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THE RELATIONSHIP BETWEEN STOCK LIQUIDITY AND FINANCIAL RISK AND SYSTEMATIC RISK

HOSSEIN MASOUDIZADEH[1], MOHAMADREZA SHORVARZY[2*]

[1]Master Student of Accounting, Department of Accounting, Neyshabur Branch, Islamic Azad University, Neyshabur, Iran.

[2]Accounting Assistant Professor in the Islamic Azad University of Neyshabur Branch, Iran

***Corresponding Author**

ABSTRACT

In each financial market, based on the depth of market, various tools are used for investment. One of the basic issues in investment is liquidity of assets. Some investors need the financial resources of investment rapidly. Liquidity speed of stock is regarding welcoming trading in TSE by investors.This study aimed to investigate the relationship between liquidity of stock and financial risk and systematic risk of companies listed on TSE. To do this, two hypotheses are formulated and the data of 1237 years of company member of TSE during 2009-2013 are used. To investigate significance of variables, t-statistic is used and to evaluate general adequacy of model, F Fisher statistics is used. The results of study show the significant relationship between stock liquidity, financial risk and systematic risk and there is a significant association between firm size as variable and risk.

Keywords: Financial risk, Systematic risk, Stock liquidity, Firm size

INTRODUCTION

Today, due to the development of economic activities, financial markets and development of investment in capital markets namely TSE by real and legal entities, access to proper information and their realistic analysis are most important tools to take proper decisions and expected benefit and optimal use of financial facilities. In the current community, information play important role in the life of people. The highly advanced the community, the better the application of information.[1]. One of the reasons of progress in developed communities is optimal and effective use of information. The final product of accounting process is

presenting information to different users as internal and external users in company in the form of accounting reports. [2]. The group of accounting reports as provided with the aim of providing information needs of users outside company is in financial accounting field. The final result of financial accounting is the reports as financial reports. Financial statements are the main core of financial reporting. Now, a complete set of financial statements includes basic financial statements (balance sheet, profit and loss statement, complete profit and loss statement, cash flow statement) and notes. Some of financial researchers consider accounting as an informing system and some of them believe that the main goal of accounting is presenting useful information for decision making [3].The researchers of this science are obliged to provide the information by which decision makers can take proper decision. This study attempted to follow the mentioned goal [4].

Significance of study and purpose

There is a constant principle in capitalism culture as capital is away from risk and is inclined to return and profit. Risk-averted investors avoid entering their capital in riskful areas or with ambiguous definition of profit and principal of capital. Can we find a risk-free place for investment? There is the risk of losing profit and principal, there is high risk in investment and others are less risky. Based on the investment risk, the investor expects profit and return. Normally, by their financial analyses, investors achieve return based on risk.[5]. In a common market in which market factors have information, high return is with high risk. This causes that decision making for investment is based on the relationship between risk and return. An investor considers risk and return factors in analysis and management of investment portfolio. In other words, investment as a financial decision has two components of risk and return and trading these two factors can present different compositions of investment. [6].On one hand, investors try to maximize their revenue and on the other hand with uncertainty conditions of financial markets, the latter can make investment revenue as uncertain.[7].

Questions and hypotheses

The study questions are as followings:

1- Is there any significant association between stock liquidity and systematic risk?
2- Is there any significant association between stock liquidity and financial risk?

Study hypotheses are as:

H1: There is a significant association between stock liquidity and systematic risk.

H2: There is a significant association between stock liquidity and financial risk.

Study method

The study method is correlation. The type and amount of relationship of variables are considered. The present study investigates the relations between variables and proves the presence of this relation under present conditions based on historical data.

Variables

Data source	Calculation method	Type of variable	Variable name
The presented data by listed companies on TSE by Rah AvardNovin software	Share Beta	Depended	Systematic risk
Information presented in stock market site by RahavardNovin software	$\frac{\text{Long – term debt}}{\text{Total assets}}$	Depended	Financial risk (Financial leverage)
Information presented in stock market site by RahavardNovin software	The criterion of ranking liquidity by TSE	Independent	Stock liquidity
Balance sheet	Ln, Market value, total assets at the end of fiscal year	Independent	Firm size

Data collection

The primary and secondary data of study are extracted by library method and from basic financial statements and audit reports of companies listed in TSE (as one of the most important capital markets), annual reports and TSE statement and referring to the library of TSE and stock market information sites. The theoretical issues of study are collected via the study of theses, journals, books and internal and international journals in libraries and internet. The data collection method is via the investigation of financial statements and Rahavard Novin software and for their analysis, statistical software is used. The required data is collected and entered Excel software and the data is entered as input data into SPSS software.

The study population and sampling method

Population is the greatest set of people at definite time. The scientific study is conducted with the aim of recognition of a phenomenon in a statistical population. Thus, the study topic can be regarding the attributes, features and functions or the relations between variables, attributes, action and reaction and effective factors on population are studied. The set of units as common in at least one attribute defines a statistical population (Kohandel, 2011). N is used to show the study population of all companies listed on TSE during 2009-2013 meeting the following criteria:

1- It is not one of the financial and investment companies.
2- The required financial information of companies is available.

Based on the above limitations, 1237 years company of study population are studied and selected by systematic elimination.

Hypotheses test

Hypothesis 1: There is a significant association between stock liquidity and systematic risk.

$\begin{cases} H_0 \text{There is no significant association between stock liquidity and systematic risk .} \\ H_1 \text{There is a significant association between stock liquidity and systematic risk .} \end{cases}$

First hypothesis test model

- ✓ $FR=\alpha_0+\alpha_1 li+\alpha_2 size+e$

Variance analysis Table

Sig probability value	F statistics	Sum of squares	Explanation	Model
0.000	**18.185**	**50.541** **1634.229** **1684.770**	**Regression** **Residual** **Total**	**1**

The results of variance analysis of fitted regression model show that F statistics at error level 5% is significant (0.000), by confidence higher than 95%, H0 is rejected and H 1 is supported.

Hypothesis 2:

There is a significant association between stock liquidity and financial risk.

$\begin{cases} H_0 \text{There is no significant association between stock liquidity and financial risk .} \\ H_1 \text{There is a significant association between stock liquidity and financial risk .} \end{cases}$

- ✓ Second hypothesis test model
- ✓ $SR=\alpha_0+\alpha_1 li+\alpha_2 size+e$

Variance analysis Table

probability value	F statistics	Sum of squares	Explanation	Model
0.000	**62.982**	**78.774** **701.044** **779.818**	**Regression** **Residual** **Total**	**1**

The results of variance analysis of fitted regression model show that F statistics at error level 5% is significant (0.000), by confidence higher than 95%, H0 is rejected and H 1 is supported.

FINDINGS AND THEIR ANALYSIS

According to the results, Beta coefficient in first hypothesis is 0.128 with probability value less than 0.001.Thus, the results in above Table show significance of regression coefficient and first hypothesis is supported at error level 5%. The results show the significance association between firm size and financial risk. The results show that in bigger companies, financial risk is lower.

According to the results, Beta coefficient in second hypothesis -0.260 with probability value less than 0.001 and the results in the above Table show the significance of regression coefficient and second hypothesis is supported at error level 5% and the results show the significance association between firm size and systematic risk.

Test result	Probability value	Beta coefficient	Explanation	.Variable
First hypothesis of study				
Supported	0.000	0.128	Liquidity rank	Independent
Supported	0.010	0.080-	Firm size	Control
Second hypothesis				
Supported	0.000	0.260-	Liquidity rank	Independent
Supported	0.000	0.112	Firm size	Control

Applied recommendations based on findings of study

Stock risk and return are two major factors in decision making of investment of stock investors. The results of present study show that liquidity rank of companies has significant association with financial risk and systematic risk. It is proposed that to take optimal decision of stock investors, liquidity index of stock of each company is considered as one of effective factors on risk in stock trading of company to have better estimation of risk of company.

Some recommendations for further studies

Some issues as proposed for further studies are:

1- The relationship of other corporate governance mechanisms as independent auditors, audit committee, legal supervision , etc. with risk.

2- The relationship between earnings management, earnings smoothing, prediction of earnings per share of companies, coefficient of reaction of profit with risk.

3- In this study, some of control variables as firm size are considered and it is proposed to control other variables and type of industry , etc.

REFERENCES

1. Ahmad PourKasgari, A., Qolami, Jamkarani, R. (2005). The investigation of the relationship between accounting information and systematic risk (companies listed on TSE). Journal of social and human sciences of Shiraz University. 22(2): 18-30.

2. Bagherzade, S. (2005). Effective factors on stock return in TSE. Financial research. 19: 25-64.

3. Mahdavi, Q., Gudarzi, K. (2011). Presenting an artificial neural network to predict systematic risk by macro economic variables (Case study: Saipa company), Economic research. 11(4): 219-237.

4. Khani, A., Molayi, M. (2009). The relationship between accounting profit and operating cash flows with systematic risk: TSE. 1999-2005. Accounting research. 1: 186-212.

5. Zanjirdar, M.,Motamed, A., Sajadi, M. (2010). The evaluation of adequacy of systematic risk variables, book value to market value. Firm size, price to income ratio, income to price ratio, market return, risk free return and risk premium in explaining real return of stock in Iran market. Journal of industrial management. 5(11): 137-151.

6. Hong, G., Sarkar, S. (2007). Equity Systematic Risk (Beta) and Its Determinants. Contemporary Accounting Research, 24(2): 423-466.

7. Shafizade, (1996). The relationship between systematic risk (Beta) and stock return in TSE. MA thesis. Management school of Tehran University.