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Effect of disclosure quality on earnings forecast accuracy with an emphasis on the role of information accrual component of earnings volatility

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ABSTRACT

Financial misinformation is now largely categorized as a major concern by various companies and businesses worldwide and has called into attention the vital importance of quality information. Access to this information can facilitate the means for effective communication between companies and investor communities in matters of assessment and decision making. Accordingly, the present study addresses this issue from the unique perspective of involving earnings volatility and cash flows in estimating information disclosure quality for investor decision, thereby exposing a novel branch of this field as well as a new outlook on the role of quality. Data on companies listed in the Tehran Stock Exchange were extracted from the Stock Exchange Database, Rahavard Novin Dataset, and Codal System, for the fiscal period from 2008-2017, concerning predefined inclusion criteria. As the final results from both proposed models suggest, disclosure quality wielded a significantly positive impact on the accuracy of earnings forecasting and influenced investors' decisions. Other findings indicate that the accrual part of earnings volatility in the short term has been able to influence the effect of disclosure quality on investors' decisions. In the final analysis, it was revealed that reducing the earnings volatility relative to cash flows strengthens the effect of disclosure quality on forecast accuracy and thereby increases earnings information.

Keywords:

accuracy of earnings forecasting, disclosure quality, earnings volatility, cash flow volatility.

1. Introduction

At present, information plays a strategic role in decision-making mechanisms, wherein the quality of decisions depends on the accuracy, validity, and timeliness of the information that is provided to individuals in the process of deciding. This sort of information is reflected in financial markets in the form of signs, symbols, news, and various predictions from inside and outside the company and is available to shareholders and causes reactions and consequently changes in stock prices. Access to greater and more precise information provides a more analytical perspective for real and legal investors, leading the capital market towards higher efficiency (Mirzajani et al, 2018). Over the past decades, national and international markets have experienced several financial crises. A primary cause for such predicaments is the lack of clear and comprehensive financial information, leaving it to accounting to prepare financial reports and provide useful information to facilitate judgment and decision making. Accounting data must be predictive to help facilitate decision-making on investments (Ahmadi et al, 2020). Forecasting is a key element in economic decision-making, which if publicized can assist investment decisions; i.e. information released about profits and forecasts by managers are of more significance to investors and stakeholders as opposed to other information published by the company. Timely dissemination, repetition, and accuracy of earnings (profit) forecast provide useful information for decision making; earning estimates reported by companies have informative content and efficiency and are highly prominent due to their role and impact on user decisions, particularly those of investors. In general, the amount and quality of information disclosed to participants in the capital market affect the accuracy of profit forecasting. For example, long and landholder (1996) concluded that the accuracy of forecasts increases with an increase in the rate of disclosure of company information. Empirical findings of Torkaman et al. (2012) indicate that information disclosure quality from financial reports is negatively correlated with earnings forecasting errors made by managers; which means that by increasing the quality of disclosure, the accuracy for earnings forecasts grows as well. Tabriz et al. (2015) showed that primary variables causing dwindles in the quality of financial reports. such as poor internal control, a restatement of financial statements, and loss. are positively and significantly related to errors in earnings forecasts made by management. Overall, these findings indicate that companies with greater issues of high-quality information for external users show higher accuracy in terms of earnings forecasting, albeit the underlying factors influencing the prediction accuracy are quite diverse. Earnings volatility and cash flow volatility are two of the main informational units that have recently been taken into consideration by investors and may reduce the accuracy of earnings forecasting. Alternatively stated, less volatile earnings from previous years and the estimated forecasts closer to the realized earnings, lead to higher investor confidence as well as an increase in the likelihood of a purchase of shares being made in conjunction with a rise in its corresponding market value (Mehrani and Hesarzadeh, 2011). Changes in earnings are expected to be negatively correlated with changes in forecasted earnings and prediction accuracy; primarily because it is difficult to predict earnings given high risk and high fluctuations in profits, which lead to further risk. Researches by Lou (2019), Nguyet (2017), Dicho & Tang (2009), Graham, Harvey and& Rajgopal (2005), Shaykhs & Ayadi Ahsan (2015), Nikbakht, Ghasemi & Imani Brandagh (2020), Hajiha & Chenari (2016) And Mehrani & Hesarzadeh (2011) present specific cases of negative relationships between earnings volatility and earnings forecasting. In an inefficient market, cash flow volatility reduces cash investment. Higher volatility causes insufficient cash flow in the company meant to save on the fund and as a result, the company cannot make a favorable investment. Ultimately, the company's future cash flow and future profitability will decrease over time. Findings of Colin& Goli (2014), Gebhardt, Lee & Swamynathan (2013), Hershilifer & Visheny (2011), Minton (2002), and Kordestani & Latifi (2011) further elaborate on the negative correlation between cash flow and future earnings. Of course, in this context, other viewpoints such as Gol and Thakur (2003) state that high earnings volatility leads to higher informational benefits for informed investors instead of uninformed investors. They hypothesize that if several investors are uninformed, they would prefer managers to report smoother profits. Jayrman (2008) believes that profits that are smoother or more volatile than cash flows provide either appropriate or distorted information to users. Rudpashti & Valipour (2013). Companies and

enterprises in Iran currently suffer from incorrect financial information. Without access to high-quality information and incorrect predictions, many activities remain unenforced and as a result, it is not possible to achieve the goals. In fact, this research seeks to help the securities market to maintain its position in attracting capital. On the one hand, this study seeks to discover the relationship between the quality of disclosure and the accuracy of earning forecasting in order to help investors in investing. On the other hand, by including the accrual part of earnings volatility, in the relationship between the quality of disclosure and the accuracy of earnings forecasts to help the growth and development of the capital market and by presenting the results to look at the relationship between the quality of disclosures and earnings forecasting accuracy from a new perspective. This new dimension can strengthen or weaken the information content of this relationship to help informed and uninformed investors in judgment and decision making. The present study provides evidence of the quality of disclosure that can help investors in predicting the company's profit and value. Second, the present study emphasizes the role of business model and providing useful information to improve accounting information. Therefore, capital market actors and policy makers can use the results of this research in line with their decisions.. Therefore, in the present study, we seek to answer the question whether the accrual part of earnings volatility moderates the quality of disclosure and judgment (accuracy of profit forecasting) of investors?

2. Theoretical Development of Hypotheses

Agency theory and signaling theory provide the context on which the hypotheses of this research have been formulated (Setayash& Kazemnejad,2012). Agency theory is oriented on the assumption that managers, as agents of shareholders, may act or make decisions that are not necessarily in the interest of maximizing shareholder wealth. According to this theory, an adequate control or monitoring mechanism should be established to protect shareholders from conflicts of interest (Sheikh et al, 2012). In other words, these mechanisms provide management with the necessary incentives for adequate actions to increase the value of the company. Therefore, the performance of a company is highly subject to improvements in control structures and accurate forecasts, which if the configured right can lead to reductions in agency costs, higher evaluation, more transparent financial reporting, and overall better performance in the long run. On the other hand, signaling theory arises in the case where one party to a potential transaction has more information than the other; i.e. there is asymmetric information. The purpose of the theory is to express the view that signaling in companies can act as an incentive for information disclosure. This makes financial reporting a suitable tool for attracting more investors' capital. It is however argued that transparent flows along with information quality are reductive factors of information asymmetry. Theoretical analyses and empirical evidence reveal that increased asymmetry or information inequality is correlated with decreases in the number of traders, high transaction costs, low liquidity of securities, and low volume of transactions, and generally leads to lower profits from trading. In this vein, the goal of investors is to maximize their wealth which means maximizing the present value of future cash flows. This decision is a proxy of quality financial information. Hence, investors require information that would enable them to predict future cash flow from investments and the associated volatility. Therefore, the subject of transparency of financial reports and quality of disclosed information has been looked at as a pragmatic solution (Bazin&vural, 2011). Among the most vital types of information disclosed to users in the capital market is the anticipated profits that must consist of logical, reliable, and timely information and be understandable and relevant. Accurate and well-timed forecasts improve the decision-making process for users working on financial reports. Forecasted earnings given by managers evoke reactions in the stock market causing increases in the volume of stock exchanges after the announcement of profit forecasts. To address this circumstance, the following two hypotheses were developed in this study:

Hypothesis 1: The long-term accrual component of earnings volatility adjusts the effect of disclosure quality on the accuracy of earnings forecasts.

Hypothesis 2: The short-term accrual component of earnings volatility adjusts the effect of disclosure quality on the accuracy of earnings forecasts.

Various factors related to disclosure quality were incorporated into this study by including control variables. The process then proceeds with the assessment of whether the accrual component of earnings volatility moderates the impact of disclosure quality on the accuracy of earnings forecasts.

3. Empirical background

Zhang et al.(2021), examined the difference in management forecast quality under mandatory vs. voluntary disclosure in China's stock markets in terms of management forecasting error (MFE) and value relevance. The results of MFE tests reveal that the disclosure approach is significantly associated with forecast accuracy, and voluntarily disclosed forecasts are more accurate than mandatorily disclosed forecasts. In terms of value relevance, the results are also consistent with the belief that in China's stock markets, management forecast quality under voluntary disclosure is higher than that under mandatory disclosure.

Huang et al.(2020), studied the impact of business and financial information integration (BFII) on voluntary management earnings forecasts (VMEFs) of listed firms in China between 2008 and 2018. Their findings suggest that companies with integrated financial and business information employ a more accurate model of publishing voluntary profit forecasts; with the relationship between these two variables identified as significantly positive.

Khofi (2020), proposed to investigate correlations between accounting information quality and investment decisions among firms in Tunisia. The sample of the study consisted of 50 firms listed on the Tunis Stock Exchange covering 2012 to 2016. The findings imply a significantly negative correlation between accounting information quality and investment inefficiency.

Luo (2019), researched the relationship between managers' short-term, quarterly earnings forecast characteristics and earnings management through real activities manipulation; using a propensity-score matched sample from 2000 to 2015. The proposed findings suggest that firms engage in less real activities manipulation when providing short-term management earnings forecasts.

Nguyet (2017), examined the relationship between earnings fluctuations and earnings forecasts for the financial period 2010-2014. The findings specified an inverse relationship between high earnings volatility and earnings forecasts.

Kwarbai et al (2016) inquired into the effects of financial reporting quality on investors' decisions during the period 2010 to 2014. Their results showed that higher-quality reporting increases investors' decisions. According to the study, large companies should voluntarily increase the quality of reporting, which will provoke a positive market reaction.

Nikbakht et al (2020), investigated the effect of errors in management earnings forecasting on the stability of cash and accrual components of earnings and overvaluation of stocks. They found that as the level of management profit forecasting error increases, stability drops for cash and accrual components, while stock overvaluation increases.

Ahmadi et al (2020), examined "The Effect of Earnings Management on the Relationship between Earnings Forecast Error and Earning Persistence: Test of Management Overconfidence Theory" during the period 2009 to 2017 in 115 companies from listed companies in Tehran Stock Exchange. The results reported a significant and positive relationship between earnings forecast error and (earnings) persistence in earnings management. Overconfidence was also shown to significantly impact earnings error and persistence in different ways.

Mirzajani et al (2018), studied the impacts of income smoothing on investors' reaction to earnings persistence in companies listed on the Stock Exchange in Tehran. Analysis reports for corporate data used in a multivariate regression model at a confidence level of 95% shows that net income persistence and operating profit persistence have a direct impact on the reaction of investors. The results further suggest that income smoothing directly affects the relationship between investors' decisions and net income persistence and operating profit.

Yadkarnia (2019), attempted an analysis of the connection between CEO experience and quality of financial reporting with profit forecasts made by management during the financial period from 2011 to 2017. The results are indicative of a direct and significant relationship between CEO experience and earnings forecasting by management, and so between the quality of financial reporting and earnings forecasting by management.

Mojavar Tabrizi et al (2018), assessed the factor of financial statements quality and accuracy (error) of

management earnings forecasting during the period 2006 to 2016 in a sample population of 99 companies. As the findings showed, variables of the weakness of internal control, the restatement of financial statements, and loss of the company (factors that degrade financial reporting) have a positive and significant relationship with errors of accurate earnings forecasting.

Behbahani Nia & Larijani (2017), addressed the role of accounting information in investors' reaction among members of the Tehran Stock Exchange between 2004 to 2015. The results showed an improvement in the reaction model to earnings and the simultaneous significance of projected earnings.

Mshaykhs and Ayadi Ahsan (2015) studied profit volatility and profit forecasting during the financial period of 2008 to 2013. Based on the obtained results, variable profit remained relatively stable throughout the annual period, while other internal components of profit were unstable in both six-month periods and annual periods, leading to profit fluctuations and reductions in the accuracy of the projected profit.

4. Research methodology

The present study was conducted in the form of descriptive analysis, with the library method used to collect theoretical foundations of relevance. For this purpose, contexts from the research literature were extracted from library resources, journals, books, and articles from university libraries. The data were then used along with a regression model to test the proposed hypotheses. The F-lime test was used to determine the type of combined data and choose between the panel and integrated data models. The statistical population consisted of manufacturing companies listed in Tehran Stock Exchange whose fiscal year ended March 19th each year. Considering the nature of the research, the following inclusion criteria were considered for determining the statistical population, so the statistical sample is selected by systematic elimination method. Companies were selected according to the following 6 criteria:

1) All companies excluding investment companies and banks.
2) Companies with financial years leading up to March 20th of each year.
3) Target companies with available information and data
4) Companies did not change during the fiscal year during 2008-2017
5) Companies accepted in the stock exchange by the end of 2007
6) At the end of March, the company's shares must have been traded at least once each year, with the trading stop not occurring for more than three months.

A total of 102 companies were purposefully selected for each year based on the mentioned inclusion criteria as the statistical sample, which according to the 10-year time domain of the research, sums to an overall total of observations is 1020 companies as the study population.

5. Hypothesis testing and research variables

The following regression models were used to test the hypotheses:

1) $\mathrm{AFE}_{i,t}= \alpha_0 + \alpha_1 DQ_{i,t}+(\alpha_2 \mathrm{DQ}_{i,t}*\mathrm{LACVE}_{i,t})+ \alpha_3 (\frac{\mathrm{BV}}{\mathrm{MV}})+ \alpha_4 \mathrm{FL}_{i,t}+ \alpha_5 \mathrm{SIZE}_{i.t}+ \alpha_6 \mathrm{AGE}_{i,t}+ \varepsilon_{i,t}$

2) $\mathrm{AFE}_{i,t}= \alpha_0 + \alpha_1 DQ_{i,t}+(\alpha_2 \mathrm{DQ}_{i,t}*SACVE_{i,t})+ \alpha_3 (\frac{\mathrm{BV}}{\mathrm{MV}})+ \alpha_4 \mathrm{FL}_{i,t}+ \alpha_5 \mathrm{SIZE}_{i.t}+ \alpha_6 \mathrm{AGE}_{i,t}+ \varepsilon_{i,t}$

a. Dependent variable:

The accuracy of earnings forecasting(AFE) is the dependent variable of the present study, and can be obtained as shown below:

3) $AFE_{it}=|(AP_{it} - FP_{it})/AP_{it}|$

In this model
AP_{it}= real earnings of company
FP_{it}= earnings forecast of company

b. Independent variable:

The independent variable of the proposed model is $DQ_{i,t}$ (Disclosure Quality Information), which is measured with respect to the ranking of the companies listed in Tehran Stock Exchange based on the score obtained in terms of disclosure quality and appropriate information calculated by the Securities Exchange Organization. Publishers' information score is calculated based on their information status and with regard to reliability and timeliness of information exchange. The criterion of timeliness is calculated

based on the time information is sent by a company at the specified levels in the disclosure guidelines with consideration of the amount of delay in sending information. The amount of volatility and changes in the submitted forecasts as well as the differences between the predicted amounts and the actual audited performance are the criteria for reliability of calculations.

c. Moderating variable:

$ACEV_{i,t}$(Accrual components of earnings volatility): Another variable of the research is the accrual components of earnings volatility, which are used to measure volatility via the Jayerman model (2008). The model measures smoothness—higher volatile earnings than cash flows—using the difference between earnings volatility and cash flow volatility. The initial step to this model includes defining the profit standard.

4) $E_{i,t} = CF_{i,t} + AC_{i,t}$

, where $E_{i,t}$ is the earnings of company i in year t. $CF_{i,t}$ is the cash flow of company i in year t. $AC_{i,t}$ are the obligations of company i in year t. The earnings variance is calculated by the following formula:

5) $VAR(E_{i,t}) = VAR(CF_{i,t}) + VAR(AC_{i,t}) + 2COV(CF_{i,t}, AC_{i,t})$

Accrual components of earnings volatility (ACEV) can then be reformulated as:

6) $ACEV_{i,t} = VAR(AC_{i,t}) + 2COV(CF_{i,t}, AC_{i,t})$

The two equations above then give:

$$ACEV_{i,t} = VAR(E_{i,t}) - VAR(CF_{i,t})$$

Table 1:Accrual components of earnings volatility

SMOOTH regime		VOLATILE Regime
$ACEV > 0$	$ACEV = 0$	$ACEV < O$

It is clear from equation (5) that neither $COV(CF_{i,t}, AC_{i,t})$ nor $\mathrm{VAR}(\mathrm{AC_{i,t}})$ in isolation can determine whether earnings are smoother or more volatile than cash flows. The variance of five years' annual earnings before extraordinary items, scaled by assets (EARNINGS VOL) is the proxy for earnings volatility, or VAR(E). The proxy for the volatility of cash flows, VAR(CF), is the variance of five years' operating cash flows, scaled by assets (CFO - VOL). Equation (7) shows that when ACEV = 0, earnings volatility equals cash flow volatility (i.e., Var(E) = Var(CF). A negative value of the parameter (ACEV < 0) indicates that earnings are smoother than cash flows, while ACEV > 0 shows that earnings are more volatile than cash flows. These scenarios are depicted in table 1; where the SMOOTH regime comprises earnings that are smoother than cash flows; the VOLATILE regime comprises earnings that are more volatile than cash flows; and the horizontal line (ACEV =0) represents the instances in which earnings volatility equals cash flow volatility.

d. Control variables:

Size: (company size): The natural logarithm of total assets book value was used as a measure of company size, assuming that larger companies are more likely to have higher persistent earnings than smaller ones. Large companies, in general, have higher fluctuations and forecast capability and are ultimately more accurate. For this reason, the size variable was incorporated into this study to control firm size (Ahmadi et al,2020; Jahanmiri,2017; Pakmaram et al,2018; Biabani et al,2020).

BV/MV: the ratio of the book value to its equity market value (the stock market price on the last trading day multiplied by the number of shares). A high value of this parameter indicates greater information asymmetry and uncertainties, which are likely to have a negative impact on a company's earnings persistence (Ahmadi et al,2020; Jahanmiri,2017).

Age: The life of a company is from the year of admission to the stock exchange to the period under consideration. Companies with a greater history of disclosure appear to have an increasing amount of accurate information (Ahmadi et al,2020; Jahanmiri,2017).

Financial leverage: calculated as total debt to total assets. Leverage was incorporated into this study based on the proposition by Eddy & Seifert who showed that higher financial leverage results in greater earning volatility, complicating the process of earning forecast. They argue that companies that have relatively more debt (higher financial leverage) get more earning fluctuations. Therefore the higher the financial leverage of a company, the less accurate earning

forecast will be)Pakmaram et al,2018; Biabani et al,2020).

6. Results

Table 2 presents the results of descriptive analysis of central indices such as mean, median, and dispersion indices such as standard deviation, Maximum and Minimum for different variables. As evident, the overall median is greater than the mean, indicating the presence of certain outliers which cause great fluctuations in the mean value. Similar values for mean and median indicate a state of symmetric distribution of variables. As the figures show, the mean disclosure quality, is 70.13 while mean accuracy for earnings forecasting (AFE) is 0.294; this implies that disclosure quality has the lowest stability among the research variables while financial leverage—with the lowest standard deviation— showed the highest stability during the ten years research period.

Table 2: Descriptive statistics

Variable	AFE	DQ	LACVE	SACVE	BV/MV	FL	SIZE	AGE
Mean	0.294	70.13	0.645	0.456	0.559	0.617	13.684	42.42
Median	0.136	72	1	0	0.458	0.63	13.681	45
Standard Deviation	0.402	20.58	0.607	0.498	0.503	0.211	1.6	13.24
Maximum	2.879	100	1	1	2.981	1.8	19.56	75
Minimum	0	6	0	0	2.869-	0.9	8.899	18

6.1. Classic hypothesis test

The results of the Durbin Watson test in Table 3 indicate a range of critical values from 1.5 to 2.5 representing no serial correlation between alternative models of the research. Another assumption of linear regression is that all residual components have equal variance. In this study, the assumption of consistency of residual variance was investigated by the Breusch-Pagan-Godfrey test. Since the output probabilities of both models (0.000) were less than 0.05, the zero (null) hypothesis of "no consistency of variance in both models" was rejected. Therefore, to eliminate variance heterogeneity, generalized least squares regression (GLS) was employed. To investigate the co-linearity between the model variables, the VIF(variance inflation factor) co-linear test was used. If the VIF statistic value in VIF co-linear testing for independent variables is less than 5, there is no co-ordenation between independent variables. Tables 4 and 5 show the results of the VIF co-linear tests for each hypothesis.

6.2. Model type selection tests

Before testing the research hypotheses, the appropriate model for the regression model must be selected**.** For this purpose, the F-Limmer test was used as an initial step to select the integrated data model concerning the combined data model. As shown in table 3, the probability for the F-limer test is less than significant (<0.05), and therefore, to test the hypotheses, the combined data model is suitable. As the combined data was substituted for the integrated data model, the Hausman test was performed to select the combined constant effects pattern against the combined random effects pattern. The probability of Hausman statistics in Table3 is also less than significant 0.05, providing sufficient reason to reject the pattern of random effects. Fixed effects model should be used to test the research hypotheses.

Table 3: Classic hypothesis test

Model	Model1		Model2		
Test	Statistic	P- Value	Statistic	P- Value	Results
Durbin Watson test	2.1	-	2.1	-	-
Breusch-Pagan-Godfrey test	116.8	0.000	114.95	0.000	heteroscedastic
F-Limer test	2.54	0.000	2.14	0.000	Combined data
Hausman test	13.98	0.0299	35.55	0.000	fixed effects

6.3. Model estimation: Model-fitting was performed

after testing the regression assumptions and ensuring their establishment based on the regression equation for the first hypothesis. The results are presented in Tables 4 and 5. Durbin Watson statistics were used to examine the autocorrelation between the residues. According to Table 4 and 5, Watson's camera statistics are equal to 2.10 and 2.10. Considering that this value is between the critical range of 1.5 and 2.5, there is no problem of autocorrelation between the residuals. On the other hand, the corresponding value for the F-test statistics are 4.96 and 4.79, while the p value for both models is 0.000; which confirms the significance of all models. Furthermore, the significance level of all independent variables is less than 5% therefore, H_1 assumption that the accrual part of long-term and short-term earnings fluctuations modifies the effect of disclosure quality on the accuracy of earnings forecasts is confirmed. Also, the adjusted coefficient of determination is equal to 0.29 and 0.28, respectively, which shows that for about 29% in the long-term model and about 28% in the short-term model the dependent variable is explained by independent and control variables.

Table 4. Hypothesis test results

Variables	Coefficient	T-statistic	prob	VIF
Constant	0.364	1.81	0.069	-
DQ	.0064	5.96	0.000	1.32
DQ*LACVE	0.005	8.63	0.000	1.006
BV/MV	-0.019	-0.601	0.547	1.047
FL	-0.002	-0.025	0.98	1.23
SIZE	-0.015	-1.40	0.159	1.06
AGE	-0.001	-1.43	0/151	1.15
R-square	0.36	F-statistic		4.96
Adjusted R-square	0.29	Prob(F-statistic)		0.0000

Table 5. Hypothesis test results

Variables	Coefficient	T-statistic	prob	VIF
Constant	0.56	2.93	0.0034	-
DQ	0.005	5.13	0.000	1.32
DQ*SACVE	0.046	8.43	0.000	1.01
BV/MV	-0.011	-0.352	0.72	1.045
FL	0.068	0.825	0.409	1.24
SIZE	-0.022	-2.10	0.035	1.06
AGE	-0.0026	-2.42	0.0155	1.15
R-square	0.36	F-statistic		4.798
Adjusted R-square	0.28	Prob(F-statistic)		0.0000

6.4. Wald model

According to the results of Figure 6 for the first hypothesis, since the significance level of the wald test for comparing the coefficients of the two variables (0.249) is greater than 0.05, the hypothesis of equality of coefficients of variables is accepted and the coefficients are equal in the long run. However, in the second hypothesis, the significance level of the wald test for comparing the coefficients of two variables (0.000) is less than 0.05, so the hypothesis of equality of coefficients of variables is not accepted and the coefficients are not equal. The difference in value of the coefficient of the two variables is also negative and equal to -0.040. Considering the absolute values of these two coefficients, 0.005 and 0.046, respectively, it can be determined that the coefficient of multiplication

of disclosure quality in short-term fluctuations has increased significantly compared to the disclosure quality coefficient.

Table 6. wald test

	MODEL1			MODEL2		
Variables	**VALUE**	**F-statistic**	**PRB**	**VALUE**	**F-statistic**	**PRB**
DQ	0.001	1.327	0.249	-0.040	58.55	0.000
DQ *ACVE						

7. Discussion and conclusion:

Investors and financial analysts consider earnings as one of the main criteria for evaluating companies and tend to measure the future profitability of the company in order to make decisions about holding or selling their shares, thus judging the situation of a company by predicting earnings. Earnings per share forecasts are of particular importance in investments. The aim of this study was to investigate the effect of disclosure quality on investors' judgment considering the informational role of accrual components of earnings volatility. The results of the first and second hypothesis tests show that disclosure quality has a positive and significant effect on the accuracy of earnings forecasting (investors' judgment/decisions). This means that companies that disclose greater amounts of quality information are more accurate in terms of forecasts and earnings estimates. Disclosure of quality information is also a factor that reduces the information asymmetry and agency costs between managers and investors or between groups of investors, thereby leading to reductions in capital costs. These are al findings that are consistent with results found by past researches by Yang et al (2020), Goodman et al (2015), Long & landhom (1996), Yadkarnia (1398), Turkman et al. (2012) and MojaverTabriz et al(2018). Other results obtained for the first hypothesis show that disclosure quality has a relatively low impact on earnings forecasting accuracy in companies that have had higher earnings volatility in the long run than cash flows. It can be stated that earnings volatility is a great factor of accuracy earnings forecasting, whereby increasing the earnings volatility for cash flows with low volatility, gives the investor more important earnings volatility and has a alleviating effect on the accuracy of earnings forecasting. These results are also consistent with the researches of Lu (2019), Nguyet (2017), Dicho & Tang (2009), Graham et al (2005), Mashayekh & Ayyad Ahsan (2015), Nikbakht et al (2020), Hajiha & Chenari (2016) and Mehrani & Hesarzadeh (2011). However, concerning the second hypothesis, contrary to the first hypothesis, with increasing earnings volatility in the short term compared to increases in cash flows, not only failes to diminish information, but rather led to significant increases in the coefficient of disclosure quality for the accrual part of the earnings volatility. In the words of Gull and Thakur (2003), high earnings volatility lead to more informational benefits for informed investors than uninformed investors. They believe that if a number of investors are uninformed, they prefer managers to report as smooth earnings as possible. It can be interpreted that investors consciously judge and pay attention not only to the amount of profit, but also to investors, the sustainability of cash flow volatility is an important parameter and considered as a positive advantage in times of decision making. These findings are in conformity with results given by Choline & Gulli (2014), Herslifer & Vishini (2011), Gebhardt et al. (2013), Minton et al. (2002), Niko Maram & Rezaei (2013), Kordestani & Lotfi (2011) and Rudpashti & Valipour (2009). As the overall findings suggest, investors are recommended to pay attention to not only the amount of profit, but also the amount of cash flow volatility as a factor of influence. This can provide investors with relevant information for judgments and decision making. It further suggested that future researches focus on the effect of disclosure quality with respec to other variables, indicating the judgment and decision of investors such as trading volume and earnings reaction coefficient.

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