STUDYING RELATIONSHIP BETWEEN CHANGES OF CASH EARNINGS PER SHARE AND EARNINGS QUALITY

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ABSTRACT
In this research, reaction of investors in capital market to changes of cash earnings per share and earnings quality was studied considering earnings quality and the main goal of this paper is to determine relationship between earnings quality and accumulated abnormal stock return in the companies of which cash earnings have increased (decreased). In fact, earnings quality is high. Market is expected to show reaction to cash earnings increase because the main idea of this paper is that reaction of market to new information changes reversely with accuracy of the published information. The previous news relating to earnings quality is aligned with recent news relating to cash earnings increase and both news indicate increase of future cash flows. Considering that news relating to earnings quality has been reflected in the financial statements before and led to reaction of market, the market is expected not to show overreaction to increase of cash earnings. Earnings quality has been measured based on earnings persistence. After controlling the information medium, investment opportunities, attitude of cash earnings receivers and operating risk of company, the findings show that reaction of market to increase (decrease) of cash earnings of the companies is negative (positive) as predicted based on earnings quality based on earnings persistence. Change in stocks price is an evident criterion of systematic change of investors’ beliefs which has been affected by information content of the accounting earnings.

Keywords: Earnings Quality, Reaction of Market (Accumulated Abnormal Stock Return), Cash Earnings Changes

INTRODUCTION
Securities analysts, managers, investors and researchers concentrate their attention to the net income as the last income statement items. The predictions about corporate profit and its adjustment are extensively published in financial press and also the predictions of financials are revised. Manager eager to maintain the profit growth and often their reward is tied to profits. Reports which are indicate the expected profit of company and they quickly effect on the stock price. In other words, investors are easily retaliating with these companies (Konan, 2001). From all the possible relations between the stock market variables and accounting data, the relation between profit and efficiency has been subjective. In recent 30 years, this subject is dedicated scrutiny to itself (Philip, 2001). Each debate about profit and return is turned to 1867 that two papers were published by Ball and Brown and Beaver. This research was conducted at the University of Chicago; one of them is about the relation between profit and abnormal stock return about the profit announcement and the other one studies the relation between profit and fluctuations and trading volume about dividends, while the statistical evidence confirm the relation between profit and return, hardly and this causes the poor explanatory power of benefit (Beaver, 1968). This relation weakness between return and profit is attributed to the low profit quality (JLev, 1989).

The earning quality is not a new Term and it is used in investment literature for many years, but it does not include a comprehensive and accurate meaning. In general application, such as the ideas of securities analysts, the term of earning quality is related to (p/E). If the benefit earning be higher, a higher P/E ratio will be set. In Regression models of return and profit, an appropriate profit quality is considered in proportion to importance (size) of profit coefficient in regression. The weakness of relation between the accounting profit of a particular stock and market return was disclosed by him. He argues that a perfect correlation between profit data and abnormal stock returns can be guaranteed only if:
Profit is the only information source during the return efficiency. Expected profit is correctly measured. Investors react to the release of companies profit, similarly. In the conducted studies about profit and return, he expresses that the profit less than 10 percent, explains the returns change of a certain securities and the low explanatory power of profit is related to the low quality of accounting earning (JLev, 1989). Earning quality is also depends on the prediction ability of abnormal stock returns and the prediction ability to stock return is influenced by accounting principles which is used for the measurement and evaluation. Manipulation of management and in general profit management influence on the usefulness of accounting information. Hawkins considers the characteristics of firms that have high earning quality:
- the corporate accounting practices are uniform, conservative and cautious.
- the company sales are quickly converted to cash, and the corporate profits are stable and predictable.
- the planned profit of company with the exchange unrealized profit is currency exchange or not inflated price changes.
- the company's profit flow is continuing from the tax and is induced from main actions.
- the net profit and sales growth of the company is not affected by tax issues.
- the level of corporate debt is proportional and it has a capital structure and it has not been modified to generate income.

He also states about items which have a detrimental effect of the quality of the company's profit and it is expressed as follows:
- the audit report of these companies is long-delayed and also presented with unusual phrases.
- It has changed its auditor.
- Optional costs of companies such as research and development and agitation are decreases and unusual increase are created in receivable accounts and payable accounts. Part of cost is the income tax of deferred company. It has unenforceable retirement debt. The invisible assets of company are high. And they changed their reserves.
- If it changes its accounting principles or it uses some approaches which are not conservative and they have non-recurring revenue sources such as sale of assets. Profit margins, liquidity and quick asset are reduced by the turnover rate of company assets (Hawkins and Pear, 1978). In many researchers about the relation between profit and return, the profit quality is ignored. In this paper, the market response to the changes in dividends is studied according to the corporate quality.

The main question in this study is that whether the market in response to dividends profit, considers the corporate profit?

It is expected that market react to the dividends change to the countries which have higher earnings quality (Michael et al., 2003).

Need for Research

In recent years, stock market has attracted many people attention. Stock market plays an important role in efficient allocation of economic resources. High quality financial reporting facilities the informed decisions of investors and guiding these invest help to the resources allocation process. Earning quality is considered as an important item for investors to financial reporting. And this item is considered in analysis of the relation between stock and returns. Studying the level of active people attention in Tehran Stock Market to the reported earning quality is introduced as a part of financial reporting quality.
- it helps to quantifying the investor's behavior in response to the dividends changes according to the reported earning quality.
- it helps to develop regulations for investor's behavior in order to increase the usefulness of financial reporting. The interval between earnings and cash flows relates to accruals, so increasing the earning quality is possible by reducing the accruals volume. And it could be considered by developers of accounting standards.
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-helping to the professionals of capital markets in order to provide a basis for calculation and disclosure of earnings quality of the listed companies and increase the investors awareness and finally improvement of market efficiency.
-it helps to the evaluation and measurement techniques and other financial information to facilitate the anticipated cash flows which are expected by investors.

Research Background

The first question that comes in mind is that why the profit figures are studied. Investors, who are the most important users of financial statement, search their interests in profit information. Accounting profit is a sign that cause changes in investor's beliefs and change their behavior. stock price changes are a visible measure of the changes in systematic investors beliefs and it is changed according to the information content of accounting profit (FASB, 1978, parda. 43).

Beaver studied the stock price volatility and stock volume of 143 listed companies in the New York Stock Exchange from 1965-1961 about 506 cases to measure the market reaction to accounting information. The findings confirm that in the announcement week, the price volatility is 67% and the trading volume is 30% higher than other weeks (Beaver, 1968). Joi et al., studied the stock prices behaviors to the unforeseen changes in season earnings and they reported a direct relation between accounting earning and abnormal returns up to six months after the announcement (Joy et al., 1997). Kuch and San studied the dividends changes as an indicator of the sustainability of past earning changes. They were tested the market reaction to the dividends changes and past dividends change.

The findings suggest that investor's revision in their past profits sustainability based on the dividends changes (Koch and Sun, 2003). Benartzi et al., investigated this issue whether the dividends changes say about past or future and this issue that dividends changes have information content and it is an old idea. And they conducted their study on 1025 companies that includes 7186 companies. The findings show that there is little evidence to support this view that dividends changes reports about future earnings. Also companies that have increased the dividends, show less willing of their benefit's reduction in comparison to companies that don't have changes in dividends. So, the changes in dividends show this message that current increase of profit is permanent. If the declaration of cash dividends has contents, it should be said that changes in current profits are permanent to interim (Benartzi et al., 1997). Feaid et al., studied the benefits of dividends to accrued earning. They re-evaluated the relation between accruals and earning quality. Accrued earning is the capital growth of working capital after deducting depreciation and the accruals were deducted of operating profit. And dividends were obtained and the growth rate of operating assets was defined equal to the changes in Net operating assets. They extracted needed data for 1978 and 1996 from computer files. Regression test shows the return rate of assets and accrued earning. cash dividends and company growth. Accruals have a high correlation with the growth of operating assets and have a negative correlation with future profitability. By considering the correlation between accrued profit and future profitability, it can be concluded that accrued earning has a lower quality from dividends. Results show that in general, dividends is not superior to predicting the future profitability than the accrued earning and profit decomposition to accrued earnings and dividends, does not provide enough information about earnings quality (Field et al., 2000). Mikhail et al., studied the investor's reaction to the changes in dividends. They measured the profit quality with R2 from the regression of future cash flows with previous reported profits. They investigated the revise in predictions of annual financial analysts about the declaration date of dividends and by considering the quality of corporate profits. For companies which have high quality profits, investors react less to increase of dividends and in facing with companies that have high quality profits and in the case of dividends increasing, financial analysts re-evaluate less their profit forecasts. They did not report a significant relation between investor's reaction and financial analysts and the quality profits of these corporations and all of these companies cut their dividends (Michael et al., 2003). Saghafi and Kordestan investigated the relation between profit quality and market reaction to the dividends changes. The findings show that in Tehran Stock Exchange, earnings quality does not constitute in market reaction to the dividends changes and the unexpected company's profit in total related information and investors do not consider it (Saghafi and Kordestani, 2005). Khavari and

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Garmaroudi studied the relation between the dividends rate and stock price volatility in Tehran Stock Exchange. The research results show that there is no a significant relation between the declared dividends and stock price volatility (Khavari and Bagheri, 2001).

**Earnings Quality**

The Earnings quality theory was declared by financial analysts and stock brokers, because the reported profit does not show the gains strength of a company. They found that prediction of future profits on the basis of the reported results is a difficult operation. Meanwhile, analysts found that the analysis of financial statements of companies is difficult due to the numerous weaknesses in measuring the accounting information. The general question is that why financial analysts do not use the reported net income or the profit of each company in investigation and they do not have caution? The answer is that in investigating the company value, the quantity profit is not considered. So it should be noted the quality in this research. The earnings quality is the contexts of future profits. In other words, the value of each capital does not depend only to the company's capital per year, but it will depends to our expectations of the company's future and the power of future profitability and reliability depends to the future profits (Jahankhani and Zarif, 1995). The primary goal of profit reporting is to provision and provide useful information for those who have the greatest interest in financial reporting, but the accounting profit cannot be a good measure for investment decisions and sometimes it can be manipulated by management. Thus, the concept of profit quality was raised to help the investors for making good decisions. For the profit quality, there are many definitions and there is not any consensus about it. One of the possible reasons for variations in the definition of profit quality is the different looks of researchers at different aspects on this concept (Hermans, 2006).

Some of the most important definitions are:

"Hunt", the financial director of General Mills believes that in investigating profit quality, two cases are investigated.

One of these aspects is a proportions of current income with last profits and the other one is the market perception of the profit quality of company which is manifest in the P/E ratio.

"Hagen", the finance director of Dinoldez Company believes that earnings quality can be measured by identifying or eliminating the changes effects in accounting methods, unusual items or temporary costs.

"Conoli" is financial analysts that believe the earnings quality can be investigated by measuring the realizable net value.

"Wallen", finance director of Casting American Company believes that the earnings quality can be measured by differencing between inflation profit and reported profit. Definition of Behnisch and Vargas (2002) of earnings quality is the future sustainability of current income in future (Beneish and Vargas, 2002).

According to the Richardson et al., (2001), earning quality is the degree of performance stability in future periods (Richardson et al., 2001), Penman and Zhang (2002) defines the earning quality as the earning ability in showing future income. Lougee and Marquardt (2004) knows the high quality profit as a profit which is near to the company value in long-term and it contains more information content (Lougee and Marquardt, 2004). Bellovary et al., (2006) knows the earning quality as a symbol of ability of reported earnings in the reflecting the actual earnings of business, the ability to predict the future profitability and stability and lack of variability in reported earnings (Bellovary et al., 2006). According to Li (2008), the earning profit is a profit that the methods and accounting methods used in its creation are free from prejudice and bias (Li, 2008). "Hawkins", accounting professor of Harvard University defines the profit quality of each profit under the six factors: the economic environment (eg inflation rates and exchanges rate changes). Unusual events (such as sale of office buildings) are regular and repeatable, capital structure (financial leverage), tax methods and accounting methods and its relation with the change per capital.

According to the multiple definitions of earnings quality, it appears that to investigating the earning quality, different criteria are used. Lack of a clear definition of earnings quality measures is not considered as weakness; because this dispute is a normal action (Dechow et al., 2010).
Earnings Management and Earning Quality

With this assumption that the opportunistic management thinks to his personal interests, managers may manipulate the accounting earnings to obtain the greatest benefits, their major motivations is to increase their current compensation by increasing the accounting profit. Early recognition of revenues, investing the current spending rather than spending it and allocate costs to longer periods and they are some examples of potential earnings management techniques. One of the components in earnings management was the earning smoothing and they try to create profit growth and uniform revenue. The opportunistic behavior of managers creates a situation that managers report the manipulations and when this manipulation is discovered, the earning quality of company will be asked and financial analysts have to reassess their financial information. Since many of accounting techniques needs to professional judgment, choosing the measurement and evaluation techniques are done as inventory valuation methods, depreciation and securities accounting that are tradable and they are done with the aim of increasing management benefits. And this is considered as a part of earning management. One of the motivations for earning management is increasing cash bonuses which are tied to profits. The companies which their expected profits are not found, they are incentive to report the accounting earning according to the expectation. The companies that their debt contracts are based on accounting figure, they incentive that by manipulating in profit, do not violate the contract terms. Special management areas are also particular in industry, Underestimation of debt associated with ensuring the goods in manufacturing companies, credit losses and loss reserves of bank's loan, technological changes especially in the companies which have advanced technology, probable lawsuits in companies producing tobacco, doubtful receivables and many receivable accounts in retail and claims that pharmaceutical manufacturers have, and all of them create the areas of earning management. If a reported financial statement shows the current situation and results of a company's operation different from what it is, the company's earning quality will be asked. One aspect of earning quality evaluation is to determine cases that management biases effect on financial statement (Stickney and Weil, 2003).

Earning Quality and Unlisted Events

In evaluating the earning quality, we should consider the unlisted events which the financial statement are not reflected in them. This limit depends on the nature of the company which is analyzed. The financial statement of listed companies provide professional services that their value is depended to the companies professionals and it has serious limitations, because the balance sheet does not provide the value of human resources. In such cases, analysts can promote the quality of financial statement by estimating the company's human resources. The companies which benefit from advanced technology, they may have intangible patents, formulas and assets that their value was not correctly provided in balance sheet. So, in this case, the financial analysts should conduct the value of these assets based on available information outside the financial statements. However, the purpose of evaluating the earning quality is reported as figures and information improvement and you should try to achieve it (Stickney and Weil, 2003).

The Dividends Changing and Earning Quality

In the finance literature, two theory of "Information content of Dividend" and "Dividend signaling" has been empirically tested. And it devoted so many researches to itself. The information content of dividends hypothesis states. The corporate managers are not incentive to increase their cash dividends, unless they believe that can maintain a new level of cash dividends in future. So the regular distribution of cash dividends shows the stability of future profits and it is assumed that cash dividends contain information about earning quality. It seems unlikely that the companies with questionable earning quality, and they can support the regular payment policy of cash dividends which is important from the economic perspective. In this regard, the question arises that if we can use the dividends cash to evaluating the quality of reported earnings. The current reported earnings of companies which regularly distribute cash dividends and it will have significant correlation with future and we can consider the current income as stables components. The hypothesis of dividends signaling states that the cash dividends contain information about future earning changes. Due to the dividends changing, this cause to changing the future profits reports. While companies claim the payment of cash dividends, especially when this profit
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has economic benefit, it helps to investors to be convinced about the quality of reported earnings, so even the dividends changing dose not inform about the future profits changings, so it can helps to investors to convince that the reported profit will retain in the future periods. There are some evidence that show the cash dividend provide some information about the quality of reported earnings but it does not say thing about the dividend's changes in future. So in spite of many research, the experimental validation of dividends signaling hypothesis of cash dividends remains controversial in the academic literature (Stickney and Weil, 2003).

Dividend Policy and its Theories

Studying the dividends effect on abnormal stock return and especially the dividends effect on abnormal stock return by considering the profit quality is the main issue of this research. So, in the end, part of theoretical research in approaches and related theories to the dividends are expressed. Studying these theories make possible the better understanding of the relation between dividends and abnormal stock return due earning quality of corporates. And it helps to a better understanding of research and interpretation hypothesis and obtained results from hypothesis testing. Financial analysts and economics have long been interested to study the interaction effect between accounting earnings, accounting earning and company value. The main question is that whether the payment dividend policy affects the company's market value. About the dividend policy, generally three schools are formed:

First: in this school, dividends are a fascinating subject that has a positive effect on stock prices.
Second: in this school, the dividends and polished surfaces has a negative effect on stock prices.
Third: in this school, the dividend policy does not effect on company value and dividends are not related on stock prices (Finger, 1994). Miler and Moligani state that the payment cash dividends in a frictionless market are a competitive market without taxes and transaction costs. And it is not related to the investors and companies that have the economic logic. Company is faced with a capital cost that is identified in market and it should be separated from decisions about investment volume. Company can pay the cash dividends with any payment and if remained funds does not efficient for investment after the dividends payment. Company can supplies the necessary funds through the capital issuance to a specified price and without bearing the cost. Likewise, the company can give the additional funds to the capital market with a specified rate, that these funds are not distributed in the form of dividends. And they are investors that their dividend income does not meet with their consumption needs. And it can also supply their needs through the purchase or sale of a stock in market, satisfactory. Accordingly, managers add company value by investing in projects that their return is higher than capital cost. Financing transactions also included the dividends payment and it has not added value, because all groups are adequately informed and they are trading in capital market (Miller and Franco, 1961). But not all groups have the same information. For example, the financial statement is released with general objectives in order to informing the outside groups of the company's financial situation. While, before providing and releasing it, company managers and suppliers of financial position have gained more recognition of the company's financial position. So the information is asymmetric and a group is relatively aware (eg managers) and a group (such as current and potential shareholders) are relatively unaware of the company's financial status. When investors are faced with managers who expect to have more information and use this information as a better usage. The investors should demand a higher price to use their money to protect their interests. Another method is to provide reliable information about the company value along with the cost and the dividends distribution has signaling goals. Profit report and dividends distribution are part of information structure and it seems that dividend related to profit dividends have a signaling role. Usually, according to the long term goal, the managers determine a part of profit which should be distributed and they focus on the dividends changes due to the amount of cash. If the current profit is more than the previous year, and dividends will not increase unless the directors believe, that future profits will increase enough to be able continue the higher dividends distribution and or by increasing the dividends, shareholders conclude the future profits and future dividends will continue in a higher level. So stakeholders do not know about the financial status as well as managers and they react to the dividends increasing and they increase the stock prices in market. Conversely, when managers believe that long-term profitability will decline and they reduce the
dividends and shareholders react according to the company's shares transaction at lower prices. Due to this fact that managers have more information about stakeholders and they are able to break the current profit into steady and unsteady sections. Probably, the dividends signaling remain valid, so managers try to maintain the information sources due to the availability of other sources to investors. Why the tarnish of directors reputation, fear of the low and other opportunities that are created to settle and they affect to their future income. Of course, Jan Lintz, the supreme financial economics at Harvard University believe that the interaction between earnings and dividends will change over time and the incentive of dividends payment will change (Linter, 1956).

And theoretical and empirical models of company's dividends policy can be separated into three categories based on qualitative criteria related to the structural nature of the inspection and rational performance:

A) The models based on full information
B) The models based on asymmetric information
C) The models based on free cash flow, the models based on agency cost and D) the models based on behavioral principles and E) the models based on behavioral beliefs and F) the theoretical behavioral models.

### CONCLUSION

#### Summary and Conclusions

The reaction of participants in capital market to the dividends changes according to the earning quality is studied in this research. The regularly dividends payment provide the prediction possibility of future dividends for investors. The dividends changes help to participants in capital market to re-evaluate their predictions about future dividends. According to the dividends changes in companies, they react to these changes and that change the stock price. The prediction of future cash flows based on historical profits, allows to participations in capital market to react before the declaring dividends prior to reported profit and change the stock price. If the reported earnings of company are stable and they have a meaningful relation with the future cash flows of company. The earnings are considered with high quality and the high quality profit disclosure associated with the investors reaction cause to stock price changes. When the dividends changes are exposed, investors are gained to a information source about future cash flow. And before the dividends disclosure and based on the high quality reported profits, they predict the dividends and consider its effect in price. The main question of this research is that how investors use the related information to historical profits about the prediction of future cash flows and changes in equity prices. When other information such as changes in dividends are available as an information source about the future cash flows, and since investors have reacted to the earning disclose, before and they have changed the stock price, it is expected that obtaining new information means the declaration of dividends changes and by doing so, an inverse relation between earning quality and abnormal stock returns will be created. It means the obtaining new information about future cash flows which is the declaration of dividends changes, should not change the abnormal stock return. the information reporting about high quality earnings of capital is created. It is expected that the relation between earning quality and abnormal stock return should be negative (positive) in companies that they increase (decrease) their dividends.

According to the research, when the earning quality is high, it is expected that market react little to the dividends increase. Because the market response to the new information is changed inversely with the accuracy of reported data, the previous related news to earning quality and related news is in line with the dividends increase and both of them show the increase of future cash flows.

According to this issue that the related news about earning quality is reflected in the financial statements and causes the market reaction, it is expected that market does not show much reaction to the dividends increase. When dividends are reduced, investors may conclude that the future profitability of company is reduced. On the other hand, the reported profits with high quality shows the company ability to retain profitability and increasing the future cash flows and this expectation is not fulfilled. According to related news with dividends reduction which implies the reduction of future cash flows and they are not
consistent, it is expected that market react positively to this new information and by reducing the dividends, it decreases the stock return. This expectation is met in Tehran stock exchange according to the research findings and earning quality in market reaction with dividends changes are generally related information.

REFERENCES


