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UDC

RELATIONSHIP BETWEEN OF STOCK RETURNS WITH 9 FINANCIAL ACTIVITY RATIOS BASED ON INFORMATION 28 CEMENT COMPANY IN TEHRAN'S STOCK EXCHANGE

Thesis theme:

The ways of management for improving profitability of the stocks (by the example of the listed companies oriented to the cement production in Tehran Stock Exchange)

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INTRODUCTION

Stock markets and other macro-economic parameters and many other variables affected, several of the factors affecting capital markets and their unknown causes uncertainty on investment (Khaloozadeh, 2003). Due to the increasing importance of capital markets in small capitalization equip the individual to productive activities, identify variables influencing the behavior of investors and the market price of the stock return is gained (Babaeian and Arab, 2000). Obviously this is undesirable feature of uncertainty in decision making and also for investors in the stock market this property is inevitable (Hendrickson, 1992) the overall objective of the research hypothesis and research, is to reduce uncertainty, investors are looking for ways to better predict stock returns to get the maximum performance from your investment. It is clear that investing in the stock market is an important part of the economy no doubt, the greatest amount of capital through stock markets around the world will exchange and the national economy is heavily influenced by the performance of the stock market to professional investors and to the public as an investment tool available.

History of Research

Many studies have been conducted to Relationship between OF stock returns and financial ratios is according to the method used in the present paper, the most important of which are mentioned below:

Research Carried Out within the Country

Relationships between profitability ratios and stock output in stock exchange market in Tehran have been showed in a research which was studied by Dr. Sasan Mehrani and Kaveh Mehrani in 2000, some ratios such as assets output and output of stockholders rights have meaningful relationship with stock output. On the other hand, some characteristics such as output growth and selling growth were not known as suitable characteristics to predict stock output. Also, some changes of variables such as output of stockholders rights and assets output predict output stock changes themselves. Kind of industry and its influence of fiscal structure in accepted companies in stock was studied by Dr. Omid Pourheidari in 2003, he presented that various industries in different business risk contain various fiscal structure are theoretically; so, many differences were in stockholders rights/total assets in every industry. Dr. Taghi Bahramfar and Seyed Hesam Shams Alam in 2004 studied influence of accountant variables/unusual output of future stock of companies in stock; his studies showed that information balance sheet, incomes and loss lists and working cash list to analysis of a stock of an economic center could use the mentioned information. Also, variables of fiscal lever, kinds of responsibilities, company market value, liability ratio/stock right, borrowing expenses, contribution of cash income with unusual future market of stock has up down relationship. While variables of assets output price, development of fixed assets and gain establish direct relation with unusual output of future stock. Ahmad (2002) the relationship between financial ratios and stock prices in the industry, vehicles (15 companies) Tiles and cement industry (19 companies) in the period (2002)-1996 is examined. The results indicate a significant relationship between the dependent and independent variables were included in the company. Ahmed et al., (2003) studied the effects of inflation on the erosion of capital as the company concluded inflation during the distribution of profits and paying taxes based on income statement based on historical cost companies will lead to capital erosion. Gholam (2006) in an article entitled, inflation factors, and strategies for dealing with Iran, come to the conclusion that inflation in Iran is caused by structural factors and loss of purchasing power due to inflation and rising government deficits and funded through borrowing from the central bank increases the money supply in the community adds to inflationary pressures and consumer spending and investment spending of oil revenues flowing into the country and the disproportionate growth in increased liquidity demand, inflationary pressures will intensify the prices of imported goods and the intensification of inflation have been effective. Although this takes different conditions in different industries for example, this relationship has been less severe in the vehicle industry. Mohammad and Mohsen (2007) a study on the relationship between stock returns and profitability ratios adjusted based on the general price index of companies in the oil industry petrochemicals are paid. The findings showed a significant correlation between

profitability ratios adjusted on the basis of the general level of prices and stock returns in the oil and petrochemical companies for 81 to 84 years there. Reza Rai and Kazem Chavoshi a study can predict the ten stocks in Tehran Stock Exchange using the artificial neural network model and multifactor models examined. The results showed that the predictability of stock returns in the stock market is influenced by macroeconomic variables. Multi-index model able to predict stock returns using macroeconomic variables, the artificial neural networks in this success and can significantly reduce forecast error. The use of artificial neural networks has good flexibility. The relationship between stock returns and macroeconomic variables are not always constant, and for various reasons, this relationship can be changed.

Research Abroad

Although previous results were completely different with Chan (1996) studies in American stock and Kryzanowski's researchers in Canada. Those results were the same with studies of Bernard and Thomas (1990). Finger (1999) studied the abilities of previous income to predict cash flow in future. He analyzed annual income and cash flow of 24 companies from 1953 to 1987 by using Regression models in period of times. The results showed that observing previous income could help accountants to predict 88% of future income; also it helped them to predict cash flow in future. Statistics examinations are meaningful. Finger also studied the superior ability of income to predict cash flow. The results showed that the ability of cash flow is more predictable than future cash in short time and there contained the same situations in long term. Mramor and Pahor (2000) paid attention to relationship between financial ratios (independent variable) and rate of excess output (dependant variable). The researchers studied the relationship between variables in linear or non-linear models. In the study, information related to two consistent markets in Japan and America. Rate of excess output (dependant variable) found in differences between rate of real income and expected output. The study of independent variables showed that 12 financial ratios contained assets of output ratios, margin of income, selling to fixed assets, selling to assets, flow ratios, fast ratio, very fast ratio, working claims, working goods inventory, settled earning turnover, liabilities to assets, rights of stockholders to fixed assets. The results showed that there were linear or non-linear relationships between excess output and some fiscal ratios, and sometimes there were linear or non-linear relationship between variables. Also, intensity and kind of relationship dependant on studied industry and differed from a country to another one. Dater et al., (1998) the effect of liquidity on stock returns examined. Research since the 1963 -1991 period is done. Variable rate of return on equity) of the dependent variable (the change rate Inventory turnover) independent (that Inventory turnover is negatively correlated with stock returns. Bae and Kim (1998) in the accounting system of the utility of the product of accounting profit and the book value of net assets (equity) in predicting stock returns has been studied the research shows that this model has the great ability in predicting stock prices and returns. Features of the system, allowing quantifying the qualitative factors involved in predicting stock prices. The researcher, in (1998), an article with the same title, regardless of genetic algorithms has done. In the paper, a questionnaire with fuzzy Delphi method to the use of expert opinion is used to predict the stock price. Sim (2000), in this paper to predict the stock price of four institutions (companies) superior bank of a factor model with respect to financial and other economic variables action. Kanas and Yannopoulos (2001); in this study the linear and nonlinear models for the prediction of monthly stock returns New York Stock Exchange were compared. MacMillán (2001) take note the nonlinear relationship between stock returns and changes can be made based on the logarithmic transformed into simple linear equations. Accordingly, the nonlinear relationship. Kuo et al., (2001) article entitled "An intelligent decision support system for stock trading by using social and genetic algorithm based on fuzzy neural network and artificial neural networks "to maintain a system of consultation, sale or purchase of stock market shares have been attempted.

Hypothesis

H₁: There is correlation between Activity Ratios in cement companies and output stock of the companies.

H₀: There is no correlation between Activity Ratios in cement companies and output stock of the companies.

MATERIALS AND METHODS

Research Methodology

Since the present study is descriptive correlational research, the relationship between two or more variables, in other words, the relationship between stock returns and financial ratios will be discussed. For this purpose, according to the research questions, the research was the following:

The research firms listed in Tehran Stock Exchange are among the companies considerations were taken into account. After the election on the basis of considerations into account, financial data required to run the model presented in the project was collected by referring to relevant sources. At this stage, according to the needs of hypotheses, models, independent and dependent variables are related to each hypothesis was measured according to the definitions of operating. At this stage, variables, return on equity and financial ratios were calculated on the basis of research models and continue to fit models were categorized and sorted. Then, using financial ratios based, model parameters by least s regression analysis and finally, based on the estimated parameters will attempt to confirm or reject the hypothesis.

The Findings

Because of 9 ratio exam, 2 than in group activity ratios no significant relationship with stock returns are to be claimed between 7 ratio exam other activity ratios of 99% and stock returns in the years to 03.2006 to 03.2015 and cement firms in Tehran stock exchange, there have been significant linear correlation.

As the table shows that only Accounts Receivable Turnover Ratios and Inventory Turnover Ratios out of 9 financial activity ratios were compared in the study had no significant relationship with stock returns. And other ratios is a significant relationship with stock returns, And regression models estimate the proportion that have a significant relationship with stock returns any ratio was determined. Explanation, however, the explanatory power of stock returns by the proportions are different. Because significant relationship with 7 than with stock returns, r² calculated ratios in some lower number shows, and it means that independent variables in this group of ratio also affects only a small percentage of dependent variable changes. As shown in the table, only 5 of Accounts payable Turnover Ratios, Collection Period Ratios, Inventory Turnover Cycle Ratios, Current Capital Turnover Ratios, Inventory to Turnover Capital Ratios explanatory factor is the impact of lower stock returns show less dependent variable to the

independent variable. And2 of Fixed Asset Turnover Ratios, Total Asset Turnover Ratios explanatory factor is that average stock returns average impact of the independent variable on the dependent variable show.

Title	Correlation coefficient		R	R2	Test F		Not standardized coefficient β		Coefficient Stan- dardized β	Test t		Sig		Result
	R	Sig			F	sig F	Inter-cept	line slope		Inter-cept	line slope	Inter-cept	line slope	
X13	0.624	0	0.624	0.389	159.23	0	89.086	1042.503	0.624	0.746	12.618	0.456	0	Hypo-thesis
X14	0.652	0	0.652	0.426	184.52	0	-583.981	3279.552	0.652	-3.769	13.584	0	0	Hypo-thesis
X15	0.196	0.002	0.196	0.039	10.028	0.002	1298.362	36.814	0.196	14.39	3.167	0	0.002	Hypo-thesis
X16	-0.165	0.009	-0.17	0.027	6.96	0.009	1876.631	-5.296	-0.165	7.842	-2.638	0	0.009	Hypo-thesis
X17	-0.022	0.724	-0.02	0	0.125	0.724	1298.599	-0.012	-0.022	13.873	-0.353	0	0.724	Not Hypo-thesis
X18	-0.142	0.024	-0.14	0.02	5.163	0.024	1445.469	-7.965	-0.142	12.763	-2.272	0	0.024	Hypo-thesis
X19	0.112	0.076	0.112	0.013	3.172	0.076	786.04	136.704	0.112	2.632	1.781	0.009	0.076	Not Hypo-thesis
X20	0.195	0.002	0.195	0.038	9.862	0.002	1302.672	10.443	0.195	14.427	3.14	0	0.002	Hypo-thesis
X21	-0.178	0.005	-0.18	0.032	8.133	0.005	1469.582	-15.993	-0.178	13.385	-2.852	0	0.005	Hypo-thesis

The results of the exam mentioned in activity ratios are as follows:

RESULTS AND DISCUSSION

Results

Independent variable	Financial ratios	% explanation	Coefficient correlation	Statistical conclusions
Activity Ratios				
X14	Total Asset Turnover Ratio	65/2	42/6	Meaningful
X13	Fixed Asset Turnover Ratio	62/4	38/9	Meaningful
X15	Inventory to Turnover Capital Ratio	19/6	3/9	Meaningful
X20	Current Capital Turnover Ratio	19/5	3/8	Meaningful
X16	Inventory Turnover Cycle Ratio	-16/5	2/7	Meaningful
X18	Collection Period Ratio	-14/2	2	Meaningful
X21	Accounts payable Turnover Ratio	-17/8	3/2	Meaningful
X19	Inventory Turnover Ratio	11/2	1/3	Without meaning
X17	Accounts Receivable Turnover Ratio	-2/2	0	Without meaning

The below table showed stock returns whit dependant variable ratios:

Recommendations based on Findings

According to the results of the Activity ratios, investment firms and other financial institutions offered predict Fixed Asset Turnover Ratios, Total Asset Turnover Ratios trend of the market is better than other the Activity ratios this model is used.

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