117 and 0.033, respectively, which indicates the percentage of explanation of the dependent variable by the independent and control variables entered in the model. The result of the Durbin-Watson test for the research model shows no correlation between errors. According to the possible value and t-symbol, there is a positive and significant relationship between the interactive variable of political uncertainty caused by the size of the firm and the concurrence of stock returns with the anomaly behavior of optional accruals and the anomaly behavior of normal stock capital costs, which indicates the acceptance of the first and second hypotheses of the research.

4.3 Test results of the third and fourth hypotheses of the research

Hypothesis 3: Political uncertainty due to the size of the company due to the extreme fluctuation of stock returns is effective on the irregular behavior of companies' optional accruals.

Hypothesis 4: The political uncertainty caused by the size of the firm due to the extreme fluctuation of stock returns is effective on the anomaly behavior of the normal capital cost of companies. The results of the third and fourth hypotheses are presented in Table 3.

Table 3: Test Result of Regression Model of Third and Fourth Research Hypotheses

$ABCOC_{i,t} = \beta_1 + \beta_2 AE_{i,t} + \beta_3 IDIO_{i,t} + \beta_4 AE \times IDIO_{i,t} + \beta_5 Controls_{i,t} + \varepsilon_{i,t}$						
Variable	Coefficient		t statistic		Possibility	
	ABACC	COCE	ABACC	COCE	ABACC	COCE
Constant	0.037	0.513	1.578	5.343	0.115	0.000
FS	-0.001	-0.008	-2.129	-2.491	0.033	0.013
ESRF	-0.001	-0.004	-3.450	-1.774	0.000	0.76
AE*IDIO	0.000	0.0003	1.690	1.350	0.041	0.017
FL	0.057	0.136	1.679	1.088	0.093	0.276
ROA	0.264	-0.226	8.629	-1.088	0.000	0.276
MB	-0.008	-0.010	-4.155	-0.837	0.000	0.402
SSD	-0.006	-0.045	-0.694	-0.804	0.487	0.421
BETA	0.0002	-0.015	0.162	-2.082	0.871	0.037
The coefficient of determination	0.438	0.027	F statistic		3.591	2.087
Adjusted coefficient of determination	0.316	0.014	F possibility (statistic)		0.000	0.035
Durbin-Watson statistic	2.457	2.326				

Considering the possible value and t statistic at a significance level of 5%, between the interactive variable of political uncertainty caused by the firm size and the extraordinary fluctuation of stock returns

with the anomaly behavior of optional accruals and there is a positive and significant relationship in both cases, which indicates the acceptance of the third and fourth hypotheses of the research.

4.4 Test Results of the Fifth and Sixth Research Hypotheses

Hypothesis 5: Political uncertainty due to the size of the company due to the frequency of transactions affects the illegal behavior of companies' optional accruals.
Hypothesis 6: The political uncertainty caused by the size of the company due to the frequency of transactions affects the behavior of the ordinary capital cost of ordinary shares of companies.
The results of the fifth and sixth hypotheses are presented in Table 4.

Table 4: Test Result of Regression Model of Fifth and Sixth Research Hypotheses

$ABCOC_{i,t} = \beta_1 + \beta_2 AE_{i,t} + \beta_3 Turn\ over_{i,t} + \beta_4 AE \times Turn\ over_{i,t} + \beta_5 Controls_{i,t} + \varepsilon_{i,t}$						
Variable	coefficient		t statistic		Possibility	
	ABACC	COCE	ABACC	COCE	ABACC	COCE
Constant	-0.016	0.508	-0.786	5.344	0.431	0.000
FS	-0.0005	-0.006	-0.752	-2.253	0.451	0.024
Turn over	0.0002	-0.002	0.836	-2.010	0.403	0.044
FS*Turn over	0.000	0.0001	1.143	0.990	0.025	0.032
FL	0.066	0.123	2.340	0.998	0.019	0.323
ROA	0.302	-0.239	7.560	-1.149	0.000	0.250
MB	-0.001	-0.009	-0.511	-0.781	0.609	0.434
SSD	-0.0008	-0.041	-0.062	-0.752	0.949	0.452
BETA	-0.0009	-0.041	-0.604	-1.880	0.545	0.060
The coefficient of determination	0.103	0.030	F statistic		8.407	2.298
Adjusted coefficient of determination	0.090	0.0170	F possibility (statistic)		0.000	0.019
Durbin-Watson statistic	2.122	2.337				

Considering the possibles value and t statistic at a significance level of 5%, there is a positive relationship between the interactive variable of political uncertainty caused by the firm size and the number of transactions with the anomaly behavior of optional accruals and the anomaly behavior of normal stock capital cost. And there is significance, which indicates the acceptance of the fifth and sixth hypotheses of the research.

5 Conclusion

In this study, the relationship between political uncertainty and the impact of a high-risk information environment on market behavior was investigated. The results showed that the existence of a risky information environment, so that the specific characteristics of the company that are reflected in the accounting information can not affect the behavior of stocks and caused the use of accounting information to be low. In this case, the risk of accounting information is high. The results showed that when the information environment is risky, the effect of political uncertainty caused by the size of the company on the irregular behavior of the market is positive and significant. Before examining the effect of a high-risk information environment on the relationship between political uncertainty and market behavior, this relationship was negative and significant, and after that, a high-risk information environment caused a positive relationship. According to the results of descriptive statistics, data and outputs of inferential statistics, research and study of the relationship between variables, it can be understood that when shareholders do not have enough knowledge to differentiate between companies' stocks and show bulk behavior based on industry or market transactions concurrent stock returns occur. In other

words, the lower the reflection of company-specific information in its stock price, the greater the stock return. Concurrent stock returns may take the value of a stock away from its underlying value because, at the same time, investors will buy and sell according to the collective market trend and share valuation is less necessary, which may adversely affect the entire stock market. Therefore, the coincidence of stock returns is one of the factors of a risky information environment. Another factor examined was the extraordinary fluctuation of stock returns. When there is fluctuation in stock returns, markets react to a sign of high risk. Fluctuations in stock returns include systematic and unsystematic fluctuations. One way to deal with this is to use management control to reduce or eliminate it, which reduces the actual risk and reduces the cost of capital. Another solution is to hide fluctuation using various accounting methods. The result of this approach is only apparent stability and the actual operational risk does not change. In fact, it increases total risk because the capital market does not get the information it needs from the financial statements. The third factor that was examined as a representative of the risky information environment in this study is the number of transactions.

The number of trades is one of the main criteria in technical analysis, which along with the price can provide a complete picture of market trends for analysts. The number of stock trades affects the expected stock return from two perspectives. First, stock liquidity is a desirable feature for the investor, so the higher the number of stock trades, the higher the liquidity strength of the stock and the lower the liquidity risk. Now that the information environment is risky, corporate executives who have acted to further their own interests due to the issue of greater representation are formulating policies that divert fewer resources because large corporations are more likely to be considered by government officials than small corporations. In the meantime, a kind of political uncertainty is created between the big companies and the government. Adopting appropriate accounting policies will increase the valuation of companies and reassurance in policy-making assures governments that they will be more flexible in enforcing laws and regulations and collecting taxes. According to the political hypothesis, large companies with strong political ties to the government can benefit from government support and their share prices will rise, which will increase shareholder returns. Conversely, if large corporations do not enter into these political connections, they will lose government support, and as shareholders' P / E increases, the return on shareholders decreases, which in turn causes sharp fluctuations in returns, indicating political uncertainty. Therefore, when there is uncertainty in the information environment and political relations, the quality of information and information available to shareholders is lower than in other companies. This uncertainty causes some investors and shareholders to focus only on the company's profit and past operations in their valuations.

The reason for this lack of attention stems from the fact that shareholders and investors do not have access to company-specific information. In fact, corporate executives manage earnings through optional accruals that are related to events within the company. This prevents shareholders from having clear information about the components of earnings and is unable to distinguish between the two parts of earnings, which include operating cash flows and accounting adjustments (operating accruals). This leads to an incorrect valuation of accruals and ultimately to market irregularities. Confidence in policy-making also allows shareholders to be more involved in the formation and creation of the appropriate capital structure of companies, and from them, more financial resources and cash flows enter the company and demand lower returns. In contrast, political uncertainty and uncertainty in the information environment lead shareholders to seek higher expected returns in order to invest in the company, while the cost of common stock capital of companies may be higher than the industry average. And it is not cost-effective for companies and it is against the rules of the market because most managers tend to

provide cheap financial resources. According to capital cost theory, capital cost is considered a barrier rate. This means that investing companies in projects with a rate of return higher than the cost of capital increases the value of the company. According to the results of the study, it can be said that market rule is born of political uncertainty. Therefore, it is suggested that creating advanced legal and political institutions, as much as possible, make the specific information of companies more widely available. When stock prices reflect more information about companies, there will be fewer stock returns at the same time and a transparent information environment will be established. Also, when companies expand, under the right legal conditions, highly influential shareholders and owners reduce uncertainty and non-transparency in order to enjoy the benefits that the government provides for them. It is also suggested that future research examine the motivations created by political uncertainty over users' decisions.

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