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The Relationship Between Performance Evaluation Indices and Performance Rating with Changes in the Price of Companies' Ordinary Shares

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One of the factors influencing the stock price change and sustainability is the company's financial performance. Financial performance can be evaluated by means of financial ratios. Hence, in this research, Financial performance evaluation indices relationship and evaluation ratings which are included as Return on assets, Return on equity, Net income to sales, The ratio of operating profit to sales, Asset turnover ratio, Inventory turnover ratio, Current ratio, Quick Ratio, The ratio of cash flow, Leverage, Long-term debt to equity ratio with changes in The price of the common ordinary shares have been investigated. For ranking the companies based on Performance evaluation indicators, TOPSIS method has been used. The research sample was 100 accepted companies in Tehran stock market in years 2007_2012 that were selected by screening. Hypothesis testing has been done by multiple regression and generalized least squares method by means of Data layout panel. Moreover, for determining the significant difference of Changes in the price of ordinary shares of the companies, with the upper and lower ranking from the view of Performance evaluation indicators, the Mann- Whitney Method has been used. The results indicate that there is a significant relationship between net income and sales, Return on assets, Return on equity, Net income to sales, The ratio of operating profit to sales, Asset turnover ratio, Inventory turnover ratio, Current ratio, Quick Ratio, The ratio of cash flow, Leverage, Long-term debt to equity with the price changes of Tehran stock market. Besides, the research findings show that there is a negative significant relationship between the Overall rating of the company based on performance evaluation indicators and Changes in prices of ordinary shares.

Key words: Performance evaluation indicators, financial ratios, stock price, Topsis.

In making an investment decision on the Stock Exchange, Efficiency and evaluation of trends in stock prices are the first and most important factor that investors are facing. Since various factors affect the stock price changes and each of these factors increases or decreases the price in a way, analyzing and investigating each of these factors are urgent. (Hashemi & Behzadfar, 2007)

According to the investors, Efficiency through changes in stock prices and the rise in the price is very important. Increase in the stock price, investors can catch the investors' positive aspects consider toward the company which this positive perspective of the company can help the company overcome its financing favorably through borrowing and debt. The decision on the selection of appropriate management and evaluating the performance of the management can make the situation better in stock exchange and this leads to price increase in stock exchange. Financial performance is one of the suitable tools for price changing in stock exchange. In this regard, the problems that may arise are due to lack of suitable managements. Most of the investors try to buy or

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sell shares of their company according to their financial ratios. Hence, financial ratios, are good indictors of evaluating the performance of the company. Regarding the relationship between financial performance and stock price changes, this research is seeking for the answers of the following questions:

1. Does appropriate financial performance make changes (stability) of the company's stock price?
2. Is ranking the companies according to Performance evaluation indicators for making the distinction between the companies, a relevant factor?

Research History

Since the situation of a business and its managers to a large extend depends on many financial factors, the real cost of these factors is of high value for shareholders. Identifying these factors and the ratios derived from them can be suitable for Shareholders and other users of financial statements. The accounting researchers have done lots of studies on the relationship between the financial statements and the other variables in which they obtained different results. But there were not much studies in the field of financial ratios and the other variables. From the piloted researches done in this field, we can name Rajabi and Ganji (2007) research with the title of "investigating the Relationship between Corporate Governance and Financial Performance". In this research, nineteen known mechanisms of governance that are classified into seven groups with fourteen indicators of financial performance classified into six groups have been tested. The results showed that seven of the effective mechanism of corporate governance which belonged to five groups are in relationship with certain financial performance indicators. Besides, the results show that corporate governance system in Iran, is closer to inter-organizational systems rather than external organizational system. Anvari, Rostami and Khotanlou (2007), used Profitability indicators for Ranking the top companies of the Stock Exchange and they concluded that there is no correlation between done Ratings and rankings conducted by the exchange. Abzari and et al (2009), used EVA , as one of the indicators For evaluating and ranking of the companies membered in metal industry. Hashemi and Behzadfar (2011) has done a research in this field, with the title of "Evaluating the relationship between the information content of accruals and Selected financial ratios and stock prices of companies listed on Tehran Stock Exchange" which after testing the hypothesis, they have concluded that there is a relationship between Earnings per share ,and the ratio of working capital to total assets, return on assets, sales, net income and asset turnover accounted for 95% of the price of shares of the sample companies. The findings showed that the components of accruals in this area are not statistically significant. Danesh Shakib and Fazli (2010), tried to rank the companies and ranked Cement companies in Tehran Stock Exchange using an integrative approach of AHP-TOPSIS. Wang and Chang (2003), Developed a method for evaluating the performance of airports. They used traditional methods to select their own statistical criteria. For determining the weight of the mentioned criteria used FAHP. Finally, by means of Topsis approach, Airports were ranked based on their performance. Xaitoon and Tian (2007), have investigated the relationship between Capital structure and firm performance using the information of 167 Jordanian companies during 1989-2003. They concluded that there is a significant relationship between the ratio of short-term debt to total assets ratio of total debt to total assets ratio long term debt to total assets ratio of total debt to total equity and ROA ratio. Anderson (2005), investigated the Capital and Function Structure for 1323 companies and found that there is a significant relationship between Capital structure and ROA. Li (2009), has done an investigation on Capital structure and used ROA as an indicator of performance in part of the research. He concluded that there is a negative correlation between Performance, Financial leverage and short-term debt ratio. Hence, Chinese companies use Short-term debt less. Lawrence and Caylor (2006), has conducted a research with the title of "the Relationship between corporate governance and corporate performance" and concluded that there is a significant relationship between Governance and Financial Performance of the companies. Vanasco (1998), Personz(1995), Shilin (1995) and Styles(1991) concluded that Inventory to sales ratio evaluates the relationship between sales and inventory. Besides, it is been expected that there is a relationship between the

inventory and stock price. According to Spits and et al, a set of seventeen financial ratio based on judgmental principles was selected. To prevent using the ratios with High correlation and the same information content a more limited set was selected for testing the hypothesis after running the related statistical tests. In other words, the remaining ratios described all possible aspects of their financial performances includes: Profitability, solvency, liquidity management practice. The ratio of sales to assets is one of the most important used ratios in previous researches from the view of Predictability manipulation of financial statements. (Prosonz, 1995, Faning & Kooger, 1998). Since the circulation of the assets shows the efficiency of employed financial assets, increasing the efficiency of assets can lead to an increase in stock price. Dimitropoulos and Asteriou (2009), have done a research entitled as "the relationship of valuable financial statements and their effect on stock prices". The results indicated that four ratios of six studied ratios and both parts of Accruals (voluntary and involuntary) have an important effect on stock price changing. Spathic and et al (2002), has done a research entitled as "Discovery of false financial statements". They showed with the use of financial ratios as independent variables that for the companies with high ratio of Inventory to sales and Debt to total assets, and with low ratio of working capital to assets, net profit to assets and sales to assets, there is more probability of financial statements manipulations. Hence, Extensive analysis on these key ratios can make the credence of a company clear for the investors and market analysts.

The findings of the research conducted by Namazi and Kermani (2009) shows that there is a significant relationship between Ownership Structure and Corporate Performance. Shahrezai (2003), in their investigation, entitled as "the effects of adjusted financial ratios based on the impacts of inflation on consumer decisions" , by means of the obtained information, showed that inflation has a great impact on financial statements factors , so it must be taken into account in decision makings. Leman and Vigand (2000), found that In the case of non-member companies of the German Stock Exchange, Ownership concentration has a significant negative impact on the company's profitability, while banking institutions ownership improves company's performance. Mardegie Gheshmi (2003), has investigated the relationship between Stock price variables and financial ratios of companies listed in Tehran Stock Exchange. In this study, ten financial ratios were considered as independent variables and Coefficient of variation of stock prices was the dependent variable.

Research Hypotheses

According to the studies and research questions, 2 main hypotheses and secondary related hypotheses have been proposed as the followings:

First main Hypotheses

1. There is a significant negative relationship between the assessed performance indicators and changes in prices of ordinary shares.

1-1. There is a significant relationship between Corporate profitability ratios and changes in prices of ordinary shares

1-2. There is a significant relationship between Company liquidity ratios and price changes in ordinary shares

Table 1.

		P	Rs	ORs	ROE	ROA	ATOR	ITOR	CR	QR	OCF	LA	LTLEQ	AGE	Size
N	Valid	600	600	600	600	600	600	600	600	600	600	600	600	600	600
	Missing	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mean		.00	19.20	22.34	29.40	16.52	1.33	124.77	1.31	.91	.32	.73	.19	3.57	13.38
Std. Deviation		.168	16.372	15.673	17.949	13.306	.712	92.072	.720	.593	.612	.443	1.864	.522	1.529
Skewness		-.321	1.542	1.346	.415	1.327	1.488	.551	2.817	2.102	2.586	-1.058	23.293	-.573	.884
Std. Error of		.100	.100	.100	.100	.100	.100	.100	.100	.100	.100	.100	.100	.100	.100
Kurtosis		32.569	3.761	3.341	-.323	2.248	4.756	-.257	13.297	15.004	10.037	-.884	560.404	-1.046	1.146
Std. Error of Kurtosis		.199	.199	.199	.199	.199	.199	.199	.199	.199	.199	.199	.199	.199	.199
Minimum		-1	-22	-27	-11	-22	0	0	0	0	0	0	0	2	10
Maximum		1	99	99	84	76	5	391	7	6	5	1	45	4	20
Percentile[a]	25	0.00	7.25	11.00	16.00	7.00	1.00	48.00	1.00	1.00	0.00	0.00	0.00	3.00	12.00
	50	0.00	15.00	20.00	28.00	13.00	1.00	121.50	1.00	1.00	0.00	1.00	0.00	4.00	13.00
	75	0.00	26.00	29.00	41.00	22.00	2.00	182.00	2.00	1.00	1.00	1.00	0.00	4.00	14.00

1-3. There is a significant relationship between Ratios of business and changes in prices of ordinary shares

1-4. There is a significant relationship between corporate debt ratios and changes in prices of ordinary shares.

2- Second main Hypothesis

2-1. Companies with better Ranking of financial performance make subtle changes in prices of ordinary shares.

2-2. Companies with weaker ranking of financial performance make lots of changes in prices of ordinary shares.

Research Methodology

The statistic population of this research is all companies listed in Tehran Stock Exchange during over the years 2007- 2012. Data collection was done by library method. The theoretical information have been gathered from related books, Foreign and Persian articles. The necessary information for testing the hypotheses have been gathered from Audited annual financial statements of companies and Report of the Board of Directors. Some of these information have been extracted from information banks of Tadbir Pardaz and Rahavarde Novin and The official website of Tehran Stock Exchange. The method of this research is descriptive and correlational which tries to describe the relationships between the variables with the statistical tests. For sampling, Systematic elimination method was used with the following conditions:

1. Companies' Financial periods be to the end of March of each year.
2. The company's financial year shall not be changed during the study period.
3. Companies must have the ongoing research activities during the research and their Shares have been traded at least once.
4. Not to be part of Investment companies, brokerage, banking, insurance and pension funds.
5. Be profitable.
6. The Required information for research during the period 2007- 2012must be presented completely.

According to the above circumstances from 423 member companies at Tehran Stock Exchange, 100 companies were selected.

Research variables

Dependent variable, changes in prices of ordinary shares is calculated as follows.

Log(Pt) – Log(Pt-1)

Pt = price of shares at end of period

Pt-1 = price of the shares at beginning of period

Independent variables, indicators of financial performance of companies that have been divided into 4 groups. These variables are as follows:

A) The profitability ratios include:

1. Return on assets 2. Return on equity 3. The ratio of net profit to sales 4.The ratio of operating profit to sales

B) The ratio of activity include:

1. Asset turnover ratio 2. Inventory turnover ratio

C) Liquidity Ratio include:

1. Current ratio 2. Quick Ratio 3. The ratio of cash flow

D) the ratio of debt include:

1. Leverage 2. Long-term debt to equity ratio

Return on symbol is ROA, Return on equity is ROE, The ratio of net profit to sales is R/S, the ratio of operating profit to sales symbol is OR / S, asset turnover ratio symbol is ATOR, Inventory turnover ratio with symbol ITOR, current

Table 2.

		p	Rs	ORS	ROE	ROA	ATOR	ITOR	OR	QR	OCF	LA	LTLEQ	Age	Size
N	Valid	600	600	600	600	600	600	600	600	600	600	600	600	600	600
	Missing	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mean		1.00		1.17	29.40	.98	-.02	4.27	-.01	-.03	.01	.73	-.01	3.57	13.38
Std. Deviation		.565		.456	17.949	.545	1.032	1.434	1.016	1.062	1.058	.443	1.014	.522	1.529
Skewness		-.169		.504	.415	-.825	-.113	-1.262	.176	-.064	.060	-1.058	.813	-.573	.884
Std. Error of		.100		.100	.100	.100	.100	.100	.100	.100	.100	.100	.100	.100	.100
Kurtosis		.744		1.396	-.323	4.153	.316	.861	1.533	.798	1.545	-.884	.074	-1.046	1.146
Std. Error of Kurtosis		.199		.199	.199	.199	.199	.199	.199	.199	.199	.199	.199	.199	.199
Minimum		-1		-1	-11	-2	-3	-1	-3	-3	-5	0	-3	2	10
Maximum		2		2	84	2	3	6	4	3	3	1	3	4	20
Percentile s	25	1.00		1.00	16.00	1.00	-1.00	4.00	-1.00	-1.00	-1.00	0.00	-1.00	3.00	12.00
	50	1.00		1.00	28.00	1.00	0.00	5.00	0.00	0.00	0.00	1.00	0.00	4.00	13.00
	75	1.00		1.00	41.00	1.00	1.00	5.00	0.00	1.00	1.00	1.00	1.00	4.00	14.00

ratio with the symbol CR, instant symbol is QR, The ratio of cash flow to the symbol OCF, leverage the symbol is L / A, the ratio of long-term debt to equity symbol is LTL / EQ.

Control variables:

Company Size

Is equal to the natural logarithm of the book value of total assets of the company in the year that the symbol will be displayed Size.

Life Company is the longevity of the company this year, which will be shown with the symbol Age to test the main hypothesis of the regression model was used: Model (1)

$$\Delta Pit=\alpha_0+\beta_1\ ROAit + \beta_2 ROEit+ \beta_3 R/Sit+ \beta_4 OR/Sit + \beta_5 ATORit + \beta_6 ITORit + \beta_7 CRit\ \beta 8\ QRit + \beta 9 OCFit+ \beta 10 L/Ait+ /EQit + \beta 12\ Sizeit + \beta 13 Ageit + \varepsilon it$$

The following regression model was used to test two main hypotheses: Model (1)

$$\Delta Pit =\alpha_0+\beta_1\ RANKit + \beta 2\ Sizeit + \beta 3 Ageit + \varepsilon it$$

To test the first hypothesis, the sources said the data were collected.

Then the data matrix with respect to the variables related to the secondary hypothesis was placed.

Then Lemer F and H Hausman test for the evaluation of the data was carried out proper arrangement. Finally, using Eviews software to perform a regression model in Panel and by GLS (generalized) respectively. After interpreting the results, at this stage of the test, T, F, R and T and F statistics significance level was used. To test the second hypothesis, based on the evaluation of the performance (return on assets, return on equity, net income to sales ratio of operating profit to sales, asset turnover, inventory turnover ratio, current ratio, quick ratio, cash flow, leverage, long-term debt to equity ratio) and to we rank by method Topsis in 6 stages. The argument for ranking hypothesis by evaluating the performance of financial ratios as indicators of performance evaluation criteria were considered positive, thus, the implementation of Topsis, 11 indicators were considered positive characteristics. To reach this conclusion after ranking second group of hypotheses is carried out, the average stock price in the different groups were compared by ranking. To test this part of the test, "Mann-Whitney" and using Spss software was used. In interpreting the results, descriptive statistics and data normalization has been chosen to illustrate in Table 1 were presented.

Check average and normality of the data

As shown in Table (1) visible, roughly between median and mean number of variables there is a significant difference. That's the difference, indicating the absence of some variables is normal. The amount of deviation, skewness and elongation of the variables shown on the left / right and stretching / chamfer is too much data. (Not included in the range of -2, 2)To fix this information with the strategy we have below normal.

1. The logarithmic transformation using the following formula is calculated.
   $Y = LN(Xi)$
2. Conversion Box - Cox: The first conversions to find a value Lambd (ë) is done, then Xt is generally observed for each of the following turn.

Table 3. The correlation matrix

	P	RS	ORS	ROE	ROA	ATOR	ITOR	CR	QR	OCF	LA	LTLEQ	AGE	SIZE
P	1													
RS	0.538128	1												
ORS	0.452607	0.804006	1											
ROE	0.458334	0.589811	0.547201	1										
ROA	0.658581	0.497007	0.412281	0.371006	1									
ATOR	0.050071	-0.11517	-0.09193	0.331568	0.002152	1								
ITOR	-0.19146	0.113438	0.155909	0.361795	-0.23903	0.27005	1							
CR	0.280872	0.267978	0.202965	0.181723	0.217355	-0.2084	0.048076	1						
QR	0.276163	0.268917	0.165838	0.202406	0.211245	-0.23528	-0.06291	0.822967	1					
OCF	0.290528	0.466005	0.473372	0.38531	0.309918	0.231709	0.142417	0.328555	0.216922	1				
LA	-0.34464	-0.59052	-0.44266	-0.22832	-0.35525	-0.03297	-0.09036	-0.65333	-0.51089	-0.57748	1			
LTLEQ	-0.28777	-0.28616	-0.18329	-0.2168	-0.24002	0.138766	-0.07045	-0.48384	-0.43164	-0.16338	0.507098	1		
AGE	0.034218	0.004579	0.041713	-0.03243	0.020749	-0.05208	-0.05052	-0.18626	-0.16276	-0.10636	0.12914	0.05414	1	
SIZE	0.024794	0.063032	0.040484	-0.05012	0.032034	-0.07168	-0.14973	-0.21676	-0.07843	-0.0579	0.123521	0.089562	0.126296	1

$$T(Xt) = \frac{Xt - 1}{\square}$$

Finally, the following table shows the variables is normal.

As shown in Table 2 can be seen, almost no significant difference between median and mean variables. This suggests that vary from normality. The skewness and elongation of the variables showed no deviation from the left / right and stretching / chamfer. (Being in the range of -2, 2). It is also shown that the normality of the data. . Minimum and maximum stock price changes between the -1 and 2 are observed. This comparison shows that the difference between the changes in the price of the common stock of companies is high. 0/10 is the standard deviation of changes in stock prices, which indicates the deviation from the mean is the stock price changes.

Data correlation matrix

Before performing the main tests, to determine the relationship between variables, Pearson's correlation coefficient was used, the results in Table 3 were presented.

The coefficients of correlation matrix shows that the correlation between variables is weak.

Test results assumptions

The main hypothesis of the relationship between the financial performances of the common stock price changes is discussed. As shown in Table 4 can be seen, the probability of F statistics obtained Lymr, is 0.000, that Shows the proper arrangement, the panel method. The Hausman test probability value obtained is 0.000, which indicates that the model for panel data and a fixed effects are estimated. The results show that changes in stock prices by 9/80 of financial ratios described**.** Watson statistic camera with the1/ 753 confirms the lack of correlation between residual values. F statistic is in light of the overall regression model confirmed.

1.1 Sub-hypothesis testing

"There is a significant relationship between the ratio of corporate profits and stock price changes."

Coefficients and t-statistics were obtained for net income to sales variable 0/214 and 6/904 respectively. These values indicate that there is a significant positive correlation between the ratio of net income to sales variable and changes in prices of ordinary shares in 99% level. Thus, the increase in net profit to sales ratio of the change in the stock price increases.

Coefficients and t-statistics were obtained for the ratio of operating profit to sales0/

Table 4. Summary statistics of the main hypotheses and assumptions related ancillary

Variables	Variable coefficients	T-statistics	Significant level	Results
C	-0/52	-3/307	0/001	Significant
ROA	0/544	16/832	0/000	Significant
ROE	0/002	1/899	0/058	Significant
R/S	0/214	6/904	0/000	Significant
OR/S	0/020	0/453	0/656	Without meaning
ATOR	0/079	8/608	0/000	Significant
ITOR	-0/076	-10/425	0/000	Significant
CR	0/128	6/699	0/000	Significant
QR	-0/025	-1/682	0/093	Without meaning
OCF	-0/026	-2/486	0/014	Significant
L/A	0/559	4/402	0/000	Significant
LTL/EQ	-0/040	-3/900	0/000	Significant
Age	0/034	1/703	0/089	Significant
Size	0/014	1/892	0/058	Significant

0/809 Coefficient of determination:	1/753 : Watson- Dorbin statistic c
The adjusted coefficient of determination:0/805	0/000: LymrF test
F-statistic:191	0/000: Significance level of F statistics

Hausman test:0/000

020 and 0/650 respectively. These values indicate that there is not a significant relationship between the ratio of operating profit to sales variable and the price of the common stock.

Coefficients and t-statistics were obtained for return on equity variable 0/002 and 1/899 respectively. These values indicate that there is a significant positive relationship between the return on equity variable and changes in prices of ordinary shares in 90% level. Thus, the increase in net profit to sales ratio of the change in the stock price increases. . Thus, by increasing the number of equity returns, changes in the Company's common stock price increases.

Coefficients and t-statistics were obtained for asset returns variable 0/544 and 16/832 respectively. These values indicate that there is a significant positive relationship between the asset returns variable and changes in prices of ordinary shares in 99% level. Thus, the increase in net profit to sales ratio of the change in the stock price increases. Thus, by increasing the number of asset returns, changes in the price of the common stock of the company increases.

2.1 Sub-hypothesis

" there is a significant relationship between the proportion of the company's common stock price changes and."

Coefficients and t-statistics were obtained for asset turnover ratio variable 0/078 and 5/608 respectively. These values indicate that there is a significant positive relationship between the asset turnover ratio Variable and changes in the price of ordinary shares in 99% level. Thus, by increasing the number of circulating assets, changes in the Company's common stock price increases.

Coefficients and t-statistics were obtained for Inventory turnover ratio variable -0/076 and -10/425 respectively. These values indicate

Table 5. weight variables investigated using Shannon entropy

Adjusted weight	Standard weight (Wj)	Amount of uncertainty (dj)	Entropy amount (Ej)	criteria	Row
0.07	0.07	0.09	0.91	R/S	1
0.045	0.045	0.057	0.943	OR/S	2
0.057	0.057	0.073	0.927	ROE	3
0.034	0.034	0.043	0.957	ROA	4
0.023	0.023	0.029	0.971	ATOR	5
0.074	0.074	0.095	0.905	ITOR	6
0.016	0.016	0.02	0.98	CR	7
0.023	0.023	0.03	0.97	QR	8
0.221	0.221	0.282	0.718	OCF	9
0.008	0.008	0.011	0.989	LA	10
0.429	0.429	0.548	0.452	LTLEQ	11

Table 6. Summary of results for the second main hypothesis

Pit=á• +â• RANKit +Age + Size+ åit

Variable	Variable coefficients	T-statistics	Significance level	Results
C	-3/578	-5/398	0/000	Significant
RANK	0/002	3/613	0/000	Significant
Age	1/116	5/424	0/000	Significant
Size	0/039	3/126	0/001	Significant

Coefficient of determination:0/537 1/939: Watson- Dorbin statistic
The adjusted coefficient of determination: 0/442 0/000: LymrF test
F-statistic:5/651 0/000: Significance level of F statistics
Hausman test:0/000

that there is a significant positive relationship between the Inventory turnover ratio Variable and changes in the price of ordinary shares in 99% level. Thus, by increasing the number of Inventory turnover, changes in the Company's common stock price declines.

3.1 Sub-hypothesis "

there is a significant relationship between the company's liquidity ratios and stock price changes."

Coefficients and t-statistics were obtained for current ratio Variable 0/128 and 6/699 respectively. These values indicate that there is a significant positive relationship between the Current ratio Variable and changes in the price of ordinary shares in 99% level. In other words, by increasing the current rate of change in the price of the common stock of the company increases.

Coefficients and t-statistics were obtained for Quick ratio variable -0/ 025 and -1/ 682, respectively. These values show that there is not a significant relationship between Quick ratio Variable and changes in prices of ordinary shares.

Coefficients and t-statistics were obtained for cash Variable flow -0/026 and -2/486 respectively. These values indicate that there is a significant positive relationship between Cash flows Variable and changes in the price of ordinary shares in 99% level. In other words, by increasing number of Cash flows reduced changes in the Company's common stock.

4.1 Sub-hypothesis

"There is a significant relationship between the ratio of corporate debt and common stock price changes."

Coefficients and t-statistics were obtained for leverage Variable 0/559 and 4/402 respectively. These values indicate that there is a significant positive relationship between leverage Variable and changes in the price of ordinary shares in 99% level. In other words, by increasing the number of changes in the common stock of corporate debt ratio increases.

Coefficients and t-statistics were obtained for rate long-term debt to equity Variable - 0/040 and -3/900 respectively. These values indicate that there is a significant positive relationship between rate long-term debt to equity Variable and changes in the price of ordinary shares in 99% level. Thus, by increasing the number of long-term debt to equity ratio, changes in the price of the common stock of companies is reduced.

The results of the hypothesis test 1 indicates that the performance evaluation indicators **(**Net income to sales, return on assets, return on equity, asset turnover ratio, inventory turnover ratio, current ratio, liquidity ratio, debt ratio, the ratio of long-term debt to equity**)**, there is a relationship by Common stock price changes, and have a significant influence on the common stock price changes.

Coefficients and t-statistics were obtained for Company Size Control variables 0/ 014 and 1/892 respectively. These values indicate that there is a significant positive relationship between Company Size Variable and changes in the price of ordinary shares in 90% level. Therefore, to increase the book value of total assets of the company, changes in the Company's common stock price increases.

Coefficients and t-statistics were obtained for Company lifetime Control variables 0/ 034 and 1/703 respectively. These values indicate that there is a significant positive relationship between Company lifetime Variable and changes in the price of ordinary shares in 90% level. Therefore, to increase the Company lifetime, changes in the Company's common stock price increases.

Two main hypotheses:

Before testing the two main hypotheses and sub- hypotheses related, the rankings are based on performance evaluation indicators, using TOPSIS method was as follows. TOPSIS process works as follows.

First stage = first, the decision matrix for each of the years (2007- 2012) to develop separately.

$$D = \begin{array}{c} \\ A_1 \\ A_2 \\ \vdots \\ A_i \\ \vdots \\ A_m \end{array} \begin{array}{c} \begin{array}{cccccc} X_1 & X_2 & & X_j & & X_n \end{array} \\ \begin{bmatrix} x_{11} & x_{12} & \cdots & x_{1j} & \cdots & x_{1n} \\ x_{21} & x_{22} & \cdots & x_{2j} & \cdots & x_{2n} \\ \vdots & \vdots & & \vdots & & \vdots \\ x_{i1} & x_{i2} & \cdots & x_{ij} & \cdots & x_{in} \\ \vdots & \vdots & & \vdots & & \vdots \\ x_{m1} & x_{m2} & \cdots & x_{mj} & \cdots & x_{mn} \end{bmatrix} \end{array}$$

Second stage: we create matrix normalized according to the formula of the first stage.

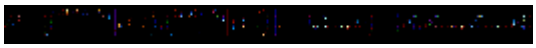
$$r_{ij} = \frac{X_{ij}}{\sqrt{\sum_{i=1}^{m} X_{ij}^2}}$$

The third stage - normalized weighting matrix

Following the Shannon entropy weighting method is carried out, the weights to the variables in the following table.

The fourth step - to calculate the positive ideal solution and negative ideal solution query.

The ideal option is positive



The ideal option is negative

$A^- = \left\{\left(\min_i v_{ij} \middle| j \in J\right), \left(\max_i v_{ij} \middle| j \in J\right) \middle| i = 1,2,\dots,m\right\} = \{v_1^-, v_2^-, \dots, v_j^-, \dots, v_n^-\}$

$j \to J = \{j = 1,2,3,\dots,n\}$ Relate to index

 Relate to cost

Fifth step- Euclidean distance in each of the positive and negative ideal solution is computed.

$$s_{i*} = \sqrt{\sum_{j=1}^{n} (v_{ij} - v_j^*)^2} \qquad i = 1,2,3,\dots,m$$

$$s_{i-} = \sqrt{\sum_{j=1}^{n} (v_{ij} - v_j^-)^2} \qquad i = 1,2,3,\dots,m$$

Sixth stage - then close relative Ai we calculate the ideal solution.

$$C_{i*} = \frac{S_{i-}}{S_{i*} + S_{i-}} \qquad 0 < C_{i*} < 1$$

After the above steps, according to the descending order ci, we attempted to rank the companies, So that companies with a performance rating of 51 to 100, and the company has a poor performance rating of 1 to 50, respectively. Finally, to illustrate the difference in the mean change in the stock price of the Mann-Whitney test was

Table 7. Summary of results for subhypotheses 1-2

Pit=á• +â• RANKit + Age + Size + åit

Variable	Variable coefficients	T-statistics	Significance level	Results
C	1/761	300/909	0/000	Significant
RANK	-0/002	-57/768	0/000	Significant
Age	-0/075	-79/930	0/000	Significant
Size	-0/007	-54/687	0/000	Significant

Coefficient of determination:0/576 — 1/702: Watson- Dorbin statistic
The adjusted coefficient of determination: 0/575 — 0/000: LymrF test
F-statistic:6786 — Significance level of F statistics: 0/000
Hausman test:0/191

Table 8. Summary statistics for subhypotheses 2-2

Pit=á• +â• RANKit + Age + Size+ åit

Variable	Variable coefficients	T-statistics	Significance level	Results
C	-0/161	-58/026	0/000	Significant
RANK	-0/006	-448/277	0/000	Significant
Age	0/138	153/235	0/000	
Size	0/036	245/741	0/005	

Coefficient of determination:0/957 — 1/604: Watson- Dorbin statistic
The adjusted coefficient of determination: 0/957 — 0/000: LymrF test
F-statistic:111475 — Significance level of F statistics: 0/000
Hausman test:0/163

used. H• : $\mu_1 = \mu$, and $H_1 : \mu_1$ "" μ, in this test

μ_1 : Mean changes in common stock prices of companies with a low level of financial performance.

μ_2 : Mean changes in common stock prices of companies with a high level of financial performance.

	P
Mann-Whitney U	40173.000
Wilcoxon W	85323.000
Z	-2.274
Asymp. Sig. (2-tailed)	.023

According to the results of the Mann-Whitney test, such as 274/2 =Z 0/05 is not equal to Z 0/05=-1/645 the null hypothesis is rejected, so the 95 percent confidence level, there is significant difference between means.

The second main hypothesis

"There is significant relation between the level of financial performance and changes in stock prices." To test this hypothesis, a rating of 1 to 100, based on the quality indicators of performance evaluation, the companies were allocated, and then tested using a regression model.

As Table 6 shows, the probability of F statistics obtained Lymr 0/000, which shows the proper arrangement, the panel method. The Hausman test probability value obtained is 0.000, which indicates that the model for panel data with fixed effects are estimated. Coefficients and t-statistics were obtained for Financial Performance Rating (RANK) 0/002 and 3/613 respectively. These values indicate that there is a significant positive relationship between Financial Performance Rating and changes in the price of ordinary shares in 99% level. Coefficients and t-statistics were obtained for Company lifetime Control variables 1/116 and 5/424 respectively. These values indicate that there is a significant positive relationship between Company lifetime Variable and changes in the price of ordinary shares in 99% level. Coefficients and t-statistics were obtained for Company size Control variables 0/039 and 3/126 respectively. These values indicate that there is a significant positive relationship between Company size Variable and changes in the price of ordinary shares in 99% level. F-statistic model is equal to5/ 651, and with respect to the probability of F statistics is less than 0/01, the model has been estimated at 99% confirmed. Coefficient of determination obtained indicate that changes in the price of ordinary shares by rating 53/7of evaluation indicators of financial performance are described. Watson Dorben statistic is 1/939, Due to the permissible scope of the absence of serial correlation, the second main hypothesis is confirmed.

Sub-hypothesis 1.2

"Companies rank better financial performance are Small changes in the price of ordinary shares." The high rank test (51-100) so that the performance evaluation index was calculated using TOPSIS method, Regression models were the independent parameters, so as to effect the proper functioning of the fluctuation of the quality of the common stock price.

As Table 7 shows, the probability of F statistics obtained Lymr 0/000, which shows the proper arrangement, the panel method. The Hausman test probability value obtained is greater than 0.050, which indicates that the model for panel data with random effects are estimated. Coefficients and t-statistics were obtained for Financial Performance Rating (RANK) -0/002 and -57/768 respectively. These values indicate that there is a significant negative relationship between High-ranking financial performance and changes in the price of ordinary shares in 99% level. The rank financial performance is better, changes in the price of the common shares is lower. And stability in the prices of common stocks with good financial performance emerges.Coefficients and t-statistics were obtained for age and size are -0/075, -0/017 and -79/930, -54/687. This indicates that, between age and size of the company and changes in the price of ordinary shares at a 99% confidence level and there is a significant negative correlation. F-statistic model is equal to 6786, and with respect to the probability of F statistics is less than 0/001, the model has been estimated at 99% confirmed. Coefficient of determination obtained indicate that changes in the price of ordinary shares by rating 57/6of evaluation indicators of financial performance are described. Watson Dorben statistic is 1/702, Due to the permissible scope of the absence of serial correlation, the sub-hypotheses 1-2 is confirmed.

Sub test hypotheses 2.2

"rated companies with weaker financial performance will be many changes in the price of the common stock." The low- rank test (1-50) so that the company's financial performance evaluation indexes were calculated using TOPSIS method, the regression model was the independent parameters, So as to effect the quality of the fluctuation of the price of ordinary shares used to assess the financial performance inappropriate.

As Table 8 shows, the probability of F statistics obtained Lymr 0/000, which shows the proper arrangement, the panel method. The Hausman test probability value obtained is greater than 0.050, which indicates that the model for panel data with random effects are estimated. Coefficients and t-statistics were obtained for Financial Performance Rating (RANK) -0/006 and -488/277 respectively. These values indicate that there is a significant negative relationship between low-ranking financial performance and changes in the price of ordinary shares in 99% level. In other words, the ranking is weaker financial performance, changes in prices of ordinary shares higher. And volatility in the price of common stock with poor financial performance emerges. Coefficients and t-statistics were obtained for age and size are 0/138, 0/036 and 153/325, 242/741. This indicates that, between age and size of the company and changes in the price of ordinary shares at a 99% confidence level and there is a significant positive correlation. F-statistic model is equal to 111475, and with respect to the probability of F statistics is less than 0/001, the model has been estimated at 99% confirmed. The results show that the coefficient of determination, 95/7of the price of the common stock of the financial performance ratings explained, the Watson – Dorben statistic is 1/604, because of the scope of unauthorized absence of serial correlation. It also confirmed sub-hypotheses 2-2.

CONCLUSION

In the present study, the relationship between measures of financial performance evaluation and ranking criteria were used to assess the company's common stock price changes. . To do this, data on 100 participants gathered during the period 2007- 2012and the hypotheses were tested using multiple regression analysis. Sales and net income is good, to show the most comprehensive figures of the power produced by a company, and financial performance. Because so four financial ratios (the ratio of profit to sales ratio of operating profit to sales, return on assets Return on equity) Which is an important indicator to assess the financial performance of the company, Selected and tested the results of this test showed that Net profit to sales ratio, return on assets and return on equity are important factors to changes in stock prices. Other than that were studied, and performance evaluation are considerable importance, they are Inventory turnover ratio and the asset turnover ratio. Accordingly, , we test this ratio with the common stock price change, the result showed that, Activity ratios are substantially influence the fluctuation of the price of ordinary shares. Other than the change in the stock price were analyzed, current ratio, quick ratio and cash flow are compared.

This is a test of the common stock price changes on these results, we argue that, Quick ratios had no effect on the changes in prices of ordinary shares.And the debt ratio (debt-to- asset ratio of long-term debt to equity) reached the conclusion that Leverage effect on normal stock price changes, as well as long-term debt to equity has a significant effect on the changes in prices of ordinary shares. The second shows the results of hypothesis testing. There is a significant correlation between financial performance and changes in prices of ordinary shares. The results show that the high grades 1-2 Sub financial performance and stock price changes are normal and there is a significant negative correlation. In other words, companies that have good financial performance of good stability in the common stock price changes. 2-2 shows the results of testing subsidiary, the low level of financial performance and changes in prices of ordinary shares and there is a significant negative relationship. In other words, companies that have bad financial performance of sustainability are poor and the common stock price changes.

Recommendations arising from the study

Given these findings, it seems that the role of performance evaluation indicators(Ratio of net income to sales, return on assets, return on equity, asset turnover ratio, inventory turnover

ratio, current ratio, the ratio of cash flow, debt ratio, the ratio of long-term debt to equity) In the identification of common stock price and its changes are appropriate. Therefore, we recommend investors to buy the shares at the time to pay attention to these factors, In addition, investors should pay particular attention to the quality of corporate financial performance, because the results show that the improved financial performance, the stock price stability is normal.

Suggestions for future research

1) To evaluate the relationship between financial performance company and changes in prices of ordinary shares in the new company in Tehran Stock Exchange**.**
2) Examine the relationship of financial ratios to changes in the price of the common stock of companies.
3) Defining the desired levels of low and stable management structure due to changes in the price of the common stock.

REFERENCES

1. Azar, Adel, Mansore, Momene, Statistics and Its Application in Management, Volume II, Tenth Edition, Tehran, publisher side 2002.
2. M. Abzry. S. Samadi. Izadi M. Nasir, M. Dehghanpour. Performance evaluation of basic metals companies in Tehran Stock Exchange using the EVA model and a comparison with the accounting standards. *Financial Research,* 2009; **10**(26): 3-20.
3. Akbari Fazlullah, analysis of financial statements, the audit Press, Publication No. 129, October 2000.
4. Anvari Rostami A., M. Khtnlv, evaluate and compare the ranking of the top companies on the Tehran Stock Exchange Indices profitability ratios, studies, *accounting and auditing;* 2007; **34**: 25-43.
5. Amyraslany pro, free markets and economic role in the regulated markets audit, management audit standard setting organizations, Publication, 2006; **159**.
6. Ansari and Abdul Mohsen Karimi, review of financial measures to assess the performance of management in creating value for shareholders by focusing on economic criteria, accountant, 2009; **200**: pp. 11-3.
7. Parsayyan Ali, Financial Management Asia, Tehran, cashmere, 2004.
8. Raymond P. Neveu, translated by Ali Jhankhany and Ali Parsayyan, financial management, Jld First, publisher, 2001.
9. Rajabi, Ruhollah and Azizu'llah Genji, "Relationship between Corporate Governance and Financial Performance," Journal of Financial Accounting Summer, 2011 Second year, second issue, 2011; pp. 34-23.
10. M. Chakib knowledge, Fazli "ranking cement companies in Tehran Stock Exchange for a combined approach using AHP-TOPSIS" *landscape management;* 2010: **32**: 109-129.
11. Shah Mahmoud Rezaei, check under the influence of inflation on financial ratios adjusted in accordance with the decisions of the users of financial information, MS Thesis, Tehran University, 2003.
12. Hashemi, Syed Abbas and Behzadfar F. "Evaluation of the relationship between the information content of accruals and financial ratios of the company's stock price listed in Tehran Stock Exchange," Journal of Financial Accounting third year, the first issue, Serial (7), spring 2012, pp. 76-55.
13. Mordege,Qshmy, Reza. Examine the relationship between stock prices and financial ratios of companies listed in Tehran Stock Exchange, Arshdhsabdary Thesis, University of Shiraz 2003.
14. Namazi, M. and Kerman, E. "Tasyrsakhtar ownership on firm performance bonds listed in Tehran Stock Exchange," Journal of Accounting and Auditing Review, 2009; **5335**: pp. 83-100.
15. Yahyazagefar Mahmoud Shams Shahabuddin, Larim Sydjfr "economic value added and profitability ratios related to the market value of listed companies in Tehran Stock Exchange." *Evaluation of accounting and auditing,* 2011; **17**(59), 113-128.
16. . Chan, K., Chan, L. K. C., Jegadeesh, N and Lakonishok, J., "Earningsquality and stock returns", working paperDepartment of Finance, College ofCommerce and Business AdministrationUniversity of Illinois, Urbana-Champaign,IL; 2001.
17. Dimitropoulos, P. and D. Asteriou, "The Value Relevance of Financial 2009.
18. Statements and Their Impact on StockPrices, Evidence from Greece", anagerial
19. *Auditing Journal,* **24**(3): pp. 248-265.
20. .Vanasco, R. R., "Fraud auditing", *Managerial Auditing Journal*, 1998; **13**(1): pp. 4-71.
21. Spathis, Ch., Doumpos M. andZopounidis, C. 2002, "Detecting Falsified
22. Financial Statements: a comparative studyusing multicriteria analysis and multivariatestatistical techniques",.*The European Accounting Review,* **11**(3): pp.509-535

23. Francis, J., LaFond, R., Olsson, P. andSchipper, K. "The market pricing ofaccruals quality", *Journal of Accountingand Economics,* 2005; **39**: pp. 295-327.
24. Jones, J., "Earnings managementduring import relief Investigations", *Journal of Accounting Research,* 1991; **29**: pp. 193-228.
25. Spathis, Ch., Doumpos M. andZopounidis, C. (2002), "Detecting Falsified
26. Financial Statements: a comparative studyusing multicriteria analysis and multivariatestatistical techniques",.*The EuropeanAccounting Review,* **11**(3): pp.509-535.
27. Subramanyam, K.R., "The pricingof discretionary accruals", *Journal of Accounting and Economics,* 1996; **22**: pp.249-81
28. Lawrence D. Brown Marcus L. Caylor. Corporate Governance and Firm Operating Performance. Georgia State University, 2006
29. Li & Yue & Zhao. Ownership, Institutions, and Capital Structure:Evidence from China 2009.
30. Naser ,Mohamed & Mazhar, Ayesha. Determinants of CapitalStructure Decisions Case of Pakistani Government Owned and Private Firms, 2007.
31. Andersen,T.J., Risk Management, Capital Structure And Preformance Golbal Business & Economics Anthology, 2005.