Studying Relationship between Qualitative Features of Profit and Return on Common Equity (A Data Mining on the Banks Accepted in Tehran Stock Exchange)

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Abstract: The present research was conducted to study the relationship between the qualitative features of the profit, such as persistence, predictability, conservatism, timeliness of profit and return on owner's equity and the factors mentioned have been considered as independent variables. The purpose is to understand and promote the level of qualitative features of information backing profit that is published in the capital market and can be useful in making decision. Return on common equity has been calculated based on dividing net profit of the period on the product of common equity changes in stock price and has been considered as the dependent variable. As well the control variables of the size of company, the coefficient of changes of profit (operational risk) and the ratio of book value to the market value as well were taken into account for improving results in research model. In order to collect the data, the published information of the Banks accepted in over-the-counter securities and stock Exchange of Tehran in the period between2010 until 2014. Finally, with the use of statistical analysis software and the results of testing hypotheses it was determined the qualitative features of the profit including persistence, predictability, timeliness and relevancy are associated positively and significantly with return on owners' equity; but there was reverse and not significant relation between conservatism and return on common equity.

1. INTRODUCTION

The profit amounts are one of the very important information for the capital market; corporate profits are carefully followed by market capital; so profit is the best indices of measuring economic activities of an economic unit. The scientists and researchers have been described different approaches to it in the framework of the scientific findings. They have measured Strengths and weaknesses of interpretations and increased its capabilities and accuracy. (Nimi, 2005)

Companies that based on final information become informed of their high profitability, pay stock dividend the market considers it a sign of good news and thus its stock is evaluated with a higher price. (Kaustav, 2009)

All extra-organizational users are trying to predict, by the help of the reported financial information, the profit in the upcoming periods. So investors can estimate their expected return using financial data of companies. Meanwhile investors in comparison with other performance indices (such as cash dividend, cash flows and changes in profit)

have greater reliance on information relating to profit (Lenuse&Verrecchia2004,). Hence the reported profit is one of the criteria for determining the expected return of investors.

for being able to help to users in evaluating a company's profitability and performance and based on which the investors relying on the information estimate their expected return, the reported profit must make possible the past performance evaluation and be effective in measuring profitability and predicting future activities. So in addition to being a reported profit amount is important for investors and affects their decision, the qualitative features of the profit as one of the dimensions of the profit information is of special interest to the investors. (Zariffard, 2006)

The main factor that each investor takes into account in his decisions is the rate of return. Investors are looking for the most productive opportunities to invest their surplus in capital markets. On the other hand, in the field of predicting stock return which is one of the subjects of interest to investors and financial researchers, so far, there have been

many attempts to provide a model that can predict reliably the return on stock. (Mardani, Mehdi et al, 2017)

It is very important for corporate managers to pay attention to the fact that the reported information risk affects return expected by investors. The existence of confidential information of managers and inaccuracies in reported information will increase the risk of information. The return expected by investors is affected by the risk of information. Information risk depends on the amount of confidential information and the accuracy of the reported public information. The higher the amount of confidential information and the lower the accuracy of the provided information, higher will be the return expected by investors. (Ghosh and Jane, 2004)

Profit changes are recognized as an index of accounting information risk. Given that information risk is due to inaccuracies in the provided information and the inability of the existing information in estimating the expected return, it is expected that each of the qualitative features of the profit, which, from the perspective of the investors, is undesirable andmakes uncertain the estimating of expected return, affect negatively the performance of the bank which the return on equity is its most important one (Gosh and Jane, 2004). On the other hand, the banking industry is among the most important industries in the world, and the growing spread of human knowledge in the field of electronic sciences has made this industry be more beneficiary. Today, banks in advanced countries act as professional advisers, experts in increasing corporate finance and collecting and exchanging information necessary for their customers, and are regarded as one of the economic motor power of each country. This has led to a tight competition between them. With the ever-increasing development of technology and the industrialization of countries, the banks managers are trying to increase the modern banking services, whose distinctiveness compared to other competitors' services is of a special privilege to attract customers' deposits. In advanced countries, more than 70% of bank affaires of bank services users are done without the presence in bank branches and using electronic systems. Therefore, using modern banking technology and implementing a customer-centric plan, the banks try to reduce the need for customers' visiting the branch office, so that in this way the customers can do business in their work or residence. (Jackson, 2005)

Therefore, in this research, the effect of five qualitative features of profit including profit persistence, profit predictability, relevancy of profitto stock value, timeliness of profit and conservativeness of profit on banks performance (return on equity) has been investigated.

According to what was described, 5 features have been considered for profit quality:

1. Profit persistence

Aprofit that is not resulted from unusual and unexpected activities has more persistence. In other words, the profit persistence is defined as durability and repeatability of profit. Financial analysts and investors in determining future cash flows do not consider accounting profit amount as the only determinant index, but the persistence and repeatability of reported profit are important for them. They pay more attention to constituent items than the final amount. From their point of view, the profit resulting from recurring operational activities is a good criterion for estimating future cash flows. (Karami and Moradi, 2006)

The higher profit persistence is associated with the larger coefficient of the profit variable in the profit / return regression. (Khajavi & Nazemi, 2005)

2. Profit predictability

The predictability of profit is called the profit self-predicting capacity. This qualitative feature of profit is evaluated by financial analysts and is as an integral part of the valuation models. In theoretical framework of the Financial Accounting Standards Board the predictability has been proposed as part of the relevancy feature and is defined as follows:

The quality of information that helps users to increase the probability of accurate prediction of past or present results. The American Accounting Association, in a manifesto of the Accounting Theory, writes: "in articulating standards the comprehensive criterion is the usefulness of information." Almost without exception, the literature on this subject has linked the usefulness to facilitating decision-making. In making a decision, one of the most important points is the result of the decision that, due to being associated the outcome of the decision with the future, determining the outcome of the decision is done through the prediction.

Therefore, accounting information should be able to predict to be able to help investors for facilitating decision making. (Khaleqi, 2005)

3. Profit relevancy

Profit is one of the best indices of measuring the activities of an economic unit (Saqafi and Kordestani, 2004). Financial reports also emphasize profit information. Therefore, the reported profit should help investors in determining the value of the company. In fact, the calculation and report of profit should be such that having this feature it can meet this goal. That is, the profit should be related to the value of the stock. The test of profit relevancy of profit to the stock value is one of the approaches to defining operationally the relevance and reliance of the Financial Accounting Standards Board. Because the accounting amounts (especially profit) will be related to the stock value when it can explain the changes in stock return. In this case, it will be useful to investors in evaluating stocks and it will be about decision making. Also, these amounts have so reliance that are reflected in stock price. (Barreth William and Landsman, 2001)

4. Profit timeliness

Information should be timely. If profit information is timely, the investors' expected return will be real too. On the other hand, whatever information is reported at shorter intervals, due to the high level of information available to investors the company's information risk will be low. This will reduce the overall investment risk of the company and reduce the return expected by investors (Francis and Olson, 2005). The timeliness of profit as a feature is based on the idea that accounting profit is intended to measure economic profit, which is defined as a change in the stock market value. The explanatory power of profit in regression represents the timeliness of profit. The timeliness does not distinguish between the positive and the negative return. (Francis & Olson, 2004)

5. Profit conservatism

Conservatism in accounting has been defined as the difference in the necessary confirm ability for understanding profit and loss. The origin of conservatism is uncertainty about the future (Watts, 2003). The future is always ambiguous and the future conditions cannot be accurately estimated. In accounting, two sources create uncertainty. First, accounting is usually for business units that are expected to continue in the future. Since most of these activities are allocated to past and future periods, we should take assumptions about the logic of these allocations based on the expectation of the future. Although some assumptions and expectations will be valid for allocations in subsequent periods, it may never be possible to fully approve the allocation process. Second, most calculations and measurements in accounting are determined based on the "money's worth of wealth," which involves estimating uncertain future amounts. (Mojtahedzadeh, 2002)

Conservatism shows the ability of accounting profit for reflecting the economic profit (positive return on stocks) and economic loss (negative return on stocks). The conservatism emphasizes on distinguishing the positive and negative return on stocks (economic profit and loss). The conservatism is obtained from the ratio of the explanatory variable of the profit (in the profit/return regression) in negative return on the positive return on the stock. The combination of timeliness and conservatism represents transparency of profit as a qualitative feature demanded by customers. (Francis, Olson and Chipper, 2005)

To measure the performance of banks, the ratio of return on (common) equity has been used. The return on equity ratio reflects the return on shareholders, and based on division of the net profit after fraction of the tax on average equity is calculated; it is considered as a dependent variable in this research.

2. THEORETICAL FOUNDATIONS AND REVIEWING RESEARCH BACKGROUND

Francis et al (2003) used the profit amounts as a variable for understanding the value of information related to the pattern of profits. According to Shiper and Vincent (2003), the profit quality is used to take investment decisions as well as sign contract. A lot of research has been done by Heng, Zang, Diss and Mufit (2009), Chan, Jogadish and Lakonishak (2006) on the relationship between the quality of profit and the performance of companies in different countries. Previous research results suggest that a decline in the relationship between profit and company performance measurement indicates a decline in the quality of profit. Badi (2002) also defines the quality of profit in terms of "the extent to which we expect the reported profit to be stable". For Richardson et al (2003), the profit quality is the degree of stability of earnings performance in the upcoming period. Benish and Vargas (2003) define the quality of profit as the probability of persistence of current earnings in future. Penman and Zhang (2002) define the quality of profit as the ability to profit in the presentation of future earnings. Skipper & Winsent (2003) regard the quality of profit as related to the profit viewed by Hicks, that is, in their view, the quality of profit is "anextent of honesty that shows the reported earnings in the Hicks' earnings report." According to Hodge (2003), the earnings quality is the degree of difference between the reported net profit and actual earnings. The definition of the quality of profit by Mikhail et al (2003) is the degree to which the company's past earnings are matched with its future cash flow. Lagui and Marquarte (2004) regard the high-quality profit that which is closer to the value of the company in the long run and contains more informational content. Scholar (2004) defines the quality of profit as the relationship between accruals and cash flows. Richardson et al (2001) have defined the quality of profit based on the persistence of current profits in future periods. Therefore, aprofit of more persistence is considered to be of a higher quality. Dichau and Dichu (2002) consider the better quality of profit due to the decrease in operational accruals of the current year. Pratt (2003) has defined the quality of profit as the difference between the reported profit in the form of profit and loss and real profits. According to Bergstler et al (2009), conservatism was introduced as an important characteristic in assessing the quality of profit. According to Ball and Shiva Kumar (2010), the financial information of private companies is far lower than that of companies comparable in size and industry in the stock market.

2-1 Domestic conducted researches

Janjani (2011) in a research deals with the Relation of Profit and Its Components with Stock Return with an Emphasis on the Quality of profit in Companies Listed in Tehran Stock Exchange. In order to investigate this subject, a sample consisting of 230 companies from companies listed in Tehran Stock Exchange has been selected for the period of 7 years between 2002 and 2008. Based on the combinatory

method, the results indicate that the components of the profit both have information content, but the profit cash component is more informative than its accrual component. Also, the results of this research show that companies of high-quality profit have positive return and companies of low-quality profit are of negative return, so that the companies with the highest quality of profit were able to achieve return, in the survey period, 17% more profit than those with the lowest quality of profit.

Ismailzadeh (2010) examined the effect of corporate governance on profit quality in Tehran Stock Exchange during the years 2004 to 2008. The corporate governance mechanisms studied in this research, the percentage of ownership of institutional shareholders, the number of block of major shareholders, the percentage of non-executive directors in the board of directors, the absence of the managing director as the chairman or vice chairman of the board of directors, and the size of the auditor are independent. Testing research hypotheses has been done by using panel analysis and information of 94 companies listed in Tehran Stock Exchange during the years 2004-2008 through combining time series and cross-sectional data. The results of the research show that there is a significant positive relationship among the percentage of ownership of institutional shareholders, the number of block of major shareholders, the percentage of non-executive directors in the board of directors, the absence of the managing director as the chairman or vice chairman of the board of directors, the size of the auditor and the quality of profit.

Saghafi and Boulou (2009) investigated the cost of equity with four features of profit based on accounting data, including the profit quality of accruals, persistence, predictability and smoothing in Tehran Stock Exchange. The results of this research indicate that only the feature of profit persistence is of a negative relationship with the cost of equity. Also, consideration of differential adjusted determination coefficient by adding these variables to the base model indicates that the feature of profit persistence among the profit features has the most impact on the cost of equity.

Kordestani and Majdi (2007) examined the relationship between qualitative features of profit and the cost of common stock capital. In this research, the relation of the five qualitative features of profit, including profitability persistence, profit predictability, relevance of profit to stock value, timeliness and conservatism of profit with the cost of common stock capital has been studied. The results of the research confirm the existence of an inverse relationship between the qualitative features of profit, including profit persistence, profit predictability, relevance of profit to stock value, timeliness of profit and the cost of common stock capital; this is statistically significant. But there has been not observed any significant relationship between conservatism of profit and the cost of common stock capital.

Boulou (2006) has examined the qualitative features of profit and cost of equity. He examined the relation of the cost of equity with four features of profit based on accounting data including accruals quality, persistence, predictability and smoothing in Tehran Stock Exchange companies. The results show that only the feature of profit persistence is of a negative relationship with the cost of equity.

Nourvash, Nazemi and Heidari (2006) studied the quality of accruals and profit emphasizing on the role of accrual estimate error. The results of the research show that changes in working capital can be used as a tool for assessing the quality of profit, and the quality of accruals is associated significantly and positively with profit persistence.

Karami, Tajik and Moradi (2006) examined the relationship between profit quality and capital increase based on shareholders' claims. The results of the research do not confirm the relationship between the quality of profit and the increase based on shareholders' claims.

Mashayekh and Ismaili (2006) examined the relationship between the quality of profit and some aspects of the principles of corporate leadership, and found that the number of non-executive directors and the percentage of ownership of members of the board of directors who are considered as mechanisms of corporate leadership principles play an important role in promoting the quality of corporate profit.

Khajavi and Nazemi (2005) examined the relationship between profit quality and stock return with an emphasis on the role of accruals. The results of the research indicate that the average stock return of companies is not affected by the amount of accruals and its components.

Saghafi and Kordestani (2004) investigated and explained the market reaction to changes in unexpected profit and cash profit, as well as the relationship between profit quality and market response to changes in unexpected profit and cash profit. The profit quality in this research has been evaluated based on profit persistence, the predictability of profit and the relation of profit with the operational cash flow by using regression models. In their research, after controlling the information environment, the set of investment opportunities, the attitudes of the recipients of cash benefits and company's operational risk, the findings show that:

• According to the profit quality based on the predictability of profit, the relation between operational cash flow and profit, and the relation between operational cash flow and profit components, the profit quality does not have a significant relation with the market reaction to increase in cash profit.

• According to the profit quality based on profit persistence, the market response to the increase in corporate cash flow is positive contrary to predictions.

• According to the profit quality based on the persistence of profit, the predictability of profit and the relation of

operational cash flow and profit components, the profit quality does not have a significant relation with the market reaction to decrease in cash profit.

• According to the profit quality based on the relation of operational cash flow and profit, the market response to the decrease in corporate cash flow is positive in accordance to predictions

• According to the profit quality based on the persistence of profit, the predictability of profit, the relation of operational cash flow and profit, relation of operational cash flow and profit and profit components, the profit quality does not have a significant relation with the market reaction to unexpected changes in profit.

Safafi and Kordestani (2004) investigated the relationship between profit quality and profit reaction and market reaction to cash dividend changes. They assessed the profit quality based on the three criteria of the relationship between operational cash flows and profit, operational cash flows and profit components, profit predictability and profit persistence. The results of this research show that the quality of profit calculated on the basis of companies' historical information is less taken into account in the market response to profit changes.

Zariffard (1999) has studied the factors affecting the profit quality of Iranian companies. In their research, the desirable and undesirable features related to each element affecting the quality of profit have been presented and it is emphasized that the quality of reported net profit of each of them is at any given time a function of the degree of desirable and undesirable features of accounting and financial components of net profit affecting the quality of profit, which is also a function of the perceptions and insights of each analyst and other users.

In another research, Zariffard has studied the factors associated with the assessment of the quality of profit. Research findings show that the factors reflecting the level of risk, the nature of the used accounting methods, the political and economic considerations, the financial and structural features are the factors associated with the quality of profit. There is no significant difference among the views of users of accounting information on the reporting of factors related to the quality of profit, and the users of accounting information are of similar views on factors related to the quality of profit.

2-2 Foreign conducted researches

Chiou Chi (2009) studied the impact of financial reporting transparency on the company's function and value in the Taiwan Stock Exchange. The results of his research showed that the transparency of disclosure of financial information maximizes the company's value and prevents the incidence of moral hazards between the manager and the owner.

Francis et al (2005) came to conclusion that the quality of accruals affects the cost of financing. In addition, the cost of

capital of companies with accruals with a lower quality is greater.

Chan et al (2004) investigated the relationship between accruals (difference between profit and cash flows) and future stock return and showed that companies with high accruals in the period after reporting financial information are of decreased return on equity. One interpretation of these results is that companies with low profit quality (that is, companies with high accruals) fall in return decrease in the aftermath of profit reporting, because investors are aware of Companies' low profit quality and adjust stock price accordingly.

Gosh et al (2004) examined the quality of profit and the coefficient of profit reaction during stable increasing profit and sales. The results of their research showed that companies with growth in profit with increasing sales have higher profit quality and higher profit reaction coefficient than companies with growth in profit with decreasing cost.

Jennifer et al (2004) have examined the relation of the quality of profit with a specific cost of debt and the specific cost of common owners' equity. In this research, the relation of the eight indices of the quality of profit with the specific cost of debt and the specific cost of common equity has been examined. The results of this research show that companies with lower profit quality have higher stock and equity costs than those with high profit quality. Jennifer Francis et al, in another research, have analyzed the effect of seven qualitative features of profit, including the quality of accruals, profit persistence, profit predictability, profit uniformity, relevance of profit to stock value, timeliness of profit and conservatism of profit on the cost of common equity capital. The research findings suggest that companies whose qualitative features of profit are lower, compared to companies with higher qualitative features of profit, have experienced a higher common stock capital cost.

Adopting a different approach, Lenuse and Verchia (2004) have investigated the role of financial performance reports (such as profit) in the alignment of the company and investors in relation to investment decisions. According to the results of this research, the poor reporting quality leads to the elimination of alignment and management factors and investors in relation to investment decisions of the company and thus increases the risk of information. Given this, the investors demand a high risk due to the low level of reporting quality and the increased risk of information, which means that the expected return rate (capital cost) increases.

Francis et al (2003) examined the relation of the quality of profit with the specific cost of debt and the specific cost of common owners' equity. In this research, the relation of eight indices of profit Quality with special cost of debt and special cost of common owners' equity has been investigated. The results show that the companies with low

profit quality have higher debt cost and higher share capital cost compared to companies with high profit quality.

3. RESEARCH HYPOTHESES

In this research, the relationship between qualitative features of profit and return on equity has been studied to provide a scientific answer for the following question.

Do the qualitative features of the profit affect the return on common equity?

In order to find an answer to the main research question, the research hypotheses have been elaborated as follows:

First Hypothesis: profit persistence has a significant effect on the return on common equity.

Second hypothesis: predictability of profit has a significant effect on the return on common equity.

Third Hypothesis: relevancy of profit to stock value has a significant effect on the return on common equity.

Fourth Hypothesis: Conservatism of profit has a significant effect on the return on common equity.

Fifth hypothesis: Timeliness of profit has a significant effect on the return on common equity.

4. RESEARCH METHODOLOGY

This research is an empirical research and given that the historical data has been used to test the hypotheses, it is included in the quasi-experimental research group. The banks accepted in the Tehran Stock Exchange constitute the statistical population of the research. Statistical samples have been also selected based on the following conditions:

1. Banks would be admitted to the Tehran Stock Exchange since the beginning of 2010-2016.

2. There would be no trading delay for more than 6 months.

3. The information needed to calculate the research variables in the years under study would be available.

According to the above conditions, 15 banks were selected from between all accepted banks in Tehran Stock Exchange. After the systematic removal of the research samples, our study was limited to 7 banks: Banks of Mellat, Trade, Export, Parsian, Sina, Modern Economics and entrepreneur bank.

4-1 Research variables

4-1-1 Independent variable

Independent variables, based on the above mentioned contents, include five qualitative features of profit: persistence, predictability, relevancy, timeliness and conservatism.

4-1-2 Dependent variable

As shown in Table (1), the return on common equity has been considered as a dependent variable.

Table 1: Independent and dependent variables

Independent variables	dependent variables
Profit persistence	
Profit predictability	
Profit relevancy	return on common equity
Profit conservation	
Profit timeliness	

4-2 Models used for evaluating profit qualitative features

In this research, the qualitative features of profit including persistence, predictability, relevancy of profit to stock value, conservatism and timeliness of profit have been evaluated using model 1 to 3.

1) Persistence of profit: for evaluating It the model (1) has been estimated as follows.

Model (1) $$Ej,t = \beta_{0,j} + \beta_{1,j}E_{j,t-1} + \varepsilon_{j,t}$$

The explanatory variable coefficient $E_{j,\,t-1}$, namely $\beta_{1,\,j}$ in model (1), which is a first-order self-regression model, represents the profit persistence. This model has been estimated in rotationally (periodically) for 5 years to assess the persistence of annual profit. In this method, the one-year data is removed from the beginning of the research period and one-year data is added from the last years to the model. For example, based on the data of the years 2010 to 2014, the profit persistence of 2014 has been evaluated and based on the data of 2011 to 2015, the persistence of 2015 and so that of other years have been evaluated. When the value obtained for the coefficient of the explanatory variable$\beta_{1,\,j}$ is closer to number 1, the profit persistence is greater and, when it is closer to zero, the temporariness of profit is greater.

2. Predictability of profit: Francis et al used the following model for evaluating it:

Model (2)   Predictability $= \sqrt{\delta^2(Vj)}$

In this model, after estimating model (2), the square root of the error is calculated and the higher (less) obtained values imply less (more) predictability of profit.

In this research, the predictability of profit has been evaluated based on model (2). Accordingly, the coefficient of determination derived from the estimate of model (1) represents the predictability of profit.

3. Relevancy of profit to the stock value: for evaluating this qualitative feature of profit the following model has been estimated (3).

Model (3) $$RET_{j,t} = \beta_{0,j} + \beta_{1,j}E_{j,t} + \beta_{2,j}\Delta E_{j,t} + \varepsilon_{j,t}$$

The coefficient of determination derived from the estimate of the model (3) has been considered as representing the index of the relevancy of profit to the stock value. Relevancy shows the explanatory power of stock return by accounting profit.

4. Timeliness of profit: for evaluating it the model (4) has been estimated as follows.

$$E_{j,t} = \beta_{0,j} + \beta_{1,j}NEG_{j,t} + \beta_{2,j}RET_{j,t} + \beta_{3,j}NEG_{j,t} * RET_{j,t} + \varepsilon_{j,t}$$

Model (4)

The determination coefficient obtained from the estimate of the model (4) with a negative sign has been considered as the index of the profit timeliness. The more (less) obtained values imply less (more) profit timeliness.

5. Conservativeness of profit: this qualitative feature of profit is considered in accordance with the Francis & Bisou's research based on the estimate of model (5) equivalent to the ratio of negative returns coefficient to the positive returns coefficient of the stock and has been calculated as follows:

Model (5) $Conservatism = -\frac{(\beta 2,j + \beta 3,j)}{\beta 2,j}$

In this model, the conservatism distinguishes the positive returns of stocks (economic profit) from the negative returns of stocks (economic loss). The greater (less) obtained values imply a less (more) conservative profit.

In models (1) to (3) which have been used to assess the five qualitative features of profit, the variables have been defined as follows:

$E_{j,t}$: Profit before unusual items of bank j in year t

$E_{j,t-1}$: Profit before unusual bank j items in year t-1

$RET_{j,t,t}$: return of company j in year t

$E_{j,t}\Delta$: Profit changes before unusual items compared to previous year

$NEG_{j,t}$: Negative yield index equal one if RET<0 and otherwise it will be zero.

$\beta_{2,j}$: positive returns coefficient of stock (economic profit or good news)

$\beta_{3,j}$: negative return coefficient of stock (economic loss or bad news)

Calculating the rate of return on owner's equity and control variables

For measuring the performance of banks the ratio of return on equity has been used. The ratio of return on equity represents the return on shareholders and is calculated based on division of the net profit after tax on the average owners' equity; it has used in this research as the dependent variable. The ratio of return on equity is calculated as follows:

Model (6) $ROE = \frac{(Ej,t)}{(et + et - 1)/2}$

ROE: The ratio of return on equity

$E_{j,t}$: the net profit after tax of company jth in period t

et: return on equity in period t

E_{t-1}: return on equity in period t-1

Control variables

The impact of profit qualitative feature on the return on equity can be resulted from the information environment and every company's specific features; in this research for the sake of increasing accuracy and reliance of results, the

three variables of size of company, ratio of book value to market value and coefficient of profit changes (company's operational risk) have been controlled.

Size of bank: it is equivalent to bank's asset book value logarithm.

Model (7) $SIZE_{j,t} = Log(Assets\ BV_{j,t})$

Ratio of book value to market value: it is equivalent to the ratio of book value of company's stock to its market value.

Model (8) $BM = \frac{StockBV}{Stock\ MV}$

Coefficient of profit changes: it has been used as an index of company's operational risk and is equivalent to the ratio of profit standard deviation on average profit between the years t-1 to the year t.

Model (9) $Var.\ Coef_{j,t} = \frac{\delta(E)}{X(E)}$

Models used for testing hypotheses

In this research for examining relationship between the profit qualitative features and return on equity, the following general model has been used:

Model (10) $ROE_{j,t} = \beta_0 + \beta_{1,j}VarCoef_{j,t} + \beta_{2,j}SIZE_j + \beta_{3,j}BM_{j,t} +$

In model (10) the variables are defined as follows:

$Attrib_{j,t}$: in the hypothesis kth (first to fifth) it is equivalent to profit persistence, profit predictability, profit relevancy to value of stock, profit timeliness and conservativeness of profit of bank j in year t.

$ROE_{j,t}$: return on equity of bank j in year t

$BM_{j,t}$: ratio of book value to market value of company's (j) stock in year t

$SIZE_{j,t}$: size of company j in year t

$VarCoef_{j,t}$: coefficient of profit changes of company j between the years j-1 to the year t

5. RESEARCH FINDINGS
5-1 Descriptive statistics

In this research, based on the models (1) to (5) and using the data of years 2010-2016, the index of qualitative features of profit is calculated and then the return on owners' equity and control variables for a 5-year period are calculated and set as foundation of testing hypotheses.

In order to increase the reliance of the results the normality of the dependent variable was investigated. P-value based on the Jarque-Bera statistic is equal to 0.067;it indicates that the zero hypothesis, which confirms the normality of the dependent variable, is not rejected at the error level of 5%, so the dependent variable is normal.

In Table 2, descriptive statistics of the research data, including mean, standard deviation, maximum and minimum of variables, kurtosis, and skewness, have been presented in terms of the individual variables.

Table 2 - Central indices and Scattering of Independent and dependent Variables

variable	Mean	median	maximum	minimum	Skewness	kurtosis	Jarque-Bera
Return on owners' equity	9.04796	9.316401	38.9300	0.410000	2.784855	0.239917	0.067
Size	9.382788	9.684674	14.74290	7.779665	2.504456	0.543562	0.47
Ratio of book value to market value	1.300851	1.323486	3.177791	0.46587	2.257690	0.836101	0.36
Profit changes coefficient	0.3758456	0.399412	0.3789084	0.371021	2.399424	0.786911	0.73
Profit relevancy index	6.663746	5.666667	9.236985	3.5018650	2.517117	0.568190	0.27
Profit predictability index	4.18623	3.39462	8.754139	4.628731	3.190685	0.794420	0.26
Profit information timeliness index	4.16954	3.225461	8.174951	4.221457	2.233126	0.119715	0.24
Profit conservativeness index	4.000454	-1.0045	5.000900	-3.00025	2.384413	0.936310	4.8
Profit persistence index	3.453284	2.87612	7.81465	3.934795	2.186775	0.916457	0.33

5-2 Inferential statistics

Data analysis method: data analysis of this research and statistics deduction have been conducted by Eviews software and T-student statistics. Initially, the normality of the data was examined using the Kolmogorov-Smirnov test and then, using the mentioned statistic, the hypotheses were rejected or confirmed.

In this section, the valid Kolmogorov-Smirnov test is used to check the normality of variables. If the level of significance calculated in the test that is calculated by the Z statistic, is greater than 0.05 at error level of 5%, the value is, the mentioned variable is normal, and if it is less than 0.05, the variable is not normal. The results are as shown in Table (3):

Table 3 - Normality of data studied through Kolmogorov-Smirnov test

variables	Return on owners' equity	Size	Ratio of book value to market value	Profit changes	Profit relevancy	Profit predictability	Information timeliness	Profit persistence	Conservativeness of profit
Statistic z	2.08	0.89	1.71	1.22	0.06	1.19	0.71	1.09	1.67
P-Value	0.120	0.406	0.089	0.101	0.719	0.117	0.687	0.056	0.057

It is noticeable that the P-value of the research variables is greater than 0.05, so the normality of the data is confirmed.

5-2-1 Testing research first hypothesis

The first hypothesis states: "Persistence of profit has a significant effect on the return on owners' equity".

To test this hypothesis, the model (11) has been used:

Model (11)

$$ROE_{j,t} = \beta_0 + \beta_{1,j} VarCoef_{j,t} + \beta_{2,j} SIZE_j + \beta_{3,j} BM_{j,t} + \beta_4 persist_{j,t} + \varepsilon_{j,t}$$

H_0: $\beta_4 = 0$
H_1: $\beta_4 \neq 0$

The result of testing the first hypothesis based on the model's estimate has been given in Table (5):

Table 5. T test results for the first hypothesis

Variable	coefficient	Statistic t	P-Value
y-intercept	0/877	1/44	0/148
Size of company	-0/0969	-2/411	0/0163
Ratio of book value to market value	0/0507	1/464	0/1437
Profit changes coefficient	-0/3247	-2/390	0/0172
Profit persistence	0/6292	2/508	0/0124
Determination coefficient	0/392	Statistic F	31/74
Moderated determination coefficient	0/383	P-Value	0/000
			Durbin-Watson statistic: 1.76

As shown in Table 5, there is a positive and significant relationship between profit persistence and return on common equity, and the first hypothesis of the research is approved at error level of 5%. Also, the control variable of the coefficient of changes is associated inversely and significantly with the return on common equity and the size of the company has a negative relation with that. The Durbin-Watson statistic confirms the absence of a linear relationship (correlation) on the components of the model error.

5-2-2 Testing research second hypothesis

The second hypothesis states: "Predictability of profit has a significant effect on the return on owners' equity".

To test this hypothesis, the following model has been used:

Model (12) $$ROE_{j,t} = \beta_0 + \beta_{1,j}VarCoef_{j,t} + \beta_{2,j}SIZE_j + \beta_{3,j}BM_{j,t} + \beta_4 predict_{j,t} + \varepsilon_{j,t}$$

$H_0: \beta_4 = 0$
$H_1: \beta_4 \neq 0$

The result of testing the second hypothesis based on the model's estimate has been given in Table (6):

Table 6 - T test results for the second hypothesis

variable	coefficient	Statistic t	P-Value
y-intercept	0/072	5/68	0/000
Size of company	-0/012	-2/89	0/002
Ratio of book value to market value	0/016	1/752	0/014
Profit changes coefficient	0/3201	8/432	0/000
Profit predictability	0/039	5/114	0/001
Determination coefficient	0/521	Statistic F	43/28
Moderated determination coefficient	0/498	P-Value	0/000
Durbin-Watson statistic: 1.82			

As shown in Table 6, there is a positive and significant relationship between profit predictability and return on common equity, and the second hypothesis of the research is approved at error level of 5%. Also, the control variable of the coefficient of changes is associated positively and significantly with the return on common equity and the size of the company has a negative significant relation with that. The Durbin-Watson statistic confirms the absence of correlation in the components of the model error.

5-2-3 testing research third hypothesis

The third hypothesis states: "Relevancy of profit to the stock value has a significant effect on the return on common equity".

To test this hypothesis, the following model has been used:

Model (13) $$ROE_{j,t} = \beta_0 + \beta_{1,j}VarCoef_{j,t} + \beta_{2,j}SIZE_j + \beta_{3,j}BM_{j,t} + \beta_4 relevance_{j,t} + \varepsilon_{j,t}$$

$H_0: \beta_4 = 0$
$H_1: \beta_4 \neq 0$

The result of testing the third hypothesis based on the model's estimate has been given in Table (7):

Table 7 – t test result for third hypothesis

variable	coefficient	Statistic t	P-Value
y-intercept	0/068	4/96	0/000
Size of company	-0/039	-3/411	0/0193
Ratio of book value to market value	0/048	1/587	0/049
Profit changes coefficient	0/125	7/501	0/000
Profit relevancy to stock value	0/000	0/876	0/525
Determination coefficient	0/421	Statistic F	35/962
Moderated determination coefficient	0/344	P-Value	0/000
Durbin-Watson statistic: 1.76			

As shown in Table 7, there is a positive and relatively significant relationship between profit relevancy to stock value and return on common equity, and the third hypothesis of the research is approved at error level of 5%. Also, the control variable of the coefficient of changes is associated positively and significantly with the return on common equity and the size of the company has a negative significant relation with that. The Durbin-Watson statistic confirms the absence of correlation in the components of the model error

5-2-4 Testing research fourth hypothesis

The fourth hypothesis states: "Conservativeness of profit has a significant effect on the return on common equity".

To test this hypothesis, the following model has been used:

Model (14) $ROE_{j,t} = \beta_0 + \beta_{1,j}VarCoef_{j,t} + \beta_{2,j}SIZE_j + \beta_{3,j}BM_{j,t} + \beta_4Conserv_{j,t} + \varepsilon_{j,t}$

$H_0: \beta_4 = 0$
$H_1: \beta_4 \neq 0$

The result of testing the fourth hypothesis based on the model's estimate has been given in Table (8):

Table 8 - t test result for fourth hypothesis

Variable	coefficient	Statistic t	P-Value
y-intercept	0/096	6/28	0/000
Size of company	-0/027	-3/23	0/004
Ratio of book value to market value	0/019	1/962	0/083
Profit changes coefficient	0/015	8/246	0/000
Conservativeness of Profit	-0/021	-3/184	0/004
Determination coefficient	0/435	Statistic F	41/35
Moderated determination coefficient	0/369	P-Value	0/000
Durbin-Watson statistic: 1.98			

As shown in Table 8, there is an inverse and not significant relationship between conservativeness of profit and return on common equity.

The fourth hypothesis of the research is approved at error level of 5%. Also, the control variable of the coefficient of changes is associated positively and significantly with the return on common equity and the size of the company has a negative significant relation with that. The Durbin-Watson statistic confirms the absence of correlation in the components of the model error.

5-2-5 Testing research fifth hypothesis

The fifth hypothesis states: "Timeliness of profit has a significant effect on the return on common equity".

To test this hypothesis, the following model has been used:

Model (15)

$ROE_{j,t} = \beta_0 + \beta_{1,j}VarCoef_{j,t} + \beta_{2,j}SIZE_j + \beta_{3,j}BM_{j,t} + \beta_4Timeliness_{j,t} + \varepsilon_{j,t}$

$H_0: \beta_4 = 0$
$H_1: \beta_4 \neq 0$

The result of testing the fifth hypothesis based on the model's estimate has been given in Table (9):

Table 9 - t test result for fifth hypothesis

variable	coefficient	Statistic t	P-Value
y-intercept	0/716	2/28	0/000
Size of company	-0/0821	-1/411	0/085
Ratio of book value to market value	0/1508	2/524	0/004
Profit changes coefficient	-0/4257	-2/421	0/003
Timeliness of Profit	0/6835	2/303	0/018
Determination coefficient	0/342	Statistic F	34/23
Moderated determination coefficient	0/349	P-Value	0/000
Durbin-Watson statistic: 1.77			

As shown in Table 9, there is an inverse and significant relationship between timeliness of profit and return on common equity, and the fifth hypothesis of the research is approved at error level of 5%. Also, the control variable of the coefficient of changes is associated inversely and significantly with the return on common equity and the size of the company has a negative significant relation with that. The Durbin-Watson statistic confirms the absence of correlation in the components of the model error.

6. CONCLUSION AND DISCUSSION

In this research, the relationship between qualitative features of profit and return on common equity was tested. The research findings show:

6-1 First hypothesis

There is a positive and significant relationship between profit persistence and return on common equity. This finding shows that investors moderate their expected return with regard to their profit persistence feature. It should be

noted that according to the model used to test the first hypothesis, in addition to profit persistence, the size of the company and the coefficient of changes in profit (operational risk) affect the expected return of common shareholders. Evidences suggest that companies that have higher profit persistence experience less return on common equity than companies with lower profit persistence. This finding is consistent with the findings of previous studies such as Kurdistan and Majdi (2007).

6.2 Second hypothesis

There is a significant positive correlation between the "profit predictability" and the return on common equity. Companies with higher profit predictability experience higher return on common equity than companies with lower profit predictability. Therefore, this finding as well the qualitative feature of profit persistence has a positive and meaningful impact on the return on common equity, which is consistent with previous and similar findings.

6-3 Third hypothesis

There was a positive and significant relationship between "relevancy of profit" and return on common equity; companies whose reported profit explains changes in stock return, have higher return on common equity. This finding confirms similar to the two examined features the findings of previous researches.

6-4 Fourth hypothesis

There is an inverse relationship between the "conservativeness of profit" and the return on common equity, but it is not significant that this has been also observed in Kurdistan and Majdi (2007).

6-5 Fifth hypothesis

There is a positive and significant relationship between the "timeliness of profit" and the return on common equity. Companies that have a higher profit timeliness than companies that are of less profit timeliness, experience more return on common equity.

In this way, it can be concluded that companies with a desired qualitative profit have higher return on common equity. These findings emphasize the importance of the qualitative features of accounting information, particularly qualitative features of profit and being informed of the qualitative features of profit as an index knowledge-giving to information users, makes clearer the need to expose it. Also the results of the research tests indicate that with promotion of the Qualitative features of profit improves the stock return also and this increases the ability to rely on financial statements. This leads in turn to improving decisions of those using financial statements based on the qualitative feature of utility in decision involved in IFRS (International Financial Reporting Standards).

7. RESEARCH SUGGESTIONS

7-1 Suggestions for current research

1- Investors, shareholders and other interested groups are recommended to consider qualitative profit features such as persistence, predictability, conservatism, relevancy and timeliness of profit in their respective companies at the time of investment, and invest as much as possible in companies that have higher qualitative features of profit so they can gain higher return of stock.

2- Companies are encouraged to use the strategies and plans to increase the qualitative features of the company's profit, in order to provide sufficient cash resources to meet the company's obligations, and to improve the economic criteria of performance of their company. So the investors are more willing to invest in the company.

3- The Tehran Stock Exchange (TSE) is recommended to divide companies' information according to the qualitative features of profit, in order to provide suitable information for making investment decisions to interested individuals and groups; in this way the information asymmetry is reduced, the transparency of information is increased and the risk of investment is reduced too.

7-2 Suggestions for future research

Any research, though comprehensive, cannot view, in terms of some essential and formal limitations subject-based or temporal, all thematic aspects. This research has not been an exception to this; therefore, to do some research consistent with this topic as well as its development, the following suggestions are presented for further research:

• It is suggested to investigate the relationship between other qualitative features of profit and return on common equity in banks admitted to Tehran Stock Exchange.

• It is suggested to study the relationship between the qualitative features of profit and the return on common equity in the small and large banks accepted in Tehran Stock Exchange.

• It is suggested to examine the relationship between qualitative features of profit and return on common equity in public and non-governmental banks admitted to Tehran Stock Exchange.

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