Original Article

Investigating the Relationship Between The Income Response Rate and the Financial Ratio with Abnormal Stock Among the Banks listed in Tehran Stock Exchange

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Abstract

The purpose of this research is investigating the effect of liquidity risks, Credit, capital adequacy, unexpected interest rate, unusual rate. In this research, a concept called the coefficient of earnings response as the ratio of the unexpected gain on unusual profits of banks as a criterion for logical decisions of investors and other financial users were studied. In this study present commercial banks in the Stock Exchange between years 2011-2015 was studied and the factor analysis technique was used to reduce 18 financial ratios to calculate the risks to be included in the regression. The hypothesis test was analyzed by SPSS software. The results indicate a positive and relevant effect of liquidity risk and credit risk is on abnormal returns of banks and also two other risks (Interest rate risk and the risk of capital adequacy) have no great effect on abnormal returns of banks.

Key words: Liquidity risks, Credit risk, Unpredictable profit, Abnormal returns.

PROBLEM STATEMENT

One of the most important items of financial reporting is announcement and diffusion of profit which may have attracted the attention of all stakeholders, including investors. The profit of one business unit is always used and evaluated by a wide range of investors, creditors, accounting professions, financial managers, stock market analysts, and so on. Also, the most important source of information for investors, creditors and other users of banks information in the stock market is the forecast of profit provided by the management of banks at certain intervals. Use of management judgments creates the opportunity to manage profits. In this way, managers choose methods or perform estimates that accurately reflect the economic situation of companies under their

management (Noroz Beygi 2015). Investors in the capital market show different responses to profit news, and as a result, their expectations are based on published news. The announcement of profit is one of the information published in the market that causes the stock price changes and, as a result, causes the returns changes and causes the real- returns difference with expected returns that this is due to the unusual returns. Unusual returns change toward unexpected profits changes over time that the process of increasing or decreasing returns or unexpected profits has a slow and gradual movement which can be done randomly or predictably, which lasts a few months after the profit announcement. (Saghafi 2004). Risk is the likelihood of a change in the benefits and advantages foreseen for a decision, an event, or a state in future. The probability is not to be sure of changes. If there were sufficient assurance of change, there would have been a change in the scope of the expected benefits and advantages while the impossibility of predicting the probability of change makes it a risk to the advantages and benefits. Change refers to any reduction or increase in interest. In the sense that it is not merely the undesirable changes covered by the risk framework. Rather, the optimal changes in this sense are also within the framework of risk. The decision, event,

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or mode of reference refers to voluntary and involuntary conditions in which the risk prevails. A decision may be made voluntarily; its benefits and advantages evaluated, and the particular risk prevail on its advantages and benefits. On the other hand, the event or state in the future may be deliberate and the predictions of its advantages and benefits are subject to the possibility of change. The risk arising from the balance sheet structure includes segments such as assets, asset structure, and asset and liability management. In this area, more attention is paid to how the various combinations of assets in the balance sheet are. In other words, whether the combination of assets that are likely to change their value in the future is more or there is a significant degree of stability required for most of the assets in the combination. The ratio of fixed assets to current assets, the ratio of financial assets to physical assets, the volume of financial assets, is one of the indicators for assessing this type of financial risk.

Studies show that abnormal returns can be affected by corporate financial information. In other words, a number of investors have not been able to calculate the expected return rate using a number of financial ratios due to the lack of knowledge of cyber investors about this relationship, this information is not reflected in the real stock price and it creates additional returns for that group of investors who have been aware of this relationship.. Accordingly, if most investors are aware of the existence of this relationship, the abnormal returns in the capital market will be reduced to some extent and so the market efficiency will increase. As a result, the identification of financial information published and its relationship with abnormal returns is very important. (Bahram far 2004).

Risks in each area has Capability to be mentioned that one of the most important of this area is banks; Because the banks, on the one hand, collect the people's capital responsible for it and, on the other hand, use these funds to carry out banking operations and activities (Mehrabi2010). The nature of risk in the banking system due to factors such as the number and variety of banking operations, the different nature of this operation, the status of the bank's capital and its limitation, the preservation of the interests of the bank's shareholders and depositors, the depositors' resources and the frequency of their resources, and the lack of sufficient expertise in the areas of resource management and registration of high financial operations are completely different from the risk in other economic units and all this requires that risk management in banks is more sensitive, complex and more difficult than risk management in other economic units. In this research, the researcher is seeking to find out whether the relationship between the coefficient of profit and financial risk (liquidity risk, credit risk, capital adequacy risk, interest rate risk) and the unusual return on

the shares of the commercial banks accepted in the stock exchange there is?

BACKGROUND OF THE RESEARCH

Chang Acehan (2015), "Investigating the Effect of Liquidity Risk on Internal Banking Performance Showed that liquidity risk is determinative of the bank's internal performance and the causes liquidity risk to include current assets and dependence on foreign funds, regulatory factors and macroeconomics and liquidity risk reduces the bank's profitability because of increasing the cost of funds, but increases the margin of net interest. Chang and Nasir (2014), "A Study of the Determining Factors the Unusual returns Stock Banks Efficiency for Examples of Malaysian and Australian Banks in the Period 2000-2012" The results of the study showed that accounting profit is a variable price-related that has a simultaneous effect on the stock price of a bank.

Chang & Ariff (2013), "Investigated the Effect of Banking Risk Detrimental Factors on the Growth Rate of the profit Reaction Coefficient", The results showed that the determinants of bank risk affect the magnitude of the earnings response coefficient and, in particular, the risk factor of banks, Has a significant role in the relationship between returns which suggests that this is an important factor that should be taken into account in valuing the stock price of a bank. Pornamasary (2012) "Investigated the Relationship between the Risk of Non-Payment of Debt and return on investment on Indonesian Banks" In this research, which was conducted on 22 Indonesian commercial banks between 2008 and 2010, it was concluded that the relationship between the risk of non-payment of debt and negative returns on investment is negative, but the growth opportunity factor has a significant effect on it. Also, two financial risks do not have a significant effect on return investment. Chang and Nasir (2010) conducted a study to investigate the relationship between financial risk, price risk, market risk, and earnings response rate of Chinese commercial banks and the results of their research indicated that there is a significant relationship between financial risk, price risk, market risk and profitability coefficient. Chena, Lia and Vanga (2010), "studied An Influencing Extensive Information on the Abnormal returns that create to rivals." In this study, conducted in Hong Kong, they examined 47 countries (19 years) from 1990 to 2009.

Chang and Nasir (2009), "Investigated the effect of size of a company on stock prices at time of publication of stocks." This effect was measured by the coefficient of earnings response, and the result was that the standard

unexpected returns and the size of the company had a negative relationship.

Chang and Nasir(2008) determined factors abnormal return of bank shares for an example of Malaysian and Australian banks during the period 1998-2006" results showed that accounting profit is a variable price-related that has a simultaneous effect on the stock price of a bank.

Akml and Saalm (2008) investigated in an article on "Technical Efficiency of the Banking Sector in Pakistan" and by using information from 30 public banks, 18 local banks and 8 foreign banks and factor analysis method of two-stage data Investigates the effects of bank specific factors, and macroeconomic factors on bank efficiency. In the first stage, the factor analysis method was used to estimate the technical efficiency and scale, and then, by using Tobit's regression, investigated macroeconomic and specific banking effects. The results of the study showed that banking efficiency has improved since 2000 and foreign banks were more efficient than local private banks and public banks.

Veek (2004), "Investigated the nature of risk in the banking system ", the research showed that the nature of risk in the banking system due to factors such as the number and variety of banking operations, the different nature of this operation, the status of bank capital and its limitation, the preservation of resources of bank shareholders and depositors, the status of depositors' resources and its frequency, and lack of expertise in the areas of resource management and record high financial operations is quite different from the risk in other economic units and all of these necessarily require risk management in banks to be more sensitive, complex and more difficult than risk management in other economic units. In addition, some risks are specific to the bank and are not relevant to other firms. On the other hand, the characteristics of some operations in Islamic banks have made risk management more sensitive and more complex.

In any case, the occurrence of risk in both conventional banking and Islamic banking systems leads to a decrease in the bank's profitability, which in three forms of profitability is lower than predicted goals, the loss of all expected profit and eventually loss is shown. Meanwhile, harm is the most destructive form of risk that can lead to the loss of all or part of the bank's capital, or even a portion of the deposits, and in the acute form of all bank deposits, and endangers the existence of the bank. Hence, identifying risks in the first stage and then managing them in a systematic way can be a means to prevent the occurrence of these adverse events.

Akso (2003), "Investigated the Context of the Effect of Size, Ratio of Book Value to Market Value and Past Information on Extra Returns". The research is carried out on companies listed on the Turkish stock exchange. On average, the sample consists of 86 companies that have had extra returns during the 14 months before the publication of the information. The results of the research show that the financial statements published by the companies have information content. One of the most abnormal results is that significant extra returns continue through the research methods used over time intervals.

The existence of longer term periods of additional returns is consistent with the provisions of several unconventional theories that try to explain the abnormal returns and cause some questions about the market model and market efficiency. Another analysis of the returns from the companies showed that the excess returns observed are not only due to high risk or wrong pricing of stocks in the market, but also the size of the company can be a determinant factor in this relation. Also, the results prove that the published financial statements of smaller companies have higher informational content.

Collins and Kootari (1999) examined the relationship between systematic risk and earnings response coefficients and found that one of the factors reducing the coefficient of reaction is profit. In addition, they found that the factor of the growth opportunities is also affected by the (β) positive systematic risk on the earnings response coefficient.

Ferret (1998), in an article titled "The Relationship Between Projected Profit and Corporate Value and Abnormal Stock Returns," by studying 716 newly-listed companies in the New Zealand Stock Exchange between 1977 and 1992, investigated the relationship between estimated earnings and company value and shares abnormal return of these types of companies at the initial stage of supply. It was concluded that earnings forecasts are related to the value of the companies with the primary supply of shares, and are more significant than other tools such as accumulated profits and there are positive relationships between profit forecast error and abnormal returns.

Halliwall and Reynold (1994), "Investigated the Effects of Business Risks on Earnings Reaction", and stated that, in addition to systematic risk, the risk of non-payment of debts could also reduce the coefficient of earnings response. They used the ranking of bonds to measure the risk of non-payment of debts, and by controlling the risk factors and the stability of the profitability process, they proved that the risk of non-payment of debts could also be negatively coefficient on earnings response.

Halliwall, Lee (1991), in an empirical study, investigated the relationship between unexpected earnings and unusual returns of securities with the impact of financial leverage. They hypothesized that the coefficient of return was related negatively to the financial leverage. The financial leverage in this research was measured as the average during the research period, based on the ratio of the book value of long-term debt to the market value of the equity. The results of this study indicate that the Earnings Reaction coefficient for companies with no leverage or with a low leverage ratio is larger than leverage companies or with a high leverage ratio.

HYPOTHESES

Main Research Hypothesis
There is a relationship between the coefficient of profit response and financial risks with abnormal returns of stocks in admitted commercial banks in Tehran stock exchange.

First Sub-Hypothesis
There is a relationship between unexpected returns and unusual returns in commercial banks admitted to the Tehran Stock Exchange.

Second Sub Hypothesis
There is a relationship between liquidity risk and unusual returns in commercial banks admitted to the stock exchange.

Third sub hypothesis:

There is a relationship between credit risk and unusual returns in commercial banks admitted to the Tehran Stock Exchange.

Fourth Sub Hypothesis
There is a relationship between the risk of capital adequacy and unusual returns in commercial banks admitted to the Tehran Stock Exchange.

Fifth Sub Hypothesis
Between interest rate risk and unusual returns in commercial banks accepted in the stock market.

The variables considered in this research are as follows:

RESEARCH METHODOLOGY

Research Method
The present research In terms of purpose is practical and in terms of nature and descriptive method is Correlation type.

Statistical Population, Sample Size and Sampling Method
In this research, the statistical population of all financial institutions (commercial banks) accepted in the Tehran Stock Exchange (TSE) was 45 banks from 2011 to the end of 2015. Considering that the statistical population of the present study, all financial institutions (commercial banks) accepted in the Tehran Stock Exchange from 2011 to the end of 2015 is 45 banks, so the statistical sample is also considered on the basis of all the same number of 45 banks.

Method and Tools of Data Collection
In this research, the method of data collection is by using a library method such as physical and digital libraries. Library methods can be done by using a tab or a map, a crocodile, or a quasi-questionnaire or a combination of them, depending on the type of document and subject. The required data for this study were studied by using financial statements, profit and loss balance sheets and notes accompanying explanations of the banks. These have been published by the Tehran Stock Exchange. This information has been obtained through the Tadbir Pardaz software and Rah Avard Novin and the website of the Stock Exchange.

RESEARCH VARIABLES

Earnings Response Coefficient (ERC)
The earnings response coefficient measures the unexpected market returns in response to the unexpected earnings components reported by the company that has securities traded. In other words, the earning response coefficient measures "the sensitivity of the market to declaring profits by the coefficient of regression between unexpected profit and unusual returns" (Scott, 2003). Different reaction of investors to profit information, Causes different reactions in market, but the reasons for different reactions of market to Scott idea are the same (systematic risk, beta coefficient, profit quality, continuity of profitability or loss, investment growth opportunities, and capital structure).

Financial Risk: (FR)
It is an added risk, which is imposed on shareholders by the increase in debt in the company. In the other definition, the risk associated with the use of debt in a company is called financial risk. Added risk arising from the use and deployment of debt in the company, which is discussed under the title of financial pyramid. The companies get more loan, Publish more bonds, the net margin of the company will be lower and the risk of its ordinary shares will be higher. (McNeil et al., 2005)

Liquidity Risk (LR)
Liquidity risk is the lack of willingness of banks to provide lending facilities or timely payments to banks (deposits)

these risks with other financial risks are mixed, which makes it difficult to measure it. Liquidity risk is an indicator to control and Liquidity management stand in the hands of managers. (Moradi, 2010)

In this study, liquidity risk is calculated by using the following formula:

LR =Ongoing current / current assets

Credit Risk: (CR)
The credit risk was about facilities and buy and sales, The probability of no return of sub and original Granted facilities and also probability of Damage caused by bugs Regarding the quality of goods exchange transactions are secure and reliable. This risk relates to the time when the borrower is unable to meet his / her obligations with the counterpart of the bank. The proper structure of lending and precautions necessary to protect the resources of lenders, Use of derivative financial instruments with a facility agreement, A periodic review of bank assets, timely management and willingness to change the combination of facilities due to events occurring in the market leads to a reduction and control of credit risk(Mehrabi1389).

In this research, credit risk is calculated by using the following formula:

CR= Total assets/ total loan

Risk Capital Adequacy (CR):
The risk of capital adequacy refers to long-term financial operations of company and its ability to cover long-term commitments. This risk measure by comparisons of all financial Obligations than Shareholders' equity (Cheng & Nasir, 2009). Banks can more efficiently manage their risk factor with more productive investor confidence and rising stock prices (Ambort, 1997).

In this research, the risk of capital adequacy is calculated by the following formula: SR=Distributed benefit / Total SR facilities

Interest Rate Risk (IR):
This risk refers to the negative impact of cash flows from the value of assets and liabilities Which is due to changes in interest rates And refers to uncertainty about changes in interest rates on deposits and loans (Mehrabi, 2010).

In this research, the interest rate risk is calculated using the following formula: IR=Total Deposits / Total Debt

Unexpected Profit (UE):
Unpredicted interest is the difference between actual profits of per share and Predicted profit of that share.

Loviatagarjan (2002) used in self-reported earnings-response coefficients to calculate the unexpected earnings from the difference of per current year profit and per last year profit (Luotigarazjan, 2002). In this research, the unexpected profit risk is calculated by using the following formula:

$UE_{i,t} = EPS_{i,t} - EPS_{i.t-1}$
$P_{i,t-1}$

EPS_i, t per share profit in current year
$EPS_{i.t-1}$: per share profit in last year
P_i, t-1: daily price of per share
UE_i, t: unexpected profit risk in Intended year

Abnormal Return (AR)
In definitions of abnormal returns, usually the difference between the actual returns and expected returns is considered and to calculate the abnormal returns, the difference between the actual returns of the current year and the actual returns of the previous year is used. In this study, an abnormal return is obtained by the following formula:

$AR_{i,t} = R_{i,t} - R_{m,t}$

R_i, t: stock return i at time t

R_m, t: return on market share at time t

Model and Research Hypotheses
Considering the theoretical foundations and the subject of the research in the second chapter, and also in order to find the objectives of the study, the research hypotheses are as follows:

Model of main hypothesis:

$CAR_i = \alpha. + \beta_1 UE_i + \beta_1 Lr_i + \beta_2 Car_i + \beta_3 Sr_i + \beta_4 Ir_i + \varepsilon_i$

First sub-hypothesis model:

$CAR_i = \alpha. + B_1 UE_i + \varepsilon_i$

Second sub hypothesis:

$CAR_i = \alpha. + B_1 UE_i + \beta_2 Cr_i + \varepsilon_i$

Third hypothesis model:

$CAR_i = \alpha. + B_1 UE_i + \beta_2 Car_i + \varepsilon_i$

The fourth sub-hypothesis model:

$CAR_i = \alpha. + B_1 UE_i + \beta_4 Ir_i + \varepsilon_i$

Testing Hypotheses and Analyzing the Findings

After reviewing the regression implementation assumptions, now we use multivariable regression to study the research hypotheses. To determine whether the general regression model is meaningful, we use F statistics and the significance level of this statistic. If the level of significance is less than 5%, it indicates that the linear relationship between the independent variables and dependent variables is significant. Otherwise, the overall model is not meaningful. If the overall regression model is meaningful, then the meaningfulness of each of the independent variables should also be considered separately, which uses the t statistic and the significance level associated with this statistic. If the level of significance is less than 5%, it indicates the significance of the desired variable. Another indicator of model fit is the adjusted R Square coefficient index, which is closer to the number 1, indicating that there is a strong linear relationship between independent variables and dependent variables.

First Sub-Hypothesis

There is a relationship between unexpected profit and unusual returns of commercial banks accepted in the Tehran Stock Exchange.

Discussion and Interpretation of The First Hypothesis Results

The results of Table 1 show that the level of significance is less than 0.05 (sig = 0.001) and t statistic is greater than 1.98 (t = 482.3) at the error level of 5%, confirm the first hypothesis of the research and there are relation between unexpected profit with the abnormal returns of commercial companies admitted to the stock exchange. Also, we use F statistics to determine whether the general model of the regression is significant. The results show that the F statistic with the value of 8.196 is significant at 5% error level. Therefore, the estimated model is sufficient to test the first hypothesis. To evaluate the fit of the model, we use the adjusted coefficient of determination (R2 adj). The results show that the adjusted coefficient of determination is 0.141 or 14.1. Therefore, it should be said that 14.1% of the abnormal returns with the unexpected profit are considered, and the results show that the model has a good fit. The results are acceptable when there is no

self-correlation, except for the disorder. For this purpose, the Watson Camera (DW) is used. If the value of this statistic is between 1.5 and 2.5, that is, the model has no self-affiliation. The results show that the DW is 1.770, which indicates the independence of the remainder.

It is also observed that unexpected at 5% profit is significant.. We conclude that there is a negative and significant relationship between unexpected earnings and abnormal returns at 95% confidence level. This conclusion confirms the first hypothesis. The single variable linear regression model used with regard to the unexpected profit of each share is as follows:

$$CAR_i = 0.386 + 1.279 \, UE_i$$

The first hypothesis equation shows that the resulting slope has a positive coefficient. This means that the ERC (line slope) is positive. The ERC (line slope) measures various market responses to profit information, so that a return share response coefficient and unexpected for reacting to unexpected earnings components reported and measure the company that issued the bonds. Findings indicate that there is a positive and significant relationship between unexpected earnings and abnormal returns in the statistical sample; therefore, the first sub-hypothesis is accepted.

Second Sub Hypothesis

There is a relationship between liquidity risk and unusual returns of commercial banks accepted in the Tehran Stock Exchange.

Discussion and Interpretation of The Second Hypothesis Results

The results of Table 2 show that the level of significance is less than 0.05 (sig = 0.002) and t statistic is greater than 1.98 (t = 3.169) confirmation at the error level of 5% in second hypothesis of research and there is a meaningful relationship between liquidity risk and abnormal return. Also, we use F statistics to determine whether the general regression model is meaningful. The

Table 1: Results of the first hypothesis test (2H)

CAR$_i$=α$_0$+β$_1$ UE$_i$+ε$_i$				
Independent variable	Coefficients	T statistic	Sig	VIF
Constant amount	0.386	5.298	0.000	1.000
UE (unexpected earning)	1.279	3.482	0.001	1.000
Adjustment coefficient	0.141			
Watson's camera statistics	1.770			
Statistic F	8.196			
Significance level of the statistic F	0.006			

The independent variable of the model is significant at the error level of 0.05.

Table 2: Results of the second sub-hypothesis test (H3)

CAR$_i$=α$_0$+ β$_1$ UE$_i$+ β$_2$Lr$_i$+ε$_i$				
Independent variable	Coefficients	Statistic t	Sig.	VIF
Constant amount	0.308	2.462	0. 018	
LR (Liquidity risk)	0.449	3.169	0.002	1.004
Adjustment coefficient	0.267			
Watson's camera statistics	1.764			
Statistic F	5.383			
F significance level of the statistic	0.008			

The independent variable of the model is significant at the error level of 0.05

results show that F statistic is 5.383 is meaningful at 1% error level. Therefore, the predicted model is sufficient to test the second hypothesis. To evaluate the fit of the model, we use the adjusted coefficient of determination (R2 adj). The results show that the adjusted coefficient of determination is 0.267.. It is better to use the modulated determination coefficient to interpret the fitting of the model. Therefore, it should be noted that 0.267 percent of the abnormal returns to the considered liquidity risk that can be expressed.

The regression model used with regard to liquidity risk is as follows:

$$CAR_i = 0.308 + 1.080\ UE_i + 0.449\ LR_i$$

The results are acceptable when having no self- affiliation, except for the disorder. For this purpose, statistic of Watson Camera (DW) is used. If the value of this statistic is between 1.5 and 2.5, That is, the model has no self-affiliation. The results show that the statistic of DW is 1.764, which represents the independence of the remnants. It is also observed that unexpected earnings and liquidity risk at 5% level are significant. In the final result there is a positive and significant relationship between liquidity risk and abnormal returns at 95% confidence level.

Third Sub Hypothesis
There is a relationship between the credit risk and the unusual returns of commercial banks accepted on the Tehran stock exchange.

Discussion and Interpretation of The Third Hypothesis Results
The results obtained from Table 3 show that the level of significance is less than 0.05 (sig = 047) and the t statistic is greater than 1.98 (t = 1.872), Therefore, at the error level of 5% of the third hypothesis, there is a significant relationship between credit risk and abnormal returns. To determine whether a general model of regression is significant or not, we use F statistics. The results show that the F statistic is 5.247 at 5% error level. Therefore, the estimated model is sufficient to test the third hypothesis.

To evaluate the fit of the model, we use the adjusted coefficient of determination (R2adj). The results show that the adjusted coefficient of determination is 0.193. It is better to use the modulated determination coefficient to interpret the fitting of the model. Therefore, it should be said that 0.193% of the abnormal returns to credit risk considered can be expressed. The rest is related to the factors that we did not consider. The results show that the model has a good fit. The results are acceptable when having no self- affiliation, except for the disorder. For this purpose, statistic of Watson Camera (DW) is used. If the value of this statistic is between 1.5 and 2.5, That is, the model has no self-affiliation. The results show that the statistic of DW is 1.749, which represents the independence of the remnants. Since credit risk at 5% level is significant Therefore, we conclude that there is a positive and significant relationship between credit risk and abnormal return at 95% confidence level.. This conclusion confirms the third hypothesis. The regression model obtained with respect to credit risk is as follows:

$$CAR_i = 0.372 + 1.287\ UE_i + 2.170\ Cr_i$$

Fourth Sub-Hypothesis
There is a relationship between the risk of capital adequacy and the abnormal return of commercial banks accepted in the Tehran stock exchange.

Discussion and Interpretation of The Fourth Hypothesis Results
The results obtained from Table 4 show that the level of significance is less than 0.05 (sig = 35.3) and the t statistic is greater than 1.98 (t = 0.938) Therefore, at the error level of 5% of the third hypothesis, there is a significant relationship between credit risk and abnormal returns. To determine whether a general model of regression is significant or not, we use F statistics. The results show that the F statistic is 7.535 at 5% error level. Therefore, the estimated model is sufficient to test the forth hypothesis. To evaluate the fit of the model, we use the adjusted coefficient of determination (R2 adj). The results show that the adjusted coefficient of determination is 0.227. It is better use the modulated determination coefficient to

Table 3: Results of the third hypothesis test (H4)

$CAR_i = \alpha_0 + \beta_1 UE_i + \beta_2 Cr_i + \varepsilon_i$				
Independent variable	Coefficients	Statistic t	Sig.	VIF
Constant amount	0.327	5.298	0.000	
Cr (Credit risk)	2.170	1.872	0.047	1.000
Adjustment coefficient	0.193			
Watson's camera statistics	1.749			
Statistic F	5.247			
F significance level of the statistic	0.009			

The independent variable of the model is significant at the error level of 0.05

Table 4: Results of the fourth sub-hypothesis test (H5)

$CAR_i = \alpha_0 + \beta_1 UE_i + \beta_3 Sr_i + \varepsilon_i$				
Independent variable	Coefficients	Statistic t	Sig.	VIF
Constant amount	0.090	5.279	0.781	
Sr (Risk capital adequacy)	0.178	0.398	0.353	1.000
Adjustment coefficient	0.227			
Watson's camera statistics	1.811			
F statistics	7.535			
F significance level of the statistic	0.002			

The independent variable of the model is significant at the error level of 0.05

interpret the fitting of the model. Therefore, it should be said that 0.227 percentages of the abnormal returns to credit risk considered can be expressed. The rest is related to the factors that we did not consider. The results show that the model has a good fit. The results are acceptable when having no self- affiliation, except for the disorder. For this purpose, statistic of Watson Camera (DW) is used. If the value of this statistic is between 1.5 and 2.5, That is, the model has no self-affiliation. The results show that the statistic of DW is 1.811, which represents the independence of the remnants. Since credit risk at 5% level is significant Therefore, we conclude that there is a positive and significant relationship between credit risk and abnormal return at 95precentages confidence level.. This conclusion confirms the third hypothesis. The regression model obtained with respect to credit risk is as follows:

$$CAR_i = 0.090 + 1.094\ UE_i + 0.178\ Sr_i$$

Fifth Hypothesis
There is a relationship between the interest rate risk and the abnormal returns of commercial banks accepted in the Tehran stock exchange.

Discussion and Interpretation of The Fifth Hypothesis Results
The results obtained from Table 5 show that the level of significance is less than 0.05 (sig = 229) and the t statistic is greater than 1.98 (t =-1/222.) Therefore, at the error level of 5% of the third hypothesis, there is a significant relationship between credit risk and abnormal returns. To determine whether a general model of regression is significant or not, we use F statistics. The results show that the F statistic is 7.857 at 5% error level. Therefore, the estimated model is sufficient to test the fifth hypothesis. To evaluate the fit of the model, we use the adjusted coefficient of determination (R2adj). The results show that the adjusted coefficient of determination is 0.197. It is better use the modulated determination coefficient to interpret the fitting of the model. Therefore, it should be said that 0.197 percentages of the abnormal returns to

credit risk considered can be expressed. The rest is related to the factors that we did not consider. The results show that the model has a good fit. The results are acceptable when having no self- affiliation, except for the disorder. For this purpose, statistic of Watson Camera (DW) is used. If the value of this statistic is between 1.5 and 2.5, That is, the model has no self-affiliation. The results show that the statistic of DW is 1.818, which represents the independence of the remnants. Since credit risk at 5% level is significant Therefore, we conclude that there is a positive and significant relationship between credit risk and abnormal return at 95precentages confidence level.. This conclusion confirms the third hypothesis. The regression model obtained with respect to credit risk is as follows:

$$CAR_i = 0.624 + 0.235\ UE_i + 1.168\ Ir_i$$

Main Hypothesis
There is a correlation between the coefficient of share response and the abnormal return of share of Maliba risks at the admitted commercial banks to the Tehran Stock Exchange.

Discussion and Interpretation of The Main Hypothesis Results
The results from Table 6 show that the level of significance less than 0.05 was (sig = 0.039), (Sig = 0.5555), (sig = 163/0), and t statistic is greater than 1.98 (t = 02525), (t = 596 / t), (421 / -t = 1), therefore, at the error level of 5% is not significant , while Liquidity risk at 5% error rate is significant. To determine whether a general model of regression is significant or not, we use F statistics. The results show that the F statistic is 4.488 at 5 percentages error level is significant. Therefore, the estimated model is sufficient to test the sixth hypothesis. To evaluate the fit of the model, we use the adjusted coefficient of determination (R2 adj). The results show that the adjusted coefficient of determination is 0.284. It is better use the modulated determination coefficient to interpret the fitting of the model. Therefore model has a good fit. The results are

Table 5: Results of the hypothesis of the sub-interest rate (H6)

$CAR_i = \alpha_0 + \beta_1 UE_i + \beta_4 Ir_i + \varepsilon_i$				
Independent variable	Coefficients	Statistic t	Sig.	VIF
Constant amount	0.624	3.002	0.005	
IR (Interest rate risk)	−1.668	−1.229	0.229	1.003
Adjustment coefficient	0.197			
Watson's camera statistics	1.818			
F statistics significance level of	7.857			
F statistics	0.002			

The independent variable of the model is significant at the error level of 0.05

Table 6: Results of the test of the main hypothesis (H1)

$CAR_i = \alpha_0 + \beta_1 UE_i + \beta_1 Lr_i + \beta_2 Car_i + \beta_3 Sr_i + \beta_4 Ir_i + \varepsilon_i$				
Independent variable	Coefficients	Statistic t	Sig.	VIF
Constant amount	0.392	0.872	0.389	
Lr (Liquidity risk)	0.396	2.973	0.005	1.024
Cr (Credit risk)	1.640	2.025	0.039	1.402
Sr (capital adequacy risk)	0.126	0.596	0.555	1.234
Ir (Interest rate risk)	−0.298	−1.421	0.163	1.178
Adjustment coefficient	0.284			
Watson's camera statistics	1.881			
F statistics	4.448			
Significance level of the statistic F	0.003			

The independent variable of the model is significant at the error level of 0.05

acceptable when having no self- affiliation, except for the disorder. For this purpose, statistic of Watson Camera (DW) is used. If the value of this statistic is between 1.5 and 2.5, That is, the model has no self-affiliation. The results show that the statistic of DW is 1.881, which represents the independence of the remnants. It is also observed that in the general model, credit risk, risk of non-payment of debt, interest rate risk is not significant at 5% level. While unexpected liquidity risk is profitable, it is based on the results of a separate regression. The linear multivariate regression model is as follows:

$$CAR_i = 0.392 + 1.298\ UE_i + 0.396\ Lr_i + 1.640\ Cr_i + 8.640\ Sr_i - 0.298\ Ir_i$$

Findings of The Research

Hypothesis 1) this research hypothesis states that there is a positive and significant relationship between unexpected profit with abnormal returns in the statistical sample. Because it is expected to be a part of the information profit that is used by investors to assess risk and returns . The relationship between profit and return of share profit is one of the most important factors in financial reporting. Profit-dependent information usually attracts the attention of investors and is also the most important factor in the future performance of banks. Profit and stock returns in numerous researches indicate that the change of profits changes the investors' beliefs and changes their behavior. The change in stock returns as a result of unexpected changes in profits suggests that the reported profit in the financial statements of the banks admitted to the Tehran Stock Exchange has information content. Many empirical studies have documented a positive and significant relationship between earnings and stock returns. The obtained results in this study with the results of research and with pornamasori (2012) and Cheng and Nasir (2008) studies have similar results and have readiness.

The second hypothesis deals with liquidity risk. Findings indicate that there is a significant and positive relationship between liquidity risk and unusual returns in the statistical sample. Liquidity is an important factor in assessing cash or current inventories for resolving needs. Failure to provide sufficient liquidity to resolve the needs of creditors may result in the destruction of the bank. Lack of liquidity has a significant impact on the performance of banks, because investors are always worried about the bank's ability to secure their capital. In this study, the meaning of liquidity risk means that banks are not well managed by managers and investors are worried about this risk. In other words, it refers to the inability of the bank to provide sufficient funds to withdraw the customer from the deposit and to finance the loan application. The demand for cash in each bank depends on the structure of assets and liabilities. Banks need liquidity to cover the volatility of balance sheet items and financial development. Because the ability of the bank's liquidity indicates the ability to pay depositors and other debts on the due date, as well as paying the facilities and making investments for profitability. The confirmation of the second sub-hypothesis, which is consistent with the results of the research by Cheng and Nasir (2008) and Asger (2008), is inconsistent with the findings of pornamasory (2012) and Cheng and Ariff (2008).

The third hypothesis deals with credit risk assessment. Since credit risk is significant at 5% level, therefore, we conclude that there is a positive and significant relationship between credit risk and abnormal return at 95% confidence level this risk has a positive and significant effect on the abnormal returns of banks. Being positive in this study shows that whatever this risk be higher, the bank will consider more rules for Necoll. High credit risk means low risk of investors, high borrowed loans and the importance of investors' attention to this risk. Therefore, it provides the newcomers with a high risk response and high returns. This conclusion confirms the third hypothesis. Credit risk (Cr) with a significant level of 0.001 indicates that there is a significant relationship between credit risk and unusual stock returns in the statistical sample. The result of research by Soa (2008), Chang and Nusier (2012) and Chang and Arif (2008), the effect of this risk on abnormal returns is favorable. But is opposite with pornamasory (2012) findings.

The fourth hypothesis examines the adequacy of risk. The risk of capital adequacy (Sr) with a significant level of 0.353 indicates that there is not a significant relationship between this risk and the abnormal stock returns in the statistical sample. Therefore, the fourth hypothesis is also rejected, which is opposed to the PyrenamaSuri research (2012), because pornamasory's results have an effect on this abnormal return, while agreeing to the research of Cheng and Arif (2008) and Cheng and Nasir (2008). The risk of capital adequacy is related to bank's capital, which is obliged to take care of deposits resulting from the depreciation of assets. Whatever the risk is higher, the likelihood Decline in bank debt increases, and whatever is lower, Investors will earn more profit, the more profits they will earn. Therefore, they tend to invest more, which will lead to an increase in stock prices.

The fifth hypothesis examines the interest rate risk. The results indicate that there is no significant relationship between profit rate risk and stock abnormal returns in the statistical sample. Therefore, the fifth hypothesis is not confirmed which have similar results with studies by Chang and Ariff (2008) and Cheng and Nasir (2008).

Suggestions for Future Research

In this study, only four financial risks were investigated, which suggests that other influential risks should be used and the results compared with this study. In this research, investigated banks are listed on the Stock Exchange, It is suggested that the investment companies and the risks affecting on it are also examined.

- Attention to the time structure of the balance sheet, in other words, the separation of items of the balance sheet with respect to the remaining time until each of the items, it is only in this case that liquidity gap can be predicted for different times in the future and according to this gap make decision about Change the composition of resources or expenses of the bank.

- Establishing and developing units of risk management and internal debt control, the risk management unit has the task of measuring and providing a suitable strategy to controlling all kinds of risks in the bank and the task of the internal control unit is to monitor the implementation of the procedures established by the risk management unit.

- Compliance with the regulations regarding the adequacy of capital adequacy and its continuous calculation and control, as well as observance of other regulations issued by the regulatory authorities.

- Identify the causes and effects of different risks and analyze existing relationships in order to determine the optimal combination of bank activities with the aim of reducing risk at the expected return level.

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