THE RELATIONSHIP BETWEEN THE QUALITY OF ACCOUNTING INFORMATION AND THE REALIZED RETURNS EXCLUDED FROM CASH FLOW SHOCKS

Khadijeh Eslami¹, *Ramzan Ali Royaee¹, Roya Darabi² and Mansour Garkaz³

¹Department of Accounting, Sciences and Research Branch, Islamic Azad University, Tehran, Iran ²Department of Accounting, South Tehran Branch, Islamic Azad University, Tehran, Iran ³Department of Accounting, Aliabad Katoul Branch, Islamic Azad University, Aliabad Katoul, Iran *Author for Correspondence

ABSTRACT

Basing on the approach of earnings response coefficient, the Realized return has been analyzed and decomposed into two elements of cash flow shocks and the returns excluded from cash flow shocks. The research hypotheses were studied with the regression model by using hybrid data and based on the pooled model during the years 2001 and 2012, and the sample included 78 companies and 1044 observations. The results indicated that there wasn't a significant relationship between the accrual quality and the excess return. Also, the relationship between the accrual quality and the return excluded from the cash flow shocks indicated insignificance.

Keywords: The Accrual Quality, Asset Pricing, Cash Flow Shocks, Accounting Quality

INTRODUCTION

In most researches which dealt with the relationship between the quality of accounting information and the cost of equity capital, the accrual quality was used on the basis of the developed model approach of Francis *et al.*, 2005) based on Dechow and Dichev's model (2002) as an indicator of the quality of accounting information. If, basing on the operational cash flows of the past, present and future, the standard deviation of the residuals obtained by fitting the accruals of working capital is high, it indicates that the accrual quality is low. This scale is related to some features of news of future cash flows. For example, the greatness of this gauge (explains the lowness of the accruals quality). Shows the growth of many sales in the past, the high likelihood of bankruptcy risk as a result of the sequence of more loss, fluctuations in interest and more sales. Each of these specifications is related to the inappropriately systematic performance of stock exchange in the future.

Aiming to identify the mere risk resulted by the accruals quality based on a new approach, this paper attempts to distinguish the return resulted by cash flows shocks and then to conduct the asset pricing test. The framework of earnings response coefficient was used to estimate the achieved return resulted by cash flow shocks. The return resulted by cash flows shock is caused by the inversion of expectations in future cash flows which are measurable by using the feedbacks relating to the unexpected earnings.

Given the lack of research in this area, this problem arises that how the quality of accounting information is related to the return excluded from cash flow shocks.

The Theoretical Literature and Research Background

The origin of theories pertaining to studying the relationship between the accruals quality and the capital costs is based on the analytical models of risk estimation and market infrastructure literature. Keeping on, some of the researches relating to the subject of studying the quality of accounting information, the cost of equity capital, and the effect of cash flows shock exclusion on the stocks feedback will be dealt with.

Cash Flow Shocks

In a cooperated study, Campbell and Shiller (1988) developed the formula of standard divided earnings growth into a model in which the discount rate changes by time. They used the log-linear approximation for the unexpected stock return and divided it into two parts including the changes in future cash flow expectations (cash flow news) and the changes in discount rate expectations (discount rate news).

Research Article

Four methods of estimating the cash flow news and discount rate news are briefly discussed to divide the return: (1) VAR method, (2) revision in analysts' forecasts, (3) ICC method (Khimich, 2011), and (4) Earnings Response Coefficients (ERCs). The first method uses VAR system as the modeling mechanism of market expectations. The next two methods use the analysts' forecasts for market expectations about future earnings. The fourth method states that cash flows news (shock) is the stocks' price response in return of revisions in the expectations of general movement in future cash flows. Since the sum of cash flows must be equal to the sum of earnings in a company's lifetime, the return resulted by cash flows shock can be measured as the return relating to the earning surprise.

Campbell (1991) showed that the deviation (variance) of cash flow news explained only one-third of the total variance of unexpected returns at the overall level. The remainder of stocks variance is resulted by the news on the future expected returns. Voulteenaho (2002) used Vector Autoregressive System (VAR) approach to estimate cash flow news and discount rate news for companies' stocks return. He realized that cash flow news played an important role at the company level and explained 70-80% of stock return variance. He also stated that cash flow news were a lot more easily distinguished than expected cash flow news at the portfolio level.

Campbell and Voulteenaho (2004) raised another important question about the test. It asks, "How much company risk is related to the return correlation pertaining to market's cash flow news (shock) in comparison with discount rate news (shocks)?" Stating that value stocks and small stocks had higher cash flow betas which could explain the mean of their higher returns, they divided company's beta into cash flow beta (bad beta) and discount rate beta (good beta).

Campello *et al.*, (2008) used the savings bond return for expected stocks return. Botosan *et al.*, (2011) and Ogneva (2012) considered the framework of earning response coefficient to exclude the achieved return from cash flow news (shocks) (I use the terms "cash flow news" and "cash flow shocks" interchangeably). Chen and Zhao (2010) proposed another method to estimate cash flow news and discount rate news. In their method, Implied Cost of Capital (ICC) was calculated through analysts' forecasts, and then cash flow news was defined as a price change which was calculated by keeping ICC constant. They showed that cash flow news was an important part of the stocks and its importance increased with the prospect investing both at company level and in all the market.

All in all, return division is a strong concept with deep functions. However, its practical functions have remained unknown. Francis *et al.*, (2005) studied the relationship between the quality of accounting information in forecasting the stocks return and the cost of capital. According to Dechow and Dichev's model (2002), the accruals quality was calculated on the basis of the variance of error expressions per a year for each company in a period of five years. Based on the variables of the research which were classified into two groups of financial (the market value of stocks owners salary, assets, sales, assets return, the ratio of book value to the market value of stocks owners salary, the cost of earnings, the ratio of each stock earning to each stock price, sale growth, and company growth) and accounting (the size of company, the variance of cash flow, the variance of sale, the operational cycle), and the analyses were done. In the first step, the results of checking the relationships of the cost of owing capital and the cost of stock capital with the accruals quality showed a positive relationship between the variables depending on the accruals quality. In the next step, the strength of accruals quality was studied in forecasting the stock return by using the models for one-factor and three-factor pricing.

The results indicate the adding up of the descriptive strength of model from 13.5% to 17.8% which is almost 32%. The comparison of the determinative coefficients of model shows that the accruals quality and the factors like the size and book value of market lead to the increase in explaining power or forecasting the future returns from 18.9% to 20.8%.

In the last step, the accruals quality was divided into two elements of the optional accruals quality and innate ones according to Dechow and Dichev's model (2002), and their relationships with the cost of

Research Article

capital were studied. The results rejected the hypothesis which stated the lack of efficiency of different elements of the accruals quality on the cost of capital.

Core *et al.*, (2007) attempted to study the matter whether the accruals quality as one of the risk factors was effective in asset pricing or not. They learned that the accruals quality was not considered as a risk factor in pricing because it didn't include a merely positive risk in terms of returning. Also, the accruals quality is not able to forecast the fluctuations in future stock return absolutely.

Ng (2011), according to the perspective of Healy and Palepu (2001), Verrecchia (2001), and Easley and O'Hara (2004), defined the quality of accounting information as a feature of company's information efficiency on the lack of trust about the company value and inverted choice and assumed that higher quality of company's accounting information had an inverted relationship with the cost of capital. The variables of accruals quality used the analysts' opinions union as the indicator of the quality of accounting information for the stated hypothesis test. According to the information on the stocks accepted in the markets of NYSE, AMEX, and NASDAQ, the results indicated that there was a negative relationship between the quality of accounting information with cashing risk and the cost of capital.

Developing the methodology based on earning response coefficient, Ogneva (2012) tried to divide the achieved return into two parts of the return resulted by cash flows shock and the return excluded from cash flows shock. The results indicate that the stocks with weak accruals quality has a relationship with the return resulted by cash flows shock. After separating the return resulted by cash flows shock, the future returns show a negative and significant relationship with accruals quality. The mere risk relating to the accruals quality has a positive and significant relationship with the return excluded from cash flows shock. In other words, the risk factor of accruals quality affects the asset pricing along with other factors.

Research Hypothesis

Given the background and problem of research, the research hypotheses have been considered to be as follows:

- 1- High accruals quality results in more returns.
- 2- There is a relationship the accrual quality and the realized return excluded from cash flow shocks.

Research Methodology

Sample and Data: The time period of the research is a 17-year period from 1996 to 2012 by considering the information near the time when the research was done and the information availability. Estimating some variables was needed before the hypothesis test, so the information pertaining to 5 years before the hypothesis test was used. Therefore, the time period of hypothesis test started from the beginning of the year 2001 until the end of the year 2012. Given the location in which the research considers, the statistical population includes all the companies accepted in Tehran Stock Exchange. The sample companies were chosen in an omitting way and according to the following conditions:

- 1- They were accepted in Tehran Stock Exchange before the beginning of 1996.
- 2- Their fiscal period ends in February. The reason for this selection is to consider the identical economic and political circumstances and prevent the effects of seasonal factors and conditions on calculating the variables.
- 3- They didn't have any transactional disrupts in the period of study, and their stocks were active in the market during the years which were studied; therefore, the companies whose transactional days were in average more than 70 days out of 250 transactional days per year during the years of research were chosen as the research sample.
- 4- They were not classified in the group of investing and holding companies.
- 5- The data required by the companies were available.

By considering the above-mentioned constraints, the statistical population of this research includes 87 companies and 1044 observations (firm-years). The required data were extracted from the software Rahavard Novin and the financial statements of sample companies available on www.rdis.ir. After collecting the data, the variables were measured through Excel work sheets and the software SPSS, the research hypothesis were tested by using the software SPSS and the software EVIEWS.

Research Article

The Experiential Hypothesis Test

In the asset pricing test, the mean of achieved return is used to extract the cost of stock owners' salary. But the achieved return is not an appropriate indicator to measure the cost of stock owners' salary because of information shocks. The achieved return consists of three parts including the expected return, the return resulted by cash flow news, and the return resulted by discount rate news Of these three parts, only the expected return reflects the cost of stock owners' salary.

Core *et al.*, (2007) documented that the accruals quality would not be able to forecast the future return of stocks. So the analysis by Core *et al.*, is checked first. Then the significance of accruals quality with the achieved return excluded from cash flows news will be checked.

Checking the accrual quality with future returns has been estimated by using the following formula:

$$R_{i,t+1} - R_{t+1}^{f} = Intercept_{t} + q_{t}RDD_{it} + b_{t}BETA_{it} + s_{t}MKTV_{it} + h_{t}BMRATIO_{it} + \epsilon_{it}$$

Model (4)

In which:

 $R_{i,t+1}$ is the return of stock i for month t+1,

 $R_{i,t+1}^f$ is the monthly rate of cooperative paper for month t+1,

RDDit is the company's rank based on the accruals quality at the end of month t,

BETA_{it} CAPM beta estimated using 36 months of data,

MKTV_{it} is the natural logarithm of market value of equity,

BMRATIO_{it} is the natural logarithm of the book-to-market ratio.

The following regression model has been fitted to check the relationship between the accrual quality and the return excluded from cash flows shock:

$$r_{i,t+1}^{NCF} = Intercept_t + q_t RDD_{i,t} + b_t BETA_{it} + s_t MKTV_{it} + h_t BMRATIO_{it} + \epsilon_{it,t}$$

Model (5)

In which $r_{i,t+1}^{NCF}$ is the realized return excluded from cash flow news (shocks) for the stock i and month t+1, and other variables are explained in model (4).

Research Variables

Dependent Variables

In this research, the framework acquired by the accounting literature about earning response coefficients (ERC) has been used to clean the return resulted by cash flow news (shock). The model used to control cash flow news () is based on Ogneva's literature (2012). Its dependent variables are as follows:

1- Return Excluded from Cash Flow Shocks or Non-Cash Flow Shock Return ($r_{i,t+1}^{NCF}$):

The framework acquired by the accounting literature about earning response coefficients (ERC) has been used to purge the return resulted by cash flow news (shock). Cash flow news () is the stock price response to changes in future cash flow expectations. Since the sum of cash flow must be equal to the sum of earnings in the company's lifetime, cash flow news (shock) can be measured as the return related to earnings surprise (SURP). To estimate non-cash flow shock ($\tau_{i,t+1}^{NCF}$), first cash flow shock should be estimated.

Estimating the part of cash flow news (shock) return $(r_{i,t+1}^{CF})$ is done in two steps. First, the earnings surprise (SURP) is estimated on the basis of the expected return derived from the simple statistical model of earnings forecast. This model assumes that earnings could be predicted on the basis of the earnings and return pertaining to the previous years, and the earnings surprise (SURP) is calculated by subtracting the expected earnings from the achieved earnings.

Research Article

The earning is estimated with a simple statistical model which is based on this assumption that the annual earnings follow a first-order autoregressive process (AR1):

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

In which *EARN*_{i,t} is the earnings before extraordinary items for firm i during fiscal year t.

Estimating the expected earnings of each company has been done in two steps (By regressing the earnings of current period on the basis of the earnings previous period. The cross-sectional estimation of this model was done absolutely for the desired time period. Then the acquired coefficients were used to create

the expected earnings of the next year): (1) the forecasting coefficients of $\overline{\beta_0}$, $\overline{\beta_1}$ and $\overline{\beta_2}$ are calculated through the estimating model as a cross-sectionally during the previous years, and (2) prediction earnings through the placement of the estimated coefficients and inserting the values of the current and previous year pertaining to the net earnings of each firm.

After calculating the earnings surprise (by subtracting the expected earnings from the actual earnings), the share of cash flows news (shock) (the return resulted by cash flows shock) is calculated from the achieved return. The return resulted by cash flow shocks is estimated by dividing the achieved return into two groups (the return resulted by cash flows shock and the return resulted by non-cash flows shock) as a time series.

Breaking the return up as a time series includes the regression estimation of a specific company's extra return based on the earnings surprise by using at least 72 monthly returns during at least 6 fiscal years.

The fitted values of such regressions indicate the cash flow shocks return $(r_{i,t+1}^{CF})$, while the remainders

plus y-intercept indicate the return excluded from cash flow shocks $(r_{i,t+1}^{NCF})$ which Ogneva (2012) called non-cash flow shocks.

The previous researches (Lipe et al., 1998; Ogneva, 2012) indicate this estimation method predicts cash flows news (more precisely.

The Excess Return $(r_{i,t+1} - r_{t+1}^f)$: is the difference of the mean of monthly returns from the month t+1 to the month t+12 in comparison with the monthly returns of bonds.

Stocks $(r_{i,t+1})$: is the return rate which is announced for each firm through the prices declared by Tehran Stock Exchange in a way that the subtraction of the desired price at the end of period from the beginning of period divided by the price at the beginning of period introduces the company return for that period. Period means each month.

Risk-Free Rate of Return ($r_{i,t+1}^f$): The interest rate on government bonds (such as municipal bonds) are used as the risk-free rate of return during the years the research was done.

Independent Variables:

The independent variables of the research have been chosen and measured as follows:

1- Dechow and Dicheve Measure) (The DD Measure): The model presented by Francis *et al.*, (2005) was has been used to estimate DD Scale. They believe that the model developed by Dechow and Dichev explains the likelihood of liquidity of accruals better, so this model is based on the unexplained changeability of the approach of Dechow and Dichev's model (2002). According to Dechow and Dichev's model, working capital accruals are fitted on the basis of operating cash flows of the previous, current and next periods. The unexplained part of deviation in working capital accruals explains the inverted scale of accruals quality.

According to the model presented by Francis *et al.*, (2005), DD Measure is estimated by using the following cross-sectional regression:

$$TCA_{it} = \alpha_t + \beta_{0t} 1/ATA_{it} + \beta_{1t}CFO_{it-1} + \beta_{2t}CFO_{it} + \beta_{3t}CFO_{it+1} + \beta_{4t}\Delta REV_{it} + \beta_{5t}PPE_{it} + \epsilon_{it}$$
(1-3)

Research Article

 TCA_{it} is the total of current accruals of the year t which is estimated by using the balance sheet approach.

$$TCA_{it} = \Delta CA_{it} - \Delta CL_{it} - \Delta Cash_{it} + \Delta STDEBT_{it}$$

 ΔCA_{it} is the annual changes in the current assets.

 ΔCL_{it} is the annual changes in the current liabilities.

 $\Delta Cash_{it}$ is the annual changes in cash.

 $\Delta STDEBT_{it}$ is the annual changes of debt in current liabilities.

 CFO_{it} is the operational cash flow of the year t which is estimated as follows:

$$CFO_{it} = NIBE_{it} - TA_{it}$$

 $NIBE_{it}$ is the net income before extraordinary items.

 TA_{it} is the total of accruals which is calculated as follows:

$$TA_{it} = TCA_{it} - DEPN_{it}$$

DEPN_{it} is depreciation and amortization expense in year t.

 ΔREV_{it} is the annual changes in revenues.

PPEit is the gross property, machinery and equipment.

 ATA_{it} is average value of total assets during the years t-1, t and t+1.

All the variables have been divided by the mean of total assets during the year t-1, t and t+1 in order to eliminate the effect of scale. Then DD measure was measured for each company i in each year t, and the remaining variance resulted by high cross-sectional regression was measured during a five-year period [t-4,t].

2- Descending Ranking Based on DD Measure (RDD): In all the asset pricing tests, DD Scale is converted to descending ranks. The process of sorting the ranks out in a descending order is done monthly, and one rank based on DD Scale from the latest fiscal year which ends in 4 to 16 months before sorting out is allocated to each share. For example, ranking for September 2005 is done from the latest fiscal year which ends in June 2004 to May 2005 which means February 2005 according to DD Measure.

Control Variables

CAPM BETA: The monthly and 36-month period (three-year) data were used to calculate Beta by using CAPM model. Also, Beta was estimated for the latest fiscal year which ends at least in three months before the month t.

Market Value of Equity (MKTV): MKTV was calculated on the basis of logarithm and was estimated for the latest fiscal year which ends three months before the month t.

The Ratio of Book Value of Equity to Market Value of Equity (BMRATIO): It is the book value of equity at the end of each year. M was calculated as the market value of equity based on the last price of stock in the last numbers of stocks published at the end of each fiscal year on the basis of logarithm and was estimated for the latest fiscal year which ends at least three months before the month t.

Research Findings

The total number of observations is 1044 in the research sample. The descriptive statistics of dependent and independent variables are presented in table (1). Some of these statistics are explained in the following.

The descriptive statistics presented in table (1) indicate the specifications of dependent, independent and control variables on the basis of central indexes (like mean) and dispersion indexes (like elongation and skewers). The mean of future excess return is 2.405; the return excluded from cash flows shock is 2.382; the accruals quality is 0.076; the market value of equity is 5.288; BMRATIO is 1.544; and Beta coefficient is 0.504. The skewers coefficient explains the deviations from symmetry. The skewers coefficient of all the variables is positive and the distribution of variables tends to right. The skewers of most variables are more than the skewers of normal distribution (1.96), except for cash flows shock,

market value of equity and the coefficient of Beta. However, the skewers coefficient of standard error of variables is almost 0.079. If this coefficient becomes smaller than -2 or greater than +2, the normality of distribution is not confirmed (Momeni, 2010), so it can be concluded that the distribution of the variables is normal. The elongation of distribution of all the variables is positive and more than that of normal distribution, except for the number of transactional days. The comparison of standard error of elongation coefficient of variables distribution with an allowable domain of -2 to +2 indicates the normality of elongation of variables distribution.

Table 1: The Descriptive Statistics of Data

Variables Mean		Skewness	Standard Error of	Elongation	Standard Error of				
(Observations:			Ske wness	_	Elongation				
1044)			Coefficient						
Dependent Variables									
Future Excess	2.405	3.642	0.079	29.531	0.158				
Return									
Return Excluded	2.382	0.848	0.079	12.37	0.158				
from Cash Flows									
Shock									
Index Variable of Accounting Information Quality									
Accruals Quality	0.076	3.287	0.079	0.079 18.08 0.158					
Control Variables									
Market Value of	5.288	0.639	0.079	0.552	0.158				
Equity									
BMRATIO	1.054	4.542	0.079	23.48	0.158				
Beta Coefficient	0.504	1.728	0.079	18.107	0.158				

Checking the Assumptions of the Classical Linear Regression before the Hypothesis Test

The normality of distribution of regression remainders error and the constancy of errors variance are of necessary assumptions for the use of linear regression. To check the normality of errors distribution, data distribution graph and normality graph were used. Comparing the graph of error frequency distribution and the graph of normal distribution indicates that error distribution is almost normal. Durbin-Watson Test has been used to check the independency of errors. If Durbin-Watson statistic is placed between 1.5 and 2.5, the lack of correlation between errors is confirmed. So Durbin-Watson statistics pertaining to models (4) and (5) are 1.449 and 0.815, respectively.

The results of checking the normality of dependent variables distribution by using Kolmogorov-Smirnov test is shown in table (2).

Table 2: The Results of Normality Test of Dependent Variables Distribution

Future Excess Return	Kolmogorov-Smirnov's Statistics Z	0.644
	Significance Level	0.801
Return Excluded from Cash	Kolmogorov-Smirnov's Statistics Z	
Flows Shock	Significance Level	0.305

The Results of First Hypothesis Result

The results of first hypothesis test are reflected in table (4). The first hypothesis has been tested in two steps. In the first step, the relationship between the accruals quality and excess returns were studied. In the second step, the first hypothesis was controlled by considering the control variables again in order to control the effects of these variables.

Given the magnitude of statistics F and their significance levels, model (4) is significant before and after entering control variables. However, the statistic coefficient t of accruals quality variables is 0.556 before

entering controlling variables, while it is 0.782 after entering control variables, the significance level of these variables are 0.578 and 0.472, respectively.

Comparing the significance levels of these statistics with the reliability level of 5% indicates that the relationship between the accruals quality and future excess returns is insignificance. So the first hypothesis is not confirmed.

Table (4): The Brief Results of Test

Table (4): The Brief Results of Test									
Model	Summary of Model				Analysis of Model				
(4): Before Entering the Control Variables	Correlation Coefficient	Determinati on Coefficient	Durbin- Statistic		Statistic F		Significanc e Level		
	0.017	0.001	1.449		1.965		0.05		
Model (5):	Correlation Coefficient	De te rminati on Coe fficient	Durbin-Watson Statistic		Statistic F		Significanc e Level		
Entering the Control Variables	0.119	0.014	1.459		3.295		0.009		
	Variables	Coefficients	Statisti c t	Degree of Importanc e	Coefficient s	Statisti c t	Significanc e Le vel		
	Y-Intercept	2.313	9.95	0.000	3.829	3.523	0.0117		
	Accruals Quality	1.165	0.556	0.578	1.876	0.782	0.433		
	Market Value of Equity				-0.216	-0.755	0.45		
	BMRATIO				-0.156	-1.815	0.069		
	Beta Coefficient				-0.558	-2.90	0.003		

The Results of Second Hypothesis Result

The results of second hypothesis test are shown in table (5). The model is significant before and after entering the control variables by considering the significance level of statistic F.

The significance level of accruals quality resulted by fitting model (5) before and after entering the control variables indicates the lack of a relationship between the accruals quality and the return excluded from cash flows shock.

The correlation coefficient and determination coefficient of the model are very weak before and after entering the control variables. Of course given the results of second hypothesis test, the weakness of determination coefficients is justifiable.

Table 5: The Brief Results of Test

Model	Summary of Model				Analysis of Model		
(5):	Correlatio	De te rminati	Durbin-V	Vatson	Statistic F		Significanc
Before	n	on	Statistic				e Level
Entering	Coefficient	Coefficient					
the	0.254	0.06	0.815		5.245		0.0000
Control							
Variables							
Model	Correlatio	De te rminati	Durbin-Watson		Statistic F		Significanc
(5):	n	on	Statistic				e Level
After	Coefficient	Coefficient			4 0 45		
Entering	0.35	0.10	0.869		4.247		0.002
the							
Control							
Variables	X7 1. 1	C	G(- 4* - 4* -	D	C	G4 - 4 * - 4 *	C'
	Variables	Coefficients	Statistic	O	Coefficient	Statisti	Significanc
			t	Importanc	S	c t	e Level
	Y-	2.245	20.48	e 0.000	4.780	4.935	0.000
	Intercept	2.243	20.40	0.000	4.700	4.755	0.000
	Accruals	0.046	1.428	0.154	1.214	1.115	0.265
	Quality	0.010	1.120	0.15	1.21 1	1.115	0.203
	Market				-0.120	-3.646	0.000
	Value of				0.120	0.0.0	0.000
	Equity						
	BMRATI				-0.022	-0.665	0.506
	0						
	Beta				0.089	1.27	0.307
	Coefficient						
	Coefficient						

CONCLUSION

Basing on the framework of earnings response coefficient in this research, we attempted to divide the achieved return into two parts including the return resulted by cash flows shock and the return excluded from cash flows shock. Then by using the assets pricing model based on a new approach, we tried to study the relationship between the quality of accounting information and the cost of enterprises' capital. To study the purpose of the research precisely, the relationship between accrual quality as an indicator of accounting information quality and future excess return was tested in the first step. In the second step, the relationship between accruals quality and the achieved return excluded from cash flows shock was tested by considering the control factors. The results indicated the lack of a significant relationship between the accruals quality as an indicator for accounting information quality and future excess return and the achieved return excluded from cash flows shock as an indicator for the cost of equity capital. Many researches documented the relationship between the cost of high capital and low accruals quality, although many scales like the beta coefficient of CAPM model and the ratio of earnings to price (E/P) were used to measure the cost of capital. The results pertaining to the relationship between accruals quality and the cost of capital based on the realized return of stocks are mixed. The results of research by Francis et al., (2004 and 2005) documented the significant relationship of the achieved return and the factor of accruals quality; on the contrary, Core et al., (2008) made contradictory observations indicating the lack of relationship between the factor of accruals quality and the achieved returns.

The results of this research are convergent with the results of the research by Core et al., (2008). Of the reasons for the lack of relationship, we can point to the unfamiliarity of many investors with financial

Research Article

issues and the fact that there are not sufficient financial analysts and experts who can predict the companies' performances on the basis of a scientific method based on accounting information, a fact which has made the capitalists try to invest their capitals according to confidential information, rumors, and recommendations.

Making Suggestions Based on the Results of Research

The lack of relationship between the accruals quality and the realized return could indicate the lack of market's attention to the quality of accounting information, so it is recommended that the officials be determined to set the regulations of stock exchange by codifying the rules in order to increase the share of accounting information in market and improve the quality of reporting.

REFERENCES

Botosan CHA, Plumlee MA and Wen H (2011). The Relation between Expected Returns, Realized Returns, and Firm Risk Characteristics. *Contemporary Accounting Research* **28** 1085–1122.

Campbell JY (1991). A variance decomposition for stock returns. *Economic Journal* 101 157–79.

Campbell JY and Shiller RJ (1988a). The dividend-price ratio and expectations of future dividends and discount factors. *The Review of Financial Studies* **1** 195-228.

Campbell JY and Shiller RJ (1988b). Stock prices, earnings, and expected dividends. *The Journal of Finance* **43** 661- 676.

Campbell JY and Vuolteenaho T (2004). Bad beta, good beta. The American Economic Review 94 1249-1275.

Campello M, Chen L and Zhang L (2008). Expected returns, yield spreads, and asset-pricing tests. *Review of Financial Studies* **21** 1297–1338.

Chen L and Zhao X (2010). What Drives Stock Price Movement? (SSRN eLibrary).

Core J, Guay W and Verdi R (2008). Is accruals quality a priced risk factor? *Journal of Accounting and Economic* 46 2–22.

Dechow P and Dichev I (2002). The quality of accruals and earnings: The role of accrual estimation errors. *The Accounting Review***77** 35–59.

Francis J, LaFond R, Olsson P and Schipper K (2004). Costs of equity and earnings attributes. *The Accounting Review* **79** 967–1010.

Francis J, LaFond R, Olsson P and Schipper K (2005). The market pricing of accruals quality. *Journal of Accounting and Economics*39 295–327.

Khimich Natalya V (2012). Cash Flow and Discount Rate news estimation: which method to choose? Dissertation, University of California, Berkeley.

Ng J (2011). The effect of information quality on liquidity risk. *Journal of accounting and economics* **52**(2) 126-143.

Ogneva Maria (2012). Accrual Quality, Realized Returns, and Expected Returns: The Importance of Controlling for Cash Flow Shocks. *The Accounting Review* **87**(4) 1415–1444.