The Relationship of Stock Return with Earnings and Cash Flows before and after Financial Statement Restatements by the Companies Listed on the Tehran Stock Exchange

Hamid Reza Nazemi[*]**, Mohammad Reza Abdoli**
Department of Accounting, Shahrood Branch, Islamic Azad University, Shahrood, Iran
*E-mail: Acc.Nazemihamidreza90@ymail.com

Abstract
In this research we study the relationship of stock return with earnings and operating cash flows before and after restatement of financial statements. For this purpose, the stock return index is used as dependent variable and earnings and operating cash flows as independent variables. The data used in this research has been collected from the financial statements of one hundred and twenty two companies listed on the Tehran Stock Exchange during 2008-2012. The results show that earnings and operating cash flows (before restatement of financial statements) are directly related to dependent variable although they become negatively related with stock return after financial statement restatements. The difference becomes more evident as regards earnings. We observe that before restatement, the investors use higher earnings index as a basis for decision making but we see a reduction in the explanatory power of this information after restatement.
Keywords: Financial Statement Restatements, Earnings, Cash Flows

Introduction
According to the established accounting principles, the financial statements of previous years are restated for two causes: change in the accounting practices and correction of accounting errors. Financial statement restatements contain new information for the market(Accounting Standards). In most of the instances, the adjustments of prior years indicate material or underlying distortion of financial statements of prior year(s) in addition to change in procedure. For the sake of observing accounting standards, the affected correction is not included in the profit and loss account of the period because of its importance. This means that the users of financial statements take inappropriate decisions based on the erroneous information of nonsystematic and confusing origins. Actually the restated financial statements provide expressive and apparent information on the fact that the financial statements of prior periods are not reliable and that they are of low quality. Following the restatements, therefore, the investors' expectations from the future cash flows and their expected return rate will change(Xia,2006).

In this research we review the influence of earnings and operating cash flows on the companies' stock return rate before and after financial statement restatements.

Background
In a research on devising the pattern of effective factors in financial statement restatements, Nikbakht and Rafiei (2012) showed that profitability, financial leverage, management term of office, change in management, and change in auditor and the size of auditing firm are effective in financial statement restatements .

Dastgir and SharifiMobarakeh(2011) reviewed a research conducted on the relationship between cash flows and stock return. The findings show lack of a significant relationship between operating cash flows and stock return in the first hypothesis. The second hypothesis proved a significant relationship between free cash flows and stock return. Based on the third hypothesis they

came to the conclusion that the information content of free cash flows explains stock return more than operating cash flows .

HierSchleiferet. al (2009) reviewed the relationship of discretionary accruals and cash flows with stock return. According to their findings, there is a high positive relationship between the amount of discretionary accruals and stock return. There is also a negative relationship between the amount of cash flows and stock return .

Michael Etrejet. al (2010)reviewed the comparison of sound and non-corrupt financial statements with fraudulent financial statements. They found that those companies restating without any frauds provided their balance sheet in a smaller volume than the companies which restated the financial statements with error and corruption .

Wilson (2008) studied the trend of reduction in the post-restatement earnings information content. The findings indicate that the relative earnings have lower information content after restatement. Also the results show that the companies which change their auditor and member of the board of directors immediately after restatement sustain a smaller decrease in the information content .

Maio (2012)studied the long-term relationship of stock return, earnings, and dividend. This research deals with the indirect relationship of the earnings from market return and profit growth through limited relationship with the present value. The results show that growth profit can be predicted according to return. In other words profit growth cannot be predicted based on the change in return

Research Hypotheses

The main objective of this research is to study the relationship of stock return with earnings and cash flows before and after restatements. To achieve this objective, four hypotheses were developed as follows:

Hypothesis 1: There is a significant relationship between return and earnings before financial statement restatements.

Hypothesis 2: There is a significant relationship between return and earnings after financial statement restatements.

Hypothesis 3: There is a significant relationship between return and cash flows before financial statement restatements.

Hypothesis 4: There is a significant relationship between return and cash flows after financial statement restatements.

Research Method

This research is an applied study as concerns research by purpose classification and is a descriptive and correlation study as concerns research by method classification. The research mainly aims at determining if there is any relationship among the tested variables and the extent and type of such relationship based on ex-post facto approach (based on previous information).

The statistical population consists of the companies listed on the Tehran Stock Exchange during 2008-2012, which were selected through elimination systematic sampling.

Research variables
Independent Variables

The profit of each share (ESP): This is gained by dividing the post-tax profit by the total number of shares.

Operating cash flows: Net profit plus tangible and intangible fixed assets depreciation

Dependent Variable

Return: Return means the total benefits accrued to a share within a year (Esmaeili2006;Mollahoseini and Ghorbannezhad2008).

Research Models

Ret= a+b1EPS+ε   (1)

Ret=a+b1CFPS+ε   (2)

In the above model:

ESP : is the profit of each share

CFPS : is the operating cash flow of each share

ε : is the percent of error

Data Analysis and Research Results

Table1 :Model Summary and Regression Statistics Index

Model	Determination coefficient	Correlation coefficient	F- Statistics	Significance level	Durbin-Watson
1	0.061	.246[a]	6.765	.011[a]	1.911
2	.010	.100[a]	1.061	.305[a]	1.988
3	.071	.266[a]	8.279	.005[a]	1.960
4	.003	.058[a]	.359	.551[a]	1.948

Table 2: Coefficient Index

Model	Variable	Coefficient B	Coefficient β	Statistics t	Significance level
1	Earnings before restatements	.000	.246	2.601	.011
2	Earnings after restatements	0.00005	.100	1.030	.305
3	Cash flows before restatements	91.012	.266	2.877	.005
4	Cash flows after restatements	-.002	-.058	-.599	.551

The First Hypothesis: The significance level of the regression coefficient of earnings before the financial statement restatements (0.000)is smaller than 5% (sig=0.011) and is hence significant. The results of the standardized coefficients of earnings before restatement (0.246) show that it has a positive and significant influence on the companies' return. On the basis of the table of coefficients, the regression model coefficient can be set as follows:

Return=Y̆= 0.007+0.000 (earnigns before financial statement restatements)

The Second Hypothesis: The F-statistics is not significant in error level 5% (sig=0.305). Hence the linearity theory of the research hypothesis regression model is not confirmed. Review of the table of regression coefficients of the research variables shows that the significance level of the regression coefficient of earnings (0.00005) is larger than 5% (sig=0.305) and is not significant. Therefore H_0hypothesis is confirmed and H_1 hypothesis is rejected.

The Third Hypothesis: The significance level of F-statistics is less than 5% and significant (sig=0.005). Hence the linearity theory of the research hypothesis regression model is confirmed.

The table of regression coefficients shows that cash flows regression coefficients are significant in error level 5% (sig=0.005) before financial statement restatements (91/012). Therefore H_0hypothesis is rejected and H_1 hypothesis is confirmed.

$$\text{Return} = \hat{y} = 0.022 + 91.012(\text{Cash flows before restatements})$$

The Fourth Hypothesis: The significance level of F- statistics is larger than 5% (sig=0.551) and not significant. Therefore the linearity theory of the research hypothesis regression model is rejected. The regression coefficients indicate that the significance level of cash flows regression coefficient is larger than 5% (sig=0.551) and not significant after financial statement restatements (-0.002). Therefore H_0hypothesis is confirmed and H_1 hypothesis is rejected.

The Analysis of the Hypotheses

The first hypothesis shows that there is a direct and significant relationship between earnings and return before financial statement restatements. Investors and decision makers consider the pre-restatement earnings as a basis for investment which has a high explanatory power. The results of this hypothesis are consistent with the results obtained by Ahmadi and Aghalatifi in (2008). In the second hypothesis it was found that the post-restatement earnings have no significant influence on the companies return. That is to say the users and investors do not take the earnings as an index for investment after financial statement restatements. They believe that this index has a low explanatory power as it is measured based on the accruals and is under the influence of the measures and decisions taken by the company management. The results of this research are consistent with the results obtained by Wilson in (2008). The third hypothesis proves that cash flows before financial statement restatements provide the users with additional information. This result is contradictory to the results obtained by HierSchleiferet. al (2009) and Dastgir&SharifiMobarakeh (2011). The fourth hypothesis shows that the cash flows after financial statement restatements have no significant influence on the companies' return. That means with increase in the cash flows after financial statement restatements, the companies' return will decrease. It is therefore concluded that this relationship is reverse.

References

Abdoli, MR, Nazemi, HR (2013). Effect of Corporate Governance and Auditing Quality on Annual Adjustment of Financial Statements. Journal of Social Issues & Humanities, 1(**7**)

Bukit, R, Iskandar, T (2009). Surplus Free Cash Flow, Earnings Management and Audit Committee.Journal of Economics and Management, 3(1), 204-223.

Dastgir, M, Sharifi Mobarakeh, R (2011).The Relationship between Cash Flows and Stock Return, Hesabras Journal, Issue Number 52.

Esmaeili, SH (2006), the Relationship between Earnings Quality and Stock Return, M.Sc. Thesis, AllamehTabatabaei University.

Hirshleifer, D, Kewei, H and Siew Hong, T (2009).Accruals, Cash Flows, and Aggregate Stock Returns". Journal of Financial Economics, 91(3), 389-406.

Maio, P(2012). The long-run relation between returns, earnings, and dividends. Electronic copy available at: http://ssrn.com/abstract=2170079

Mashayekhi, B,Fadayinejad, ME and Kalateh Rahmani, R (2010). Capital Expenditure, Discretionary Accruals, and Stock Return.Journal of Financial Accounting Research, 2(1).

Michael, E , scholz, S and smith, k(2010). How Do Restatements Begin? Evidence of Earnings Management Preceding Restated Financial Reports, Journal of Business Finance & Accounting.

Molahosseini, A,Ghorbannejad, K (2007). A Review of the Relationship between Free Float and Stock Return Rate of the Companies Listed on Tehran Stock Exchange, Accounting and Auditing Reviews, 15(51).

Nikbakht, MR, Rafiei, A (2012). Devising the Pattern of Effective Factors in Restatement of Financial Statements.Accounting Knowledge.

Technical Committee of Auditing Organization, Principles and Rules of Accounting and Auditing (2007).The Accounting Standards, Auditing Organization, Issue Number 160.

Wilson, WM (2008). An Empirical Analysis of the Decline in the Information Content of Earnings Following Restatements. The Accounting Review, 83(2).

Xia, W (2006). Accounting Restatements: A Comparison between China and USA. Journal of Modern Accounting and Auditing, 2(10).