



2528-9705

Örgütsel Davranış Araştırmaları Dergisi
Journal Of Organizational Behavior Research
Cilt / Vol.: 3, Sayı / Is.: S2, Yıl/Year: 2018, Kod/ID: 81S2204



THE EFFECT OF ACCOUNTING INFORMATION QUALITY ON SYSTEMATIC RISK IN COMPANIES LISTED IN TEHRAN STOCK EXCHANGE

Mahmoud HEMMATFAR

Associate Professor, Department of Accounting, Boroujerd Branch, Islamic Azad University, Boroujerd, Iran.

Email: Dr.hematfar@yahoo.com

ABSTRACT

One of the factors influencing investors' decisions are risk factors. Therefore, investors in their deciding investment to pay attention to the risk. So that they can identify levels of investment risk. According to this study, we evaluated the risks affecting of the quality of financial information firm for the period 2010-2014. In the present study, the risk is considered as the dependent variable and the quality of financial information as an independent variable. Financial leverage variables, firm size and current ratio were investigated as control variables in research. To test the hypothesis has been used of the difference test panel regression model, results show that there is a negative correlation between the quality of financial information and risks in the company's shares. Companies that have high quality financial information are significantly lower with risk assessment.

Keywords: Accuracy of Earnings, Accruals Quality, Beta, Volatility of Stock Returns, B / M.

INTRODUCTION

A study about the influence of accounting information's quality on systematic risk in companies which are accepted in stock securities market of Tehran. The quality of accounting information consists of accuracy with any financial report that expresses the information of cash flow supposed by companies to the investors. Accounting quality calculated by using of the quantitative information of financial statement includes the quality of accruals, special items, repeating of operational losses and unexpected interest (extra interest). As an additional test, the quality of accounting calculated by using of index 's readability from lee's article in 2008 that was a scale of qualitative information in yearly reports. Results of show that companies that their annual report is hard to read, it means that the companies with high readability have a significant high delay price (Osmania, 2002).

To evaluate the quality of accounting information we should put a distinction between the set of information that investors had, and the information that recently were informed about. The investors use their existed data set to predict the cash flow and come to an estimated price when the new valuable information accomplished, they update their prediction of the cash flow to determine the new price. so, it assumed that when the accounting data is a part of data set that investors use for prediction of cash flow, the low quality of data maybe is related with the lower quality of existing data set and then by lower quality of prediction of cash flow. When the new value data weather systematic or special for company is achieved, the prediction of cash flow as a result of the high quality of accounting data set, cause to determine

the uncertain price. When the uncertainty is in price determination. The investors decide to correct the primary price determination fulltime, maybe by using of their improved understanding and the information of other investor's determination, until the price convergent with the basic values. this is the process which called delayed price balance. Data shortage potentially was an obstacle for on time price exploration, and the delayed stock price is kind of a result of imperfect data. A delayed stock is potentially dangerous for a customer, because maybe is alien with the general information that was processed on that time and was effective on the price, and probably the customer needs a return consume to compensate the incompatible choice that have done. As both company's no accounting and accounting indexes. so we can separate the delay consume related to accounting from the no accounting, and find some evidences between invest cost and weak accounting quality (Ghaemi and Shahriari, 2009).

According to risky features of investee's company and environmental conditions, the investors determine their expected return. If we look at the invention discussion from investee's company view, the investor's expected return is the same as investee's company's inverts' cost. Purpose of the study divided as follows:

The general purpose of this research is a study about the effect of information quality on company's risk. To access to this main purpose, we can divide it into two minor goals and during research these purposes follow:

1. Determination of data quality on company's risk
 - 1-1 Determination of interest currency on company's risk
 - 1-2 Determination of accruals quality on company's risk

According to the presented theoretical, the study purpose is to answer these questions:

2. Does the higher data quality, decreases the company's risk?
3. does high interest currency decrease the company's risk?
4. Does the accrual's quality influences on company's risk?

SIGNIFICANCE OF THE STUDY

The subject of clarity of financial statements and the quality of presented data in it is considered as a functional solution. The clear and qualified data flow cause the deduction of data asymmetry (Ya'qubnezhad and Zabihi, 2011).

Low Financial revelation cause to misguidance of shareholders and has an adverse effect on their Wealth. so a qualified revelation through asymmetry decrease, cause a increase in deals, amounts and liquidity. Wales believes that although in efficiency markets it's highly impossible to achieve unusual yields by using existed data in stock market, but the evidence shows that data publication in market in the majority of investor's view is valuable, because it provides the necessary balance for updating investors in markets' views in one hard and highly solve the dominated uncertainly on market that is effective on the exchange volume and liquidity. In fact, by data publication in market the amount of security exchange increases and so investors can achieve to optimal investment basket that increases their wealth and economic walfare (Walas, Wanda, 2004).

Data asymmetry caused by revealing with low quality cause the incorrect choice. Securities that have this problem, has fewer liquidity (Erkens et al., 2009).so the customers have less attitude to buy. Investors ask more reward for additional paid cost. By revealing the private information and improving the quality of revealing, companies can decrease the information asymmetry and



securities exchange cost and as a result decrease the investment's cost (Amihud and Mandelstam 1986).

The request for stock with higher data quality is because of the lower fluctuation in liquidity changes. So the stock yield with lower data quality (means higher data risk) supposed to be more sensitive to market's liquidity it means that the data quality influences on company's risk. In this way, the present research studies the effect of information quality on company's risk.

THEORETICAL FOUNDATIONS

Company's risk and risk's identity

Several economists defined investment's risk as distribution return. For example, Keens defined investment's risk as the possibility of yield's variance. According to Keens, if somebody invests in a property that its yield has a lot of dispersion should receive an equal amount because of the risk that bears. Hikes emphasizes that an investment that has more dispersion in its yield (supposed to have expected return) has less attractiveness. So Acharya and Pedersen emphasizes that when the return is uncertain, the dispersion factor is an important factor that effects on investment's decisions. (Acharya and Pedersen, 2005).

Estrada defined investment's risk in uncertainty condition as probability of loss and suggest investors to measure risk according to loss possibility. In their ideas between all questions that comes to an investor's mind, the most important question is that How much is the possibility of being the real return less than zero. This question is the basis of risk. (Estrada, 2001).

Also they presented a quantity index from risk that is effected by the probability of loss and the possible amount of loss. so they emphasize on the negative part of possible distribution and according to their model, more dispersion doesn't necessary means more risk. Bokmal is another author who stated that variance doesn't show risk by itself, but generally risk stated that an investment's return finally gets negative values. By the way, despite that there's no agreement about risk, but most authors suggest that risk should be measured by one of the distribution scale of return. Despite the problem that exists in determination of an index for risk, there's a lot of effort to determine the risk index according to distribution factors. The most adapted efforts in this case risk determination by using of return's distribution's variance that is called variance's mean factor and it is the basis of portfolio's theory (Sufiyan, 2005).

Portfolio's risk and return

Portfolio's expected return is easily calculated by weight mean of expected return of each security. The weights that are used for mean, are some ratios of investable funds, that are invested in each security. The portfolio's expected return is calculated as follow:

$$E(RP) = \sum_{i=1}^n w_i E(R_i)$$

That in this equation we have: portfolios expected return- $E(RP)$; W_i - Expected return of security I - the investable funds share related to securities. Without considering the present asset in one portfolio or the total stock of investable fund expected portfolio's return, always is the weight mean of expected return of each assets (Arab Mazar Yazdi and Talebian, 2008).

Portfolio's risk



Another main calculate in portfolio's model is portfolio' risk's calculation. In Marquez's model, the risk measures by using portfolio's return's variance, and measures the same as calculating the risk of each security:

$$\delta_p^2 = E(r_p - \bar{r}_p)^2$$

In this part the basis of portfolio's modern theory appears and states as follow:

Although the expected return of portfolio consists of weight mean of expected return of each security exist in portfolio, we can show this definition as the following equation) :

$$VAR(RP) = \sum_{i=1}^n w_i var(R_i) + \sum_{i=1}^n \sum_{j=1}^m w_i w_j cov(R_i, R_j) - VAR_p$$

Exactly because of this inequality in portfolio's variance's equation that investors can decrease the portfolio's risk. portfolio's risk is not only depended an weight mean of portfolio 's constituent security risk, but also is a function of risk in each security and covariance of between return of each security. This concept has shown in the following variance statement:

$$\sum_{i=1}^n w_i var(R_i) + \sum_{i=1}^n \sum_{j=1}^m w_i w_j cov(R_i, R_j) - VAR_p$$

That we have in this equation:

VAR_p – portfolio's return variance $var(R_i)$ - Return variance of security I; $cov(R_i, R_j)$ – covariance of between return of securities i , j W_i, W_j - the percentage of investable funds that invested in securities (Arab Mazar Yazdi and Talebian, 2008).

- ***he method of calculating and estimating Beta (β)***

As discussed before, in market's model, the stock return defined as follows:

$$R_i = \alpha_i + \beta_i R_m + \varepsilon_i$$

In this relation Beta's coefficient (β_i) is as systematic risk's index that states this concept:

- ***The relation degree of each security with market***

If there's not such a relation, it means that the market effects on security price is in minimum position and so the expected return of those securities are independent of such factor. This independency shows that prices are not balanced price and probably the market is not efficient.

- ***The convenience of pricing mechanism in security's market***

To have a pricing mechanism helps as to study that is the security's price is based on risk or no? Because in an efficient market all the price are balanced, so there's no security in market that is priced highly or lowly (Fakhari and Fallah Mohammadi, 2009).

Information quality

- ***The purposes of presenting accounting information in financial reports***

All the economical units need accounting information and reports to manage daily activity, past function valuation, and planning the future activities. So the purposed for presenting accounting information in financial reports are: a: The valuating of economical unit's function b: Judgement about how economical unit use the present sources. c: The prediction of interesting progress of economical unit in the future. The written information in financial statements show the quality of past activity of economical unit. So, the information that are presented though financial

reports, should be related, convenient, and complete and the needs and requests of main investors, investing institutes, financial analysis, and other users should be considered in presenting financial information. All the related and important information should be presented in financial statement in a way that financial reports, present a complete demonstration of financial activities and events of an economical unit. The significance of following the importance issue in presenting information in financial reports is for preventing minor and important information to make the main and important information to be ignored. To answer these questions, main hypothesis are presented as one main hypothesis and six sub hypothesis as follow:

1. The quality of financial data has a significant relation with company's risk.
 - 1-1 Interest currency has a significant relation with stock return's fluctuations.
 - 1-2 Accrual's quality has a significant reverse relation with stock return 's fluctuations.
 - 1-3 Interest's currency has a significant reverse relation with B/M
 - 1-4 Accrual's quality has a significant reverse relation with B/M
 - 1-5 Interest's quality has a significant reverse relation with systematic risk.
 - 1-6 Accrual's quality has a significant reverse relation with systematic risk.

RESEARCH METHOD

The success of each econometrics study is related to accessing suitable data to have a practical analysis, we may have their kinds of data. Temporal data, sectional data, and mixed data (the mixture of temporal and sectional data). Research variables and their operational definitions the first for testing the research hypotheses is the exact and suitable presentation of variables which make available the possibility of measuring the considered characteristics of this research. The variables of this research are divided into dependent and independent variables in order to testing the hypotheses. This classification is useful and worth because of its general function and special importance in research planning and also reporting of its results. The independent variable, is a variable which the researcher takes it into consideration in order to study its effect on dependent variable. The dependent variable is also measuring for determining the effect of independent variable and it's actually the variable which is being predicted.

The dependent and independent variable

The independent variable in this study is data quality which for measuring it the interests' currency and accruals quality are used. Accruals quality: for every selected company in mentioned time, the regression equation of Francis and colleagues (2005) was estimated. The mentioned regression equation was used for estimating accruals quality of the company in a year. This equation is as follows: according to relation (1):

$$TCA_{i,t} = b_0 + b_1 CFO_{i,t-1} + b_2 CFO_{i,t} + b_3 CFO_{i,t+1} + b_4 \Delta REV_{i,t} + b_5 PPE_{i,t} + \varepsilon_{i,t}$$

Which according to relation (2):

$$TCA_{i,t} = (\Delta CA_{i,t} - \Delta CL_{i,t}) - (\Delta Cash_{i,t} - \Delta STDebt_{i,t})$$

$\Delta CA_{i,t}$ = change in current assets

$\Delta CL_{i,t}$ = change in current debts (loans)

$\Delta Cash_{i,t}$ = change in cash



$\Delta \text{STDebt}_{i,t}$ = change in short- time debts

$\text{CFO}_{i,t}$ – The company cash flows in every year which is calculated by relation (3):

$\text{NIBE}_{i,t}$ – Pure interest before unexpected items and $\text{TA}_{i,t}$

The whole accrual items in every year which is calculated by relation (4):

$$\text{TA}_{i,t} = \text{TCA}_{i,t} - \text{DEP}_{i,t}$$

$\text{DEP}_{i,t}$ – The deprecation Fee of the company and $\varepsilon_{i,t}$ is the left over portion in relation (4) which is the quality scale of accruals.

According to Francis and his colleagues' Model (2005), the amount is of accruals quality in year(t), is it standard deviation of company rests in relation (t) From t-1 to t-5, which calculated as follows: (relation 5):

$$\text{AQ} = \sigma = \sqrt{\frac{\sum_{n=t-5}^{t-1} (\varepsilon_{j,n} - \bar{\varepsilon})^2}{2}}$$

For every institute in every fiscal year, standard deviation of company rests was calculated for fiscal years from t-1 to t-5. It's clear that the bigger standard deviation shows the lower data quality and smaller standard deviation shows the higher data quality. For showing that whatever the quality scale of accruals is bigger, the data quality will be more, the obtained standard deviation is multiplied in negative. Because of the coverage of t-1 and t+1 in data model of 5 years for calculation is used.

Accuracy of profit: by using Chang and Firth's Model (2000), the measuring process of profit forecast error of every stock is as follows:

$$\text{FE} = (\text{AP} - \text{FP}) / \text{FP}$$

Which its constituent factors are:

FE= Forecast error

FP= Forecast profit

Systematic Risk: It's representative of sensitivity of a bunch of securities to change in market portfolio yields which is calculated by the ratio of securities yield covariance and market portfolio yield toward its variance:

$$\beta = \frac{\text{COV}(R_{it}, R_{mt})}{\sigma^2(R_{mt})}$$

in above equation, R_m is market portfolio yield and $R_{i,t}$ is the yield of every stock(i) in time(t). The market yield R_m also is calculated as below:

$$R_m = \frac{I_i - I_o}{I_o}$$

I_0 is the total market price index announced by Tehran stock exchange in the beginning of the year and I_t is the market price index in end of the year. Book value ratio to market value of shareholder's salary book value ratio to market value book value of shareholder's salary in year (t) {stock market value in end of course}:

$$\text{Book value to market value} = \frac{\text{Book value of equity in year } t}{\text{Stock market value at the end of the period}}$$

In this study, due to the study of Marquez, standard deviation was used as stock return fluctuations. The calculation of monthly stock return also is as follows:

$$\text{VOLI} - \text{RET}_{it} = \frac{p_1(I + a) + D - [p_0 + a(1000)]}{p_0 + a(1000)}$$

VOLI-RET: stock return fluctuations (i) in year (t)

P1: Stock price in end of year (t)

a: Percentage of capital increase

D: Cash profit per share

PO: Stock price in the beginning of year (t)

According to above explanations, for calculating actual per share, the capital increase was also considered. Here it is considered that increase of capital to nominal value 1000Rial per share have been done according to business law. Of course in terms of tax, most of companies have submitted increase of capital as nominal value. In this study it is assumed that dividends were split uniformly during the year, so for calculating monthly return,

$\frac{1}{12}$ of paid dividends was used.

Control variable

The bellow variables were used as control variables:

Liquid ratio: for this purpose, the current ratio is used which is the current assets divided by current debt.

Size of the company: Total assets logarithm (size).

Financial leverage: It comes from the total debt divided by total assets.

Research model

In order to study the research hypotheses, the general model below was used. For measuring the required variables for every hypothesis, the relevant measuring models were used:

$$R = \beta_0 + \beta_1 \text{QU} - \text{INFOR}_i + \beta_2 \text{SIZE}_{ti} + \beta_3 \text{LEV}_i + \beta_4 \text{Cash ratio}_i + \epsilon_i$$

In this model, R= company risk

-QU- INFOR_i= the quality of financial information

SIZE_i= the size of company

LEV_i= Financial leverage

Cashratio_i = Cash ratio

ϵ_i = Measurement error

Data collection method



In this study, library resources including book, monthly journals according quarterly, research centers publishing like publication of audit organization, dissertation and relevant research papers and searching on electronic database, were reviewed.

For collecting statistical data also, the securities and also shares computer system (rdis.ircodal.ir) was used.

Statistical society and its volume

Statistical society of this study consist of the total accepted companies in Tehran stock Exchange in period of time from 2010 to 2014 which have the stated conditions. Every company was audited, didn't have any change in fiscal year and the fiscal year was leading to 12.29 for every year. The companies should have the complete information for all financial statements like cash flow, profit and loss account and balance sheet for every year. Share of the company should be traded at least for nine months of every year. It also shouldn't be among investment, financial (like banks), leasing and holding companies. For selecting a sample, the systematic deletion sampling method is used. That way all of the companies of statistical community which have above conditions and criteria, will be part of sample, size and sampling method.

For selecting the sample, the systematic deletion sampling method was used. That way all of statistical community which have above criteria, will be among the sample, other wise they will be deleted. According to above condition's, 134 companies remained which all of them were studied.

Data analysis method

Because this test is a kind of descriptive- correlation test, for data analysis, some of the statistical indicators like median, standard deviation, the regression coefficient and the coefficient of determination for study variables and also EXCEL and Eviews software are used.

RESEARCH FINDINGS

Estimates are done cross – sectional. The test in the form of sectional is considered for every year for present companies in bourse and in the form of cumulative for all of the companies. This study is a functional research in terms of purpose and correlation in terms of data collection.

Time series data: It is collected during the time. For example, data related to employment, unemployment and the amount of money. This data may be collected in specified time interval daily (ext. stock price), weekly (ext. the amount of money), monthly (ext. the unemployment rate) and yearly (ext. government budget). This data also may be quantitate (for example, price, income) or qualitative (ext. employed or unemployed, single or unemployed).

Table 1: Descriptive statistics

Variable	observations	Average	Middle	MAX	MIN	s.d	Skidding	Elongation
Systematic Risk (B)	670	.669	.595	8.413	-2/064	1/2.3	0/696	2/624
Book-to-market ratio (BM)	670	.512	.517	4.265	-9/096	0/9.2	-0/742	2/294
Stock return volatility (VOL1_RET)	670	.775	.571	4.442	0/0.0	0/676	0/482	2/187
Accuracy of Accounts (AQ)	670	-.069	-.059	-.005	-0/334	0/0.46	-1/720	7/092
Profit margin (FE)	670	-.344	-.147	.000	-0/429	0/031	-3/836	20/2.4

(SIZE)	670	6.078	6/007	8.255	٤/٢٥٧	٠/٦٠٦	٠/٧٤٢	٢/٦٥٤
(LEV)	670	.640	.636	3.060	٠/٠١٢	٠/٢٨٠	٢/٦٩٧	٢١/٧٣٣
Liquidity ratio (CR)	670	1.516	1.226	43.688	٠/٢٢٢	٢/١٦٣	٤/٩٩٥	١٢/٩٠٦

In summary, the average financial leverage shows that sample companies, have provided the structure of their fund from %64 of debts, and the rest from shareholder's salary. This case can be because of two reasons. The first one: the sample companies have high credit rating in terms of financing and the second one is that presumably the provision of capital through shareholder's salary is obligatory.

Table 2: Kolmogorov Smirnov test

Variable	Test results KS (Normality)					
	Average	S.D	Positive	Negative	The statistics k-z	Significance level
Systematic Risk (B)	٠/٥٢٥	٤/٠٩٦	٠/٢٩٧	-٠/٣٤٠	١/١٠٨	٠/١٠٩
Book-to-market ratio (BM)	٠/٥١٣	٠/٩٠٢	٠/١٤٢	-٠/٢٧٢	١/٠٥٢	٠/١٢٠
Stock return volatility (VOL1_RET)	٠/٧٧٦	٠/٦٧٧	٠/١٦٧	-٠/١٤٩	١/٣١١	٠/٠٧٧

According to table 2.13, after normality test, the significance level (Z) of test (K) for dependent variable is increased up to more than 0.05. So the Ho hypothesis based on normality of variable distribution is accepted and according to it the research dependent variables have normal distribution. So for testing the hypotheses, the parametric statistical method are used.



Table 3: The correlation test

Correlation								
Probability	B	BM	VOL1_RET	AQ	FE	SIZE	LEV	CR
Systematic risk	1.000000							
	~~~~~							
Book value to market value	0.078572	1.000000						
	0.0420	~~~~~						
Stock return fluctuations	0.101619	-0.111497	1.000000					
	0.0085	0.0039	~~~~~					
Accrual quality	-0.109440	-0.105832	-0.194232	1.000000				
	0.0051	0.0061	0.0000	~~~~~				
Accuracy of profit	-0.010198	-0.100296	-0.111624	0.042477	1.000000			
	0.7922	0.0077	0.0005	0.2722	~~~~~			
SIZE	0.197709	-0.029705	0.050818	-0.024148	-0.004780	1.000000		
	0.0000	0.4427	0.1889	0.5326	0.9017	~~~~~		

Financial Leverage	-0.141884	-0.510534	-0.015641	0.008684	-0.217924	0.063779	1.000000	
	0.0002	0.0000	0.6861	0.8225	0.0000	0.0990	~~~~~	
Liquidity ratio	0.031914	0.038162	0.078548	-0.165601	0.065397	0.045888	0.326853	1.000000
	0.4095	0.3240	0.0421	0.0000	0.0908	0.2355	0.0000	~~~~~

Between accrual quality and stock return fluctuation, there is a negative and meaning full relationship (it's because of a meaningful level under S percent). This relationship is %19.4. Between profit and stock return fluctuation, there is a meaningful and negative relationship (it's because of a meaningful level under %5). And it is %11.1. other coefficient were not analyzed and can be seen in table below.

Table 4: Survival test

Variable	Number of interruptions	Amount t	The significance level
Systematic Risk (B)	•	-20/322	•/•••
Book-to-market ratio (BM)	•	-20/441	•/•••
Stock return volatility (VOL I_ RET)	•	-11/466	•/•••
Accuracy of Accounts (AQ)	•	-22/796	•/•••
Profit margin (FE)	•	-22/403	•/•••
(SIZE)	•	-23/618	•/•••
(LEV)	•	-16/409	•/•••
(Liquidity ratio CR)	•	-20/979	•/•••

According to the results presented in table 4.13, all if the research variables on confidence level %95, have.

#### *Inferential statistic*

According to the main hypothesis of the study which is reviewing the effect of Financial information quality on company risk, the sub hypotheses are as follow:

#### **The result of testing the First Sub hypothesis**

1.14. First sub hypothesis: Accuracy of profit has an inverse relationship with stock returns.

$$VOL_RET_{it} = \beta_0 + \beta_1 FE_{it} + \beta_2 SIZE_{it} + \beta_3 LEV_{it} + \beta_4 CR_{it} + e_{it}$$

Table 5: The result of the second Sub hypothesis

Variable name and symbol	Regression coefficient	Statistics t	The significance level	The statistics VIF
C	•/308	1/324	•/180	-
FE	-•/124	-2/473	•/•••	1/•49
SIZE	•/•6•	1/397	•/162	1/••4
LEV	•/31•	3/3••	•/•••	1/173
CR	•/•26	2/•46	•/•41	1/12•
The statistics F The significance level		11/09• (•/•••)	Camera statistics- Watson	1/631

The coefficient of determination	۰/۱۰۹	Jarco's statistics The significance level	۲/۴۲۰ (۰/۱۸۵)
Godfrey	۱/۳۷۷	Prob. ۰/۱۲۰	
ARCH	۱/۱۲۲	Prob. ۰/۳۳۳	
H-Housman	۴۱/۴۲۴	Prob. ۰/۰۰۰	
F-limer	۳/۸۱۲	Prob. ۰/۰۰۰	

In the first sub hypothesis, the relationship between stock return fluctuation and accuracy of profit was studied.

The results of the first sub hypothesis shows that accuracy of profit has a meaningful and inverse effect on stock return Fluctuation. Also according to this hypothesis, the relationship between liquidity ratio and stock return fluctuation is positive and meaningful. Due to this, it is presumed that if a company has more stable profit, the stock return changes will be decreased,

Which in this case has correspondence with Hakim and Colleagues studies (2008) but isn't the same with Machines study (2010). Machines believed that stability of profit doesn't have informational advantage and doesn't effect on stock returns.

#### *The results of the second sub hypothesis*

The second sub hypothesis: Accruals quality has an inverse and meaningful relationship with stock return fluctuations.

$$\text{VOLI_RET}_{it} = \beta_0 + \beta_1 \text{AQ}_{it} + \beta_2 \text{SIZE}_{it} + \beta_3 \text{LEV}_{it} + \beta_4 \text{CR}_{it} + e_{it}$$

**Table 6: The results of testing the second hypothesis**

Variable name and symbol	Regression coefficient	Statistics t	The significance level	The statistics VIF
C	۰/۲۳۲	۰/۸۶۹	۰/۳۸۵	-
AQ	-۲/۷۲۷	-۴/۸۲۰	۰/۰۰۰	۱/۰.۳۱
SIZE	۰/۰.۵۴	۱/۲۹۱	۰/۱۹۶	۱/۰.۰۵
LEV	-۰/۰.۰۴	-۰/۰.۴۹	۰/۹۶۰	۱/۱۲۵
CR	۰/۰.۱۵	۱/۲۱۱	۰/۲۲۶	۱/۱۵۴
F The significance level		۱۷/۴۰۲ (۰/۰۰۰)	Camera statistic Watson	۱/۶۳۳
The coefficient of determination		۰/۱۴۲	Jarco's statistics The significance level	۲/۴۲۰ (۰/۱۸۵)
Godfrey		۱/۵۷۲	Prob. ۰/۱۲۱	
ARCH		۱/۹۰۲	Prob. ۰/۰۲۳	
H-Housman		۳۳/۴۵۶	Prob. ۰/۰۰۰	
F- limer		۳/۹۷۳	Prob. ۰/۰۰۰	

According to the study and testing the second sub hypothesis, it was shown that accruals quality have an inverse and meaningful effect on stock return fluctuations. This means that 1 percent increase in the accruals quality, leads to 48.20 percent

Decrease in stock return fluctuations. These results aren't the same with Alireza Rezaei and colleagues study, because in that study it is found that there is a meaningful and positive relationship between accruals and stock return changes. but this study has correspondence with Ghorbani and colleagues study (2013). The results of Ghorbani and colleagues study show that



quality of financial information and financial reporting have an inverse and meaningful effect on stock return fluctuations. In Ghorbani's study it was determined that there is a negative and meaningful relationship between financial leverage and company size with stock return fluctuations.

#### *The results of the third sub hypothesis*

Third sub hypothesis: Accuracy of profit has an inverse and meaningful relationship with the ratio of book value to stock holder' Equity.

$$BM_{it} = \beta_0 + \beta_1 FE_{it} + \beta_2 SIZE_{it} + \beta_3 LEV_{it} + \beta_4 CR_{it} + e_{it}$$

**Table 7: The results of the third hypothesis**

Variable name and symbol	Regression coefficient	Statistics t	The significance level	The statistics VIF
C	1/726	0/723	*/...	-
FE	-0/291	-0/184	*/...	1/0.49
SIZE	*/...	*/0.19	*/984	1/0.04
LEV	-1/917	-17/0.22	*/...	1/173
CR	-0/0.60	-4/248	*/...	1/120
The statistics F The significance level		03/677 (*/...)	Camera statistic Watson	1/0.19
The coefficient of determination		0/30.7	Jarco's statistics (The significance level)	4/783 (*/0.98)
Godfrey		0/200	Prob. */814	
ARCH		6/363	Prob. */...	
H-Housman		19/40.7	Prob. */...	
F-limer		4/637	Prob. */...	

According to the third hypothesis of the study, there is an inverse and meaningful relationship between accuracy of profit and B/M -5.84 shows that %1 increase in accuracy of profit, leads to % 51.84 decrease in ratio of book value to stock holders' equity. Coefficient of determination 0.3 in this study shows that % 30.7 of B/M charges is determined by profit accuracy.

#### *The results of fourth sub hypothesis*

The fourth sub hypothesis accruals' quality has a meaningful and inverse relationship with ratio of book value to stock holder' Equity.

$$BM_{it} = \beta_0 + \beta_1 AQ_{it} + \beta_2 SIZE_{it} + \beta_3 LEV_{it} + \beta_4 CR_{it} + e_{it}$$

**Table 8: Results of the fourth hypothesis**

Variable name and symbol	Regression coefficient	Statistics t	The significance level	The statistics VIF
C	1/839	0/982	*/...	-
AQ	-1/718	-2/639	*/0.08	1/0.31
SIZE	*/0.02	*/0.47	*/962	1/0.00
LEV	-1/780	-10/900	*/...	1/120

CR	-0.03	-3/630	0.000	1/104
The statistics F The significance level		46/770 (0.000)	Camera statistic Watson	1/682
(The coefficient of determination)		0.286	Jarco's statistics (The significance level)	4/783 (0.098)
Godfrey	0.208		Prob. 0.772	
ARCH	6/122		Prob. 0.000	
H-Housman	13/763		Prob. 0.008	
F-limer	4/402		Prob. 0.000	

Studying the kind of relationship between accruals and B/M was an indicator of a meaningful and inverse relationship between these two variables. Also it is found that % 28.6 of B/M changes is determined by accruals' quality. - 2.639 also indicates that one percent increase in accruals' quality leads to % -26.39 decrease in B/M.

#### *The results of the fifth sub hypothesis*

Fifth sub hypothesis: accuracy of profit has a meaningful and inverse relationship with systematic risk. According to this hypothesis, there is a meaningful and inverse relationship between accuracy of profit and systematic risk.

$$B_{it} = \beta_0 + \beta_1 FE_{it} + \beta_2 SIZE_{it} + \beta_3 LEV_{it} + \beta_4 CR_{it} + e_{it}$$

**Table 9: Results of fifth hypothesis test**

Variable name and symbol	Regression coefficient	Statistics t	The significance level	The statistics VIF
C	-1/390	-2/980	0.002	-
(FE)	-0.101	-1/166	0.243	1/0.49
(SIZE)	0.411	0/022	0.000	1/0.04
(LEV)	-0.723	-4/140	0.000	1/173
(CR)	-0.000	-0/266	0.790	1/120
The statistics F (The significance level)		12/063 (0.000)	Camera statistic Watson	1/961
(The coefficient of determination)		0.80	Jarco's statistics The significance level	4/420 (0.100)
Godfrey	0.810		Prob. 0.442	
ARCH	4/078		Prob. 0.000	
H-Housman	10/788		Prob. 0.029	
F-limer	1/300		Prob. 0.021	

According to -1.166 it is found that one percent increase in accuracy of profit leads to 17.66 percent decrease in systematic risk. 8 percent of systematic risk changes also is determined by the variable of accuracy of profit. The positive relationship between size and systematic risk and the negative relationship between financial leverage and the liquidity ratio, have less systematic risk.

#### *Results of test of sixth sub hypothesis*

The sixth sub hypothesis: accruals' quality has an inverse and meaningful relationship with systematic risk.



$$B_{it} = \beta_0 + \beta_1 AQ_{it} + \beta_2 SIZE_{it} + \beta_3 LEV_{it} + \beta_4 CR_{it} + e_{it}$$

Table 10: Results of sixth hypothesis test

Variable name and symbol	Regression coefficient	Statistics t	The significance level	The statistics VIF
C	-1/447	-3/080	0/02	-
AQ	-2/420	-2/437	0/01	1/031
SIZE	0/407	0/473	0/00	1/000
LEV	-0/690	-4/62	0/00	1/120
(CR)	-0/011	-0/03	0/614	1/104
The statistics F		22/746	Camera statistic	1/963
The significance level		(0/00)	Watson	
The coefficient of determination		0/160	Jarco's statistics	4/420
			(The significance level)	(0/100)
Godfrey		0/072	Prob. 0/064	
ARCH		1/647	Prob. 0/062	
H-Housman		19/439	Prob. 0/001	
F-limer		1/300	Prob. 0/023	

Reviewing this hypothesis shows that the accruals quality has an inverse effect on systematic risk and this issue indicates that with one percent increase in accruals' quality leads to 24.37 percent decrease in systematic risk and coefficient of determination 0.167 shows that 16.8 percent of systematic risk changes is determined by accruals' quality. Results of this hypothesis aren't the same with the results of Koura and colleagues (2008) and Muesli and Jafri (2009) studies. it's because in both studies it was found that there isn't any meaningful relationship between accruals' quality and systematic risk. But the study results due to the sixth hypothesis, doesn't have correspondence with the results of Francis and colleague's study (2005).

#### The summary of research findings

According to the confirmation of all sub hypothesis, the main hypothesis which is based on the effect of financial information on company risk is confirmed.

Table 11: Summary of research finding

hypothesis	Research hypotheses	Result
First sub hypothesis	The accuracy of profit with the return on equity fluctuations has a reverse and significant relationship	Confirmation
Second sub hypothesis	The quality of accruals has a reverse and significant relationship with fluctuations in stock returns.	Confirmation
Third sub hypothesis	The accuracy of profit with B / M has a reverse and significant relationship.	Confirmation
The fourth sub hypothesis	The quality of accrual items has a reverse and significant relationship with B / M.	Confirmation
Fifth sub hypothesis	The accuracy of profit with the systematic risk has a reverse and meaningful relationship.	Confirmation
Sixth hypothesis	The quality of accruals with systematic risk has a reverse and significant relationship.	Confirmation

## CONCLUSION



In general reviewing of the study and due to the results of six sub hypothesis, the negative and meaningful relationship between Financial information quality and company's risk is confirmed. This issue indicates that if the financial information is high and the financial information of a company has useful information load for investor's decision making, the company will encounter less risk in its stock return. There is no doubt that securities while providing the need of huge resources of economic, governmental and private designs, will increase the peoples' participation in society, so the importance of reviewing the risk and efficiency of this kind of securities in capital market is clear. So presenting the relevant and useful information and having sustainable profit with high predicting power and high accrual's quality in every company, decreases the stock returns fluctuations and risks related to liquidity and market risk. In general, the results of this study is not the same as Ahmad pour and Jam Karani, Salary and Bards (2011) studies.

### *Suggestions for future studies*

1. It is suggested that in a research, the effect of financial information quality on error of profit forecast, be studied.
2. Reviewing the effected of institutional ownership on liquidity risk, is suggested.
3. Reviewing the effect of inflationary conditions on investment risk, is suggested.
4. It is suggested that the effect of competition between investors on stock liquidity risk, be studied.

### **References**

- Acharya, V. and Pedersen, L.H. (2005). Asset pricing with liquidity risk. *Journal of Financial Economics*, 77, 375–410.
- Ahmad pour, A and Gholami Jam karani, R. (2005). Investigate the relationship between accounting information and market risk. *Journal of Social Sciences and Humanities University of Shiraz*. No. 2 Pages 18-30.
- Amihud, Y. & Mendelson, H. (1986). Asset pricing and the bid-ask spread. *Journal of Financial Economics*, 17, 223–249.
- Arab Mazar Yazdi, M and Talebian, S. M. (2008). Financial reporting quality, information risk and cost of capital. *Accounting studies*. 21, pp. 1-30.
- Erkens, D., Hung M. and Matos P. (2009) "Corporate Governance in the 2007-2008 Financial Crisis: Evidence from Financial Institutions Worldwide", ECGI – Finance Working Paper No. 249.
- Estrada, J. (2001). The cist of equity in Emerging markets: A Downside risk Arouch. *Emerging markets Quarterly*, Spring, 63-72
- Fakhari, H and Fallah Mohammadi, N. (2009). Investigating the Effect of Disclosure on the Liquidity of Shares of the Companies Acquired in Tehran Stock Exchange. *Accounting Research* Number 4. Pages 148-163
- Ghaemi, M and Shahriari, M. (2009). Corporate governance and financial performance of companies. *Accounting progress*. No. 1 Pages 113- 128.



Osmania, M. G. (2002); Identification of capital cost model and its effective factors; Thesis of Accounting Doctor; Allameh Tabatabaei University School of Accounting and Management

Sufiyan, M. (2005); The Relationship between Economic Value Added and Capital Structure; End of Master Degree; Al-Zahra University.

Wallace, V. (2005). Audit role in free markets and supervised markets, sponsored by Amir Aslani. Tehran: Organization A. Bond, Shaun & Patel, Kanak, 2002," The conditional distribution of real estate returns: Are higher moments time varying?"

Ya'qubnezhad, A., and Zabihi, Ali. (2011). Investigating the relationship between the disclosure quality and the liquidity of shares in the listed companies in Tehran Stock Exchange. Journal of Financial Knowledge Analysis of Securities. No. 10 Pages 217-235.

