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Research Article

THE QUALITY OF THE ACCRUALS, RETURN, AND DIRECT INDICATOR OF CASH FLOW SHOCKS

Khadijeh Eslami[1], *Ramzan Ali Royaee[1], Roya Darabi[2] and Mansour Garkaz[3]
[1]*Department of Accounting, Sciences and Research Branch, Islamic Azad University, Tehran, Iran*
[2]*Department of Accounting, South Tehran Branch, Islamic Azad University, Tehran, Iran*
[3]*Department of Accounting, Aliabad Katoul Branch, Islamic Azad University, Aliabad Katoul, Iran*
**Author for Correspondence*

ABSTRACT
One of the most important factors in selecting the best investment is stock return. With regard to the relationship between stocks return and other accounting information, the investors can allocate their sources in the best way. The quality of accruals is one of the effective factors on the stocks return. This research aims to study the effect of the quality of accruals on the return and cash flow shocks of the stocks. The hypotheses of the research were examined by regression model using combined data and based on a pooled model and by a sample including 87 companies and 1044 observed cases from 2001 to 2012. The result indicated that there is no significant relationship between the qualities of the accruals and the excess return. Moreover, there is a positive correlation between the quality of the accruals and the cash flow shock.

Keywords: *The Quality of the Accruals, Return and the Cash Flow Shocks*

INTRODUCTION
Numerous researches have proved that the accounting information is a part of information collection which investors use to predicate the future cash flow to obtain the estimated value of the stock. The most researches in this field have focused on the study of the influence of the accounting information quality on the capital cost of the enterprise. As Healy and Palepu (2001), Easley and O'Hara (2004), Francis *et al.*, (2004, 2005), Giner and Reverte (2006), Ng (2011), and Callen *et al.*, have proved, the quality of accounting information (the quality of the accruals) is effective on the capital cost. While Core *et al.*, (2008) have stated that although the quality of the accruals, as an indicator of the accounting information quality, shows a positive relationship on average, it is not capable of explaining casual fluctuations in the stocks return. Additionally, the quality of the accruals, as a characteristic of the company, cannot predict the future achieved returns. In the most research in which the relationship of the accounting information quality and the capital cost of the enterprise are studied, the quality of the accruals has been used based on the approach of Francis *et al.'s* expanded model (2005) with regard to Dechow and Dichev model (2002), as an indicator of the accounting information quality. If the standard deviation of the result obtained from fitting working capital accruals are based on the past, present, and future cash flow operation, it will show the low quality of the accruals. This criterion is related to several characteristics of the future cash flow news. For example, high level of this measure (which shows low level of the quality of the accruals), indicates selling a lot in the past, high risk possibility of bankruptcy due to the sequence of more loss and fluctuations of more benefits and sales. Each of these characteristics is related to inappropriate systematic performance of the stock market in the future. So, in this research, the effect of the quality of the accruals and the capital cost based on the analytical model of the risk estimation and the literature of the market structure has been studied.

Review of the Literature
The source of the literature is related to the study of the relationship between the quality of the accruals and capital cost based on analytical model of the risk estimation and the literature of the market structure. In the following, there is a discussion about some researches related to the subject of the study about the accounting information quality and capital cost of the enterprise, effect and analysis of the cash flow shocks on the stock return.

In a research named The Market Pricing of accruals quality, Francis *et al.*, (2005) have studied the relation of accounting information quality in predicting the stock return and the capital cost. The sample used in the research included 8881 companies and the period time was from 1970 to 2001. The quality of the accruals was measured using Dechow and Dichev model (2002) based on the standard deviation of the error terms in a 5-year period for each company in each year. The analysis was done based on the variables of the research which were classified in two financial group (market value of the stock holders' equity, assets, sales, assets return, the ratio of the book value to the market value of the stock holders' equity, the earnings per share to the price per share ratio, sale growth, and the company growth) and accounting group (the firm size, the standard deviation of cash flow, the standard deviation of sale, the operation cycle). In the first stage, the study of the relationship of the cost of debt capital and the cost of equity capital with the quality of the accruals indicated a positive relationship between the dependent variables and the quality of the accruals. In the second stage, the quality power of the accruals in predicting the stock return was studied using single-factor and three-factor pricing model as follows:

$$R_{q;m} - RF_{;m} = a_q + b_q(RM;_m - RF;_m) + \varepsilon_{q,m} \quad (1)$$

$$Rj;m - RF;_m = a_j + b_j(RM;_m - RF;_m) + \gamma_j AQfactorm + \varepsilon_{j;m} \quad (2)$$

$$R_{jm} - RF_m = a_j + b_j(RM_{;m} - RF_{;m}) + s_j\, SMB_m + h_j\, HML_m + \gamma_j AQfactor_m + \varepsilon_{j;m} \quad (3)$$

The result of added factor of the quality of the accruals to the single-factor model (2) compared to the model (3) indicates increasing explanatory model of power from %13.5 to %17.8 and about %32. The comparison of the factors determining the models (2) and (3) shows that the quality of the accruals accompanied by the factors of size and book value compared to the market value leads to an increase in explanatory or predictive power of the future returns from %18.9 to %20.8.

In the last stage, the quality of the accruals was divided into two items including the quality of the discretionary and non-discretionary accruals based on the Dechow and Dichev model (2002), and their relationship to the capital cost was studied. The results rejected the hypothesis of lack of different effect of the quality factors of the accruals on the cost of equity capital.

Core *et al.*, (2007), discussed the effect of the quality of the accruals, as a risk factor, in pricing the assets. Using a sample of companies from 1971 to 2002 and based on a two-staged approach, they found out that the quality of the accruals is not a risk factor in pricing, because it does not include a positive risk after return. Moreover, the quality of the accruals cannot periodically predicate the future fluctuations of the return.

Ng (2011) defined the quality of the accounting information based on Healy and Palepu (2001) and Easley and O'Hara (2004)'s view, as an effective information characteristic of the company on the uncertainty about the company value and the reverse selection, and he assumed that there is a reverse relationship between higher quality of the accounting information of the company and the capital cost. To examine the hypothesis, he used the variables of the quality of the accruals which were approved by the analysts as the indicators of the quality of the accounting information. Based on the information of the accepted stocks in NYSE, AMEX, NASDAQ stock exchange from 1983 to 2008, and after controlling the characteristics of the market such as liquidity, turn over, and return fluctuations, and the characteristics of the company such as the sale growth, performance cycle, and the asset size, the result showed: there is a negative relationship between the quality of the accounting information and the risk of liquidity and the capital cost. Also, Ng studied this relationship in three different periods: in first period, the liquidity of the market was so low, in the second period the liquidity of the market was so high, and in the period stage, there was a relative stability in the liquidity condition of the market. The result of the analysis showed that there is a more negative relationship between the quality of the accounting information and the risk of liquidity and capital cost in the first and second periods.

By expanding a methodology based on earnings response coefficient, Ogneva (2012) analyzed the achieved return into two parts resulted from the cash flow shocks and the excepted return of the cash flow shocks. The result of the 86.553 observation test in 37 years in the American capital market indicates that there is a relationship between the stocks with the low quality of the accruals and high return resulted

from cash flow shocks. After separating the return of the cash flow shocks, the future returns showed a negative and significant relationship with the quality of the accruals. The risk related to the quality of the accruals with the excepted returns of the cash flow shocks shows a positive and meaningful relationship. On the other words, the risk factor of the quality of the accruals accompanied by some other factors is effective in the pricing of the assets.

In a shared study, Campbell and Schiller (1988) expanded the growth formula of the standard dividend to a model in which the discount rate changes in time. They applied the log-linear approximation to the unexpected stock return and divided it into two parts: the changes of expectations of the future cash flow (cash flow news) and the changes of expectations of the discount rate (discount rate news).

The understanding of the dynamic quality of the discount rate and the cash flow socks proposes some questions. Campbell (1991) and Campbell and Ammer (1993) studied it on the total portfolio level of the market. Campbell (1991) showed that in the total level, the deviation (variance) of the cash flow news explain only one third of the total deviation of the unexpected return. The remaining of the stock deviation is due to the news related to the future expected returns. Vuolteenaho (2002) used Vector Autoregressive System (VAR) to estimate the cash flow news and discount rate news for the stock return of the companies. He understood that in the company level, the cash flow news plays an important role and explain %70 to %80 of the deviation of the stock return. Also, he stated that the cash flow news can be varied in the portfolio level much more simple than the expected return news.

Campbell and Vuolteenaho (2004) examined another important question. They discussed how much of the risk of the company is related to the return correlation related to the news (shocks) of the cash flow of the market compared to the news (shocks) of the discount rate. They analyzed the company beta into cash flow beta (bad beta) and discount rate beta (good beta) and stated that the value stocks and small stocks have higher cash flow which can explain the average of their higher returns.

Callen and Segal (2004), Callen *et al.*, (2005) and Callen *et al.*, (2010) used VAR model in the company level to analyze the relative importance of the earnings components (accruals, domestic earnings, and foreign earnings), informational content of SEC files, and pricing of the conservatism. Callen and Segal (2004) found out that the news of the accruals in creating the stock return in the company level dominated on the discount rate news. On the other words, in the company level, the accruals news playe more important role than the discount rate news in creating the return. Callen *et al.*, (2005) proved that the domestic return is more important than the foreign return in explaining deviations of the unexpected stock return. Callen *et al.*, (2010) proposed a new criterion of accounting conservatism. They create a conservatism ratio which is defined as the ratio of the current earnings to the cash flow news and they showed that the companies with a higher conservatism ratio has higher losses (loss sequence) and more negative accruals, and shows a higher fluctuation (changeability) of return and earnings.

Campbell and Schiller (1998) used VAR to modeling the expectations about the future stock return and the future cash flow. They modeled both the cash flow news and discount rate news directly. In the later works, just the discount rate has been calculated directly and the residuals were being considered as the cash flow news. The point of considering the residual approach, as the cash flow news, is that the monthly data with high repetition can be used without complexity of the seasonal behavior in the dividend payments (like Campbell and Schiller, 1988). In VAR method, the researcher should select some state variable which help predicting the future stock return and the future cash flow. Chen and Zhao (2009) proposed that VAR method is sensitive to the selection of these state variables and produce inconsistent results. They re-examined the results obtained by Campbell and Vuolteenaho (2004) and stated that the selection of the state variables is a critical factor in applying VAR method. Chen and Zhao (2009) showed that small changes in the state variables lead to opposite results in high betas of cash flow for value firms and relative importance of cash flow news and discount rate news in price formation. Campbell *et al.*, (1991) tried to pay attention to the issue and considered several substitute characteristics in the market level in applying VAR model. Also, Campbell (1991), Vuolteehano (2002), Cohen *et al.*, (2002), Callen and Segal (2004), and Larocque (2009) analyzed the achieved return to the cash flow news (shocks) and discount rate news (shocks) using VAR method.

Campello *et al.,* (2008) used the bond revenue to the expected stock return. Botosan *et al.,* (2011) and Ogneva (2012) paid attention to the frame of earnings response coefficient to exclude the achieved return of cash flow news (shock). Chen and Zhao (2010) proposed another method to measure the cash flow news and the discount rate news. In their method, the Implied Cost of Capital (ICC) was calculated based on the analysts' prediction and then, they defined the cash flow news as a price change which is measured by maintaining the stability of ICC. They showed that the cash flow news is an important component of the stock return and its importance increases by the investment goal both in company level and in the total market. Furthermore, Gebhardt *et al.,* (2001), Easton (2004), Ohlson *et al.,* (2005) used ICC approach to analyze the return. In this approach, the analysts' earnings prediction was used as an indicator of cash flow news (shock) to analyze the return. Hou *et al.*, (2012) used ICC approach once, but they used predicted earnings based on the cross-sectional model as an indicator of the cash flow news (shock) instead of insisting on the analysts' earning prediction.

In total, return analysis is a powerful concept which has deep applications; however, its practical usage is unclear yet: in the literature, there is no agreement on how the cash flow news and the discount rate news should be measured. Using VAR method is more complicated in the company level than in the market because it includes VAR system measurement based on the pooled time-series and cross-sectional data.

In summary, four measuring methods of the cash flow news and the discount rate news are discussed to analyze the return: (1) VAR method, (2) Revision in analysts' forecasts, (3) ICC method, and (4) the method base on Earning Response Coefficients (ERCs). The first method uses VAR method as a modeling mechanism of the expectations of the market. The two other methods use the analysts' forecast as an indicator of the expectations of the market for the future return. The fourth method states that the cash flow news (shocks) is the response of the stock price due to a revision in the expectations of the total movement of the future cash flow. Since in the company lifetime, the sum of cash flow must be equal to the benefit sum, the return obtained from cash flow shock can be measured as a related return to the earning surprise.

Research Hypothesis

Regarding the literature and questions of the research, the research hypotheses are proposed as follows:

1. The quality of the accruals can forecast the future stock return based on the evaluation model of the capital assets.
2. The low quality stocks of the accruals experience more negative cash flow news (shock).

MATERIALS AND METHODS

Research Method

1- Statistical Population and Sample

The time-span of the research is a 17 year period from the beginning of the 1996 to the end of 2012, regarding the information about the time of the research and its accessibility. There was a need to measure some variables before examining the hypotheses, so the information of 5 years ago before the period of the hypotheses examination was used to measure them. Thus, the period of testing hypotheses started in 2001 and ended in 2012. Regarding the place of the research, the statistical population includes all the accepted companies in Tehran Stock Exchange. The sample companies were selected in an emissive manner and based on the below conditions:

1. They had been accepted in Tehran Stock Exchange before the beginning of 1996.
2. Their financial period ended in March. The reason of this selection is paying attention to equal economic and political condition and avoiding the effect of the conditions and seasonal factors in measuring the variables.
3. They did not get trading interval in the mentioned period and their stocks are active; so those companies which their trading days in the mentioned period of the research were more than 70 days of 250 days on average were selected as the sample of the research.
4. They were not classified in the group of the investment companies and holdings.
5. The desired data of the company were available.

Regarding the above restrictions, the statistical population of the research included 87 companies and 1044 observations (company-year). The Needed data extracted from Rah Avar Novin Software and the financial statements of the sample companies in www.rdis.ir. After gathering the data, the variables were measured by the excel spreadsheet and SPSS software and then the research hypotheses were examined using SPSS and Eviews software.

2- Research Method

The research plan is practical in terms of the performance result, and the process of the performance is also quantitative. The plan is after event or semi-experimental. The current research is correlative. To write about literature and the history of the research, library method was used and to test the research hypotheses, the information of the financial statement and the notes beside the companies listed in informational system of Tehran Stock Exchange and Rah Avard Novin software was used. But the model used in this research is also as follows:

The quality of the accruals with the future return using below regression model was measured:

Model (4)

$$R_{i,t+1} - R^{f}_{t+1} = \text{Intercept}_t + q_t \text{RDD}_{it} + b_t \text{BETA}_{it} + s_t \text{MKTV}_{it} + h_t \text{BMRATIO}_{it} + \varepsilon_{it}$$

In which

$R_{i,t+1}$: The return of the share I for the month t+1,

$R^{f}_{i,t+1}$: Monthly return of the bonds for the month t+1,

RDD_{it}: The company rank based on the quality of the accruals at the end of month t,

$BETA_{it}$: Using the return of the past 36 months fitted based on CAPM model.

$MKTV_{it}$: The natural logarithm of the market value of the stock holders' equity,

$BMRATIO_{it}$: The natural logarithm of the ratio of book value of the stock holders' equity to the market value of the stock holders' equity,

Dechow and Dichev criteria (DD criteria): Francis *et al.,* (2005) model was used to the estimation of DD criteria. Francis *et al.,* believe that the login of uncommon accruals such as properties, machinery, and equipment, and a change in the operation revenues explain the lack of certainty in the liquidity map considerably, so, the risk of the information decreases compared to the Dechow and Dichev approach (2002). Therefore, among different models of measuring the quality of the accruals, Francis *et al.,* (2005) model was selected to evaluate the quality of the accruals. The model includes:

$$TCA_{it} = \alpha_t + \beta_{0t}\, 1/\text{ATA}_{it} + \beta_{1t}\text{CFO}_{it-1} + \beta_{2t}\text{CFO}_{it} + \beta_{3t}\text{CFO}_{it+1} + \beta_{4t}\Delta\text{REV}_{it} + \beta_{5t}\text{PPE}_{it} + \varepsilon_{it}$$

$= TCA_{it}$ The sum of the current accruals for the year t (which is measured by the balance sheet approach):

$TCA_{it} = \Delta\text{CA}_{it} - \Delta\text{CL}_{it} - \Delta\text{Cash}_{it} + \Delta\text{STDEBT}_{it}$, ΔCA_{it}: The annual changes in the current assets, ΔCL_{it}: The annual changes in the current liabilities, $\Delta Cash_{it}$: The annual changes in cash, $\Delta STDEBT_{it}$: The annual changes in the debt in current liabilities.

$= CFO_{it}$ The operational cash flow for the year t which is measured as follows:

$CFO_{it} = \text{NIBE}_{it} - \text{TA}_{it}$,

$NIBE_{it}$: The net income before unexpected items, TA_{it}, the total accruals (which is measured as follows)

$TA_{it} = \text{TCA}_{it} - \text{DEPN}_{it}$, $DEPN_{it}$: the depreciation expense of the fixed and intangible asset in the year t,

$= \Delta REV_{it}$ Annual change of income

$= PPE_{it}$ Gross property, machinery and equipment,

$= ATA_{it}$ The average of the total assets within the years of t-1, t, and t+1.

To eliminate the scale effect on the average of the total assets, all variables were divided within the years of t-1, t, t+1.

Then, a DD criterion was measured for each company i and each year t, and the standard deviation of the residuals obtained from the cross-sectional regression in a 5-year periods [t, t-4].

Two direct indicators of the cash flow shock include earnings surprise (SURP) and the analysts' forecast (Ogneva, 2012). In this research, the earnings surprise is used as a direct indicator of the cash flow shock to study the correlation between the direct indicator of the cash flow and the quality of the accruals. Based on the literature, the used model for the cash flow shock and the earnings surprise is Ogneva (2012).

The direct indicator of the cash flow shock: the cash flow shock is the reaction of the stock price to the changes in the future expected cash flow. Since in the lifetime of a company, the total cash flow must be equal to the total profit, cash flow news (shocks) can be measured as a return related to the earnings surprise.

The earnings surprise (SURP) is measured based on the expected profit which is derived from simple statistical model of the profit forecast, and then, the earning surprise is calculated by subtracting this profit (the expected profit) from the achieved profit.

The expected profit is measured by a simple statistical model which is based on the hypothesis that the annual profits follow an autoregressive process of a specific order:

$$EARN_{i,t+1} = \beta_0 + \beta_1 EARN_{i,t} + \beta_2 EARN_{i,t-1} + \varepsilon_{it+1}$$

$EARN_{i,t}$: The net income of the company i in the financial year t.

The estimation of the expected profit of each company is done in two stages. (1) The predictor coefficients $\widehat{\beta_0}$ and $\widehat{\beta_1}$ *and* $\widehat{\beta_2}$ which are obtained by the model estimation as a time-series within the last years. (2) Profit prediction by substitution of the estimated coefficients and putting current and last year amount of net income of each company.

سپس، سهم اخبار (شوک) جریان نقد بازده تحقق یافته با استفاده از تجزیه بازده تخمین زده شد. تجزیه بازده با استفاده از تخمین رگرسیون بازده مازاد شرکت مورد نظر بر اساس سود غیر منتظره با استفاده بازدههای سالانه انجام میگیرد. ارزش برازش شده از چنین رگرسیونهایی بازدههای شوک جریان نقد($r_{i,t+1}^{CF}$) را ارایه میکند، در حالیکه باقیماندهها بعلاوه عرض از مبدا، بازده مستثنی شده از شوک جریان نقد ($r_{i,t+1}^{NCF}$) را نشان میدهد. اگنیوا (2012) آن را بازده شوک غیر نقدی نامید.

The previous researches (Lip *et al.,* 1998; Ogneva, 2012) showed that this estimation method measures the cash flow shocks more precisely.

RESULTS AND DISCUSSION

Research Findings

Before testing the hypothesis, the number and the kind of the data used in the test were generally known. To study the condition of the data, two groups of indicators of the data description, including the central (mean) indicators and the dispersion index (skewness and kurtosis) were used. The number of the observation was 1044 totally. Descriptive statistics of the dependent and the independent variables are provided in the chart (1). In the following, some of the provided data will be discussed.

The provided descriptive statistics in the chart (1) shows the characteristics of the dependent, independent, and control variables based on the central (mean) indicators and dispersion (kurtosis and skewness). The amount are as follows: the future average excess return (2.405), the cash flow shocks (-0.056), the quality of the accruals (0.076), the market value of the company stock holders' right (5.288), the ratio of the book value to the market value of company stock holders' equity (1.544) and beta coefficient (0.504). The skewness coefficient indicates the deviation of the symmetry. The skewness coefficient of all variables is positive, and the variable distribution tends to the right side, the skewness of the most variables, the market value of the company stock holders' right, and beta coefficient is more than

the skewness coefficient of normal distribution (1.96), but the skewness coefficient of the standard deviation of the variables is almost equal to 0.079. If this coefficient is smaller than negative 2 or bigger than positive 2, the normality of the distribution is not confirmed (Momeni, 2000), so, it can be concluded that the variable distribution is normal. The elongation of distribution of all variables except the number of positive trading days and more than distribution is normal. The comparison of the standard error of the elongation of distribution with a permissible range +2 to -2 indicates the normality of the elongation of the variable distribution.

Chart 1: Descriptive statistics of the data

Standard error of kurtosis coefficient	**kurtosis**	**Standard error of skewness coefficient**	**skewness**	**average**	**variables 1044 :Number of observation**
Dependent variables					
0.158	29.531	0.079	3.642	2.405	Future additional return
0.158	758.239	0.079	-26.189	-0.056	Cash flow shocks
variable of the quality of accounting information indicator					
0.158	18.08	0.079	3.287	0.076	Quality of the accruals
Control variables					
0.158	0.552	0.079	0.639	5.288	Market value of company stock holders' equity
0.158	23.48	0.079	4.542	1.054	Ratio of the book value to the value of firm market
0.158	18.107	0.079	1.728	0.504	Beta CAPM

The study of the hypotheses of the linear classic regression before testing the hypothesis
The normality of the distribution of the residual error of the regression and the stability of the variance of errors are among the essential assumptions to use the linear regression. To investigate the normality of the error distribution, the data distribution chart and the normal chart were used. The comparison of the error distribution chart and the normal distribution chart, it was observed that the error distribution is almost normal. One of the characteristics of the combined data (the data which have the characteristics of the time-series and sectional data together simultaneously) is the independence residual error of the regression. Thus, Durbin – Watson test was used to investigate the independence of the errors. If the statistics of the Durbin – Watson locate in a range from 1.5 to 2.5, lack of correlation between the errors is confirmed. So, the statistics of the camera Watson related to the models (4) and (5) equal to 1.449 and 0.815 respectively.
The result of the normality analysis of the distribution of the dependent variable is provided using Kolmogorov- Smirnov test in the chart (2).

Chart 2: Result of the normality of dependent variable distribution test

0.644	Statistics z of Kolmogorov-Smirnov	Future additional return
0.801	Significant level	

The Result of the First Hypothesis Test
The result of the first hypothesis is shown in the chart (3). The first hypothesis was tested in two stages. In the first stage, the relationship of the quality of the accruals and the additional return was studied. In the second stage, the first hypothesis was again tested in the presence of the control variable in order to control the effect of the control variables.

Regarding the amount of the statistics (4) and the significance level of the statistics, model (4) is significant before and after the entrance of the control variables; while the coefficients of the statistics t of the variables of the quality of the accruals is 0.556 before the entrance of the control variables and 0.782 after the entrance of the control variables, and the significant level of the statistics is 0.578 and 0.472 respectively. Comparing the significant level of the statistics with the certainty level of 5 percent shows that the relationship of the quality of the accruals and the additional return is not significant. So, the first hypothesis is not confirmed.

Chart 3: Result

Model analysis			**Model summery**				**Model (4): before entrance of control variable**
Significant level	F statistics		Durbin-Watson statistics	Determination coefficient		Correlation coefficient	
0.05	1.965		1.449	0.001		0.017	
Significant level	F statistics		Durbin -Watson statistics	Determination coefficient		Correlation coefficient	**Model (5): after entrance of control variable**
0.009	3.395		1.459	0.014		0.119	
Importance level	T statistics	coefficients	Importance level	T statistics	coefficients	variables	
0.0117	2.523	3.829	0.000	9.95	2.313	intercept	
0.433	0.782	1.876	0.578	0.556	1.165	Quality of accruals	
0.45	-0.755	-0.216				Market value of company stock holders	
0.069	-1.815	-0.156				Ratio of book value to market value of company stock holders' equity	
0.003	-2/90	-0.558				Bata CAPM	

The Result of the Second Hypothesis Test

Chart 4: Pearson-spearman correlation between quality of accruals and Cash flow shocks indicator

Cash flow shock indicator	**Quality of accruals**	**Pearson correlation Spearman correlation**
0.077* 0.014	**1**	**Quality of accruals**
1	0.80* 0.010	**Cash flow shock indicator**

Certainty level: %95 •

The result of the second hypothesis is provided in the chart (4). To test this hypothesis, the correlation between the criteria was studied using Pearson and Spearman correlation coefficients. The result of the correlation investigation between the criteria has been provided in the chart (4). The Pearson correlation has been provided in the top diagonal and the Spearman correlation has been provided in the bottom diagonal of the chart.

Based on Pearson and Spearman coefficients and regarding the significance level of the coefficients, there is a positive and significant correlation between the coefficients. The Pearson correlation coefficients are 0.077 between the quality of the accruals and the indicator of the cash flow shocks and the significant level of the statistics in 0.014. The Spearman correlation coefficient is 0.08 between the two mentioned variables and the significant level of the statistics is 0.01. The significant level of the two variables is significant in the certainty level of the 95 percent. Therefore, the more the quality of the accruals decreases, the more the cash flow shocks increase. So, the second hypothesis is not confirmed.

Conclusion

To study the aim of the research, first the relationship of the quality of the accruals, as a quality indicator of the accounting information with the future additional return was studied. The results indicate the lack of a significant relationship between the quality of the accruals as a quality indicator of the accounting information with the future additional return. Several researches have documented the relationship between high capital costs with the low quality of the accruals, however, different criteria such as beta coefficient model CAPM, and the ratio of the earnings to the price (E/P) have been used in these researches to measure the capital cost, while the result of the relationship between the quality of the accruals with the capital cost is based on the achieved return of the complex stocks. The result of Francis *et al.,* (2005), and Nichols (2006)'s research proved the significant relationship between the achieved return with the quality of the accruals, on the contrary, Abode *et al.,* (2005), and Core *et al.,* (2008) obtained opposite results indicating lack of a relationship between the quality of the accruals and the achieved return.

In the second step, the correlation between the quality of the accruals and the cash flow shocks was tested. A positive and significant relationship has been observed between the coefficients. If such shocks are related negatively to the quality of the accruals, then the companies having low quality of the accruals will have a negative return of the output cash flow shocks. But the tests showed that the correlation of the quality of the accruals and the direct indicator of the cash flow shock is positive. It means that in future, the companies having low quality of the accruals will not experience the negative cash flow shocks. On the other words, the investors' expected return in such companies does not change due to the news of the possibility of the cash flow exit.

Lack of relationship between the qualities of the accruals with the achieved return can be a sign of lack of market attention to the quality of the accounting information. Some of the reasons of this lack of relationship are many investors' unfamiliarity with the financial issues and lack of the financial analysts and experts who can predict the company performance based on a scientific method of the accounting information. This problem has caused that the investors do invest based on the secret information, hearsays, gossips, and the others' recommendations. With regard to the research findings, it is suggested that the authorities of regulating stock exchange market try to pass some laws in order to increase the share of the accounting information in the market and enhance the quality of reporting. For the future studies, it is also suggested that the relationship of the capital cost and the quality of the accruals is studied based on the earnings response coefficient in return separation in the industry level. Moreover, with regard to the passed law of the stock exchange market in December 2005, it is suggested that the efficiency and effectiveness of this law is studied in terms of the quality of the accounting information based of the overture of the capital cost in two periods before and after passing the law.

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