University College of Takestan

Available online at **http://UCTjournals.com**

UCT Journal of Management and Accounting Studies

UCT . J.Educa.Manag .Account. Stud., (UJMAS)

Volume 3,Issue3

152-158 (2015)

ISSN 2382-9748

Effect of over time on Unusual fluctuations on stock returns of companies listed in Tehran Stock Exchange

Maryam Ziaei[1&2], Forough Heirani[3*] and Akram Taftiyan[4]

1department of Accounting, Yazd science and research branch, Islamic Azad university, Yazd, Iran.

2department of Accounting , Yazd branch, Islamic Azad university, Yazd, Iran.

3department of Accounting, Yazd branch, Islamic Azad university, Yazd, Iran.

**(corresponding author)*

4department of Accounting, Yazd branch, Islamic Azad university, Yazd, Iran.

ABSTRACT

Finance reporting with quality and clear finance statement could eventuate to important economic results such as reduction in vibrancy of anomaly stock output. In other words, how much the finance statement of companies, specially reported profit by firms, be more quality; based on efficient market theory, it is expected this information peers in stock price, so price of stock will have less vibrancy. In this research is evaluated about impact of finance reporting quality and time passage on output of anomaly stock in accepted companies in Tehran Stock Exchange for five years period (between 2009 to 2013). In this study are used from two models of Decho & Dicho and Francis for measurement the finance reporting quality and time passage. Also in this research linear regression is used for data analysis. This study is application type and also in terms of inference is description-analytical (apriority) and in terms of research plan is scientific. Variables of time (T); variable of book value to market value (BM) with significant level of less than 0.05 have significant impact on relative variable. Variables of yearly stock output (RET) with significant level of more than 0.05 have no significant impact on relative variable, so these variables have no significant impact on anomaly vibrancy of stock output.

Original Article:

Received 29 Aug. 2015
Accepted 24 Sep. 2015
Published 15 Oct. 2015

Keywords:
variable of book value, yearly stock output ,time passage, anomaly vibrancy of stock output

INTRODUCTION

Explanation of this relation is that the accounting is pensionable commitment of future cash flows and sensible devotion of past cash flows, so with estimation of faults that has useful role for investors in a unsymmetrical environment are in a relation (Dicho and Dechif, 2010).

High vibrancy of accruals could be demonstrator of high level of applies reviews of management and high level of time lapsing between profit and real cash flows; that could leaded to more estimation faults. Swing ability of stock output, is one of the controversial finance topics that is lionized by researchers of capital market in newfound markets in recent years. Reason of this tendency come back to relation between price swing ability and stock output of companies and also impact of it to finance performance of firms and also whole economic. In other side, the benefit of study about swing ability of stock output from investors is that they consider the swing ability of stock output as a risk criterion and also policy men of capital market can use from this criterion as a tool for measuring amount of vulnerability in stock market. In most of researches, anomaly output of stock is defined based on difference between predicted output and real output of stock. Anomaly output vibrancy has priority to some cases like portfolio diversification, active management portfolio and relation between risk and reward; also examination of impact factors on it could be important.

According to the mentioned subjects and investigation about this study; it is specified that have been done no research to examine the relation between finance reporting quality and vibrancy of stock anomaly output inside the country. So this research is done to answer to this question that, finance reporting quality has impact on vibrancy of stock anomaly output in accepted companies in Tehran stock exchange?

Background of the research

Khaleghi et al. (2010) in a research have investigated about the impact of representation of finance statement on relation between output and profit of each share and also output and operational cash flow of each share. So for this purpose finance statement of 219 accepted companies in Tehran stock exchange that these firms represented theirs finance statement between years of 2005 to 2009, with other related information are examined. Obtained results showed that the correlation between output and profit of each share after representing the finance statement is reduced toward before of it, so there is no significant relation between output and operational cash flows.

AlaviTabari et al. (2010) in a research have investigated about impact of accruals quality and stability of benefit to cost of regular stock invests. For examination the relation between invest cost of regular share and independent variables, is used from multi-variables regression analysis with cumulative data. Results of the research are illative the impact of qualitative features of benefit to invest cost of regular share. With controlling variables of company size and ratio of book value to market value, the results of the research prove existence the reverse relation between benefit qualitative features including accruals quality and benefit stability with invest cost of regular share.

Dicho and Ras (2005) with comparing method of stabilizing benefit based on balance sheet approach and profit and loss statement approach have showed that benefit stability is impressed the amount and accruals sign. Verdi (2006) in examination the finance reporting quality and efficiency of quality concluded that there is a negative relation between finance reporting high quality and more-investment and less-investment. Plus that he showed that relation between finance reporting quality and less-investment in companies with limits in supplying finance and also relation between reporting quality and more-investment in companies with cash are stronger. He proved that the relation between finance reporting quality and investment efficiency for companies with weakness information are stronger.

Verdi et al. (2008) have concluded that quality of reporting in companies which are in commercial field that tendentious to more-investment have negative relation with investing and also less-investment have positive relation with investing. In other word high reporting quality are prevented from more-investment (less-investment).

Vilson (2008) has tested about reduction in profit information after representing. The results show that the profit after representing has less information content. For companies that because of fault revising presented again and companies that experienced large reduction in share price in represented time, reduction in profit information content is more significant. Also the results showed firms that immediately after representing attempted to changing auditor and changing board of directors, have less reduction in information content.

Routensin (2008) has examined about changing in corporate governance after representing. Results showed that if representing be caused of reduction in reported profits then it will be indicative weak performance of company and probability of corporate changing will occurred.

Nabar et al. (2009) in their research have concluded that in represented companies, before representing finance statements the probability of existence of board of directors and auditors committee with lower dependent are more than companies of control group. So firms that represented finance statements of previous periods have weakness strategic pillar in compare of other companies in statistical society.

Hypotheses of the research

In this research is attempted to examination the impact of finance reporting quality and time lapsing on anomaly vibrancy of Stock returns in accepted companies in Tehran stock exchange. So hypotheses of the research are presented as following:

First main hypothesis: time lapsing has impact on anomaly vibrancy of Stock returns.

Statistical society and sample of research

The statistical society of this research is total of accepted corporations in Tehran stock exchange. Because the reason of accepting firms and their existence in stock exchange, is related to presentation and access ability of them by public that are used in studies of firms' performance, so the easiest and surest information source about companies is stock exchange. So between the accepted companies in Tehran stock exchange, 77 firms are determined by using systematic sampling with considering following criteria:

- For increasing the comparing ability, the end of finance year is considered 29^{th} Esfand.
- Background of them membership in stock exchange back to year of 2009 (according to the time domain of research).
- Between years of 2009 to 2013 have been active in stock exchange.
- Between years of 2009 to 2013 their activities or finance year have not been changed.
- All needed information in research be available.

Research methodology

For gathering data are used from following methods:

Librarian studies: for gathering information in theoretical field and literature review are used from librarian sources, articles, books and word wide web. Finance data are extracted from audited finance statement in site of 'management of research, development and Islamic studies in stock exchange' and also software of TadbirPardaz and RahAvard Novin and books in library of Tehran stock exchange. The collected data are analyzed by Excel software and SPSS.

Data analysis method

Analysis of obtained data in this research is included 2 sections as following:

A. description statistic: for description the obtained data, are used from plentitude table, cylinder and pie charts. Also for better description of data are used from central and dispersion indexes.

B. Illative statistic: in this research are used from multi-variables regression for calculation the coefficients and testing the hypotheses. This type of regression was used in before researches for examination the relation between independent and dependent variables. Plus that is used from correlation matrix to analysis data.

Statistic analysis

Obtained results, central and dispersion indexes

In this section, used summary signs in research's variables and central and dispersion indexes of variables are shown.

Table 1. Central and dispersion indexes of research's variables

RET	VAR	PPE	TCA	BM	LEV	
1/01E+08	922361/3	5/785612	1576915	-41300/7	0/081724	average
17/89329	31999	0/394708	395142	7118	0/038579	middle
1/37E+10	38225450	641/961	45606720	8313668	1/239771	most
0/004343	-1E+07	-1272/92	38772	-4/3E+07	0	less
8/87E+08	3803273	70/20541	4118251	1793096	0/132459	Standard deviation
12/03242	5/559547	-7/87082	6/120488	-21/4792	4/161936	skewness
160/0331	43/33665	195/7471	51/63657	514/037	26/41535	tension
6/20E+10	5/67E+08	3558/152	9/70E+08	-2/5E+07	50/26029	summation

Above table shows the central and dispersion indexes of research's variables including average, variance, standard deviation, summation of data, most and less data. Virtual variables of the research that are between 0 and 1are not reported in this table and only finance variables with real quantities are reported. Average of each variable and so what variable has the most and the less average are obvious in above table. Also because of different measure of research's variables, comparing between central indexes is not possible. So suffice to only situation report of description statistic and comparing between indexes is not presented.

Chart's of total situation of indexes

Following charts are showing the changing procedure in variables of the research. Number of observations for each variable is 385 and shows the 77 corporations in years between 2009 to 2013.

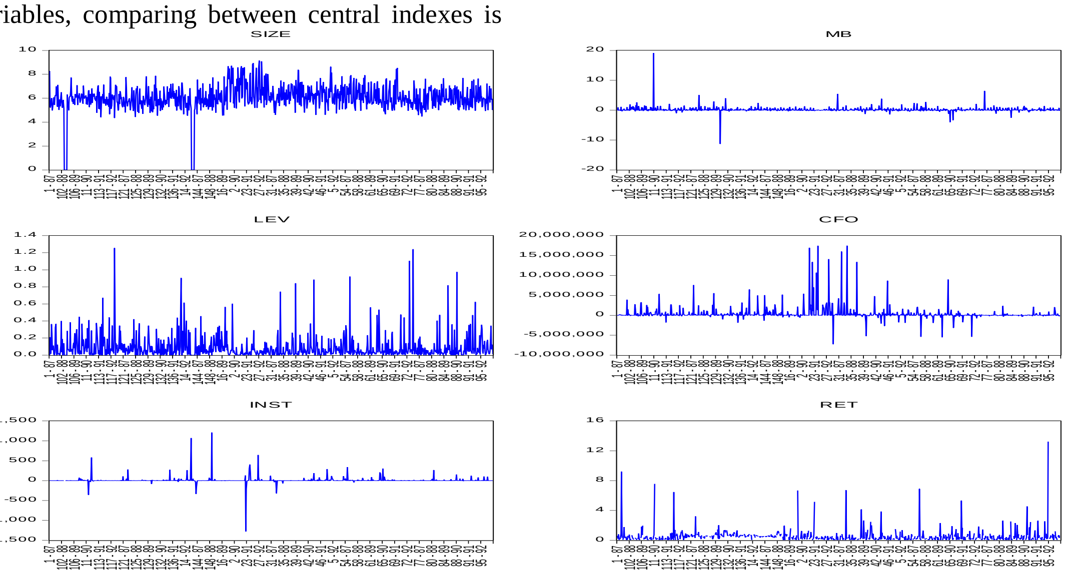

Chart 1. Changing procedure in variables of the research.

Above charts show vibrancy and changing of important variables of the research. Variables like operational cash flow, assets summation, finance leverage, yearly Stock returns and etc. are shown as charts. As it is shown, dispersion of data distribution in variable of corporation size and finance leverage is more than other variables. The other variables have relative distribution.

Inferential statistics

After extracting descriptive results of independent, dependent and control variables and be familiar with latent information in this variables, in inferential statistic section is attempted to evaluate the relation between independent and dependent variables with testing hypotheses of the research (significance testing for variables) and if there is an acceptable linear relation then will present a regression model.

Fitness of regression model for extracting finance reporting quality based on accruals

Table 2. results of estimation of model with synthetic model (panel data), dependent variable: total accruals

Results of model	Significance level of test	T-test	Coefficient of variables		variables
	0.000	-85.1838	-58613.1	BL	C
It is effective	0.000	6.04235	4.023465	Difference between total revenue and changing of accounting receivable	(ΔREV-ΔAR)
It is effective	0.0207	-2.3238	-38.698	Gross value of fixed assets	PPE
It is effective	0.0270	2.2186	6.71566	Output of assests	ROA
	0.0026	-3.0289	-0/07337	AUTO REGRESSIVE	(AR (1
Faults in model are not correlated			2.24	Durbin-Watson statistic	
35 percent of changing of total accruals are significant by dependent variables			0.35	Coefficient of determination model	
2.2616				F-test	
Being linear is proved			0.000	Significance level of model	

Results of model estimation with panel data regression method (dependent variable: total accruals) show that coefficient of model determination is equal with 0.35. Meaning that 35 percent of changing in total accruals of dependent variables are explained by significant variables in model. So disturbing element, that shows finance reporting quality, explain 65 percent of changing in accruals. Also Durbin-Watson statistic index is equal with 2.27 and because this amount is in interval between 1.5 and 2.5 so we could conclude that faults of model are not correlated. All independent variables in above model are significant and fitness model is appropriate.

Results of fitness of extraction model for finance reporting quality based current accruals

For estimation model at the first, this pattern is estimated with integration of the least square method and then is used from F-limmer. If H_0 hypothesis is rejected the estimated model is panel type and after that again the model will be estimated with random effects and determined with using from Hasman-test. The model must be estimated with fixed effects or estimated with random effects. For estimation model and doing mentioned tests is used from Eviews 7 software.

Table 3. Results of F-limmer test for demonstrating synthetic data against random effect model

Results of test	Significance level	Statistic test	Type of test
Prove of fixed effect model against synthetic data model	0.0000	8.01735	F-limmer test

Table 4. Results of Hasman test for demonstrating fix model against random

Results of test	Significance level	test Statistic	Type of test
Prove of fixed effect model against random effect model	0.0422	11.5179	Hasman-test

According to the results of the no. 5 and 6 tables, research's models for under study companies, based on fixed effect model are estimated and results are presented in table no. 5.

Table 5. results of estimation of model with synthetic model (panel data), dependent variable: total current accruals (TCA)

Results of model	Significance level of test	T-test	Standard deiation	Coefficient of variables		variables
	0.1208	-195/415	8061/63	-15754	BL	C
It is effective	0.000	2.6856	0.0027	0.0018	Operational cash flow	CFO
It is effective	0.03946	2.9337	0.0036	0.0033	Operational cash flow of last period	(CFO -1)
It is effective	0.0417	-2. 2612	-0.0024	-0.0056	Operational cash flow of next period	(CFO T+1)
It is effective	0.0247	-2.6123	2.4936	-1.5346	Changing of total revenues	ΔREV
It is effective	0.0409	10.2573	43.547	446.70	Gross fixed assets	PPE
Faults in model are not correlated				1.72	Watson-Durbin statistic	
75 percent of changing of current operational cash flow				0.97	Coefficient of determination model	

are expressed by independent variables		
103.788		F-test
Being linear is proved	0.000	Significance level of model

Results of model estimation with panel data regression method (dependent variable: current operational cash flow) show that coefficient of model determination is equal with 0.97. Meaning that 97 percent of changing in current operational cash flow are explained by significant variables in model. Also Durbin-Watson statistic index is equal with 1.72 and because this amount is in interval between 1.5 and 2.5 so we could conclude that faults of model are not correlated.

For testing hypotheses of the research is used from regression model as following.

$$VAR= \beta_1 + \beta_2 EQ1_{i,t} + \beta_3 VCFO_{i,t} + \beta_4 BM_{i,t} + \beta INST_{i,t} + \beta_6 RET_{i,t} + \beta_7 CFO_{i,t} + \beta_8 SIZE_{i,t} + \beta_9 LEV_{i,t} + \beta_{10} RET^2 + \beta_{11} T + e_{i,t}$$

Table 6: results of model estimation with synthetic data method (panel data)

Dependent variable: anomaly vibrancy of share market (VAR)				
Significance level	T-test	Standard deviation	Coefficient of variables	variables
0.00	07/693/270	11755/94	-90441/60	C
0.14	-2/332/549	14226/64	-33184/35	VCFO
3.76	0/610943	19991/27	12213/53	BM
3.06	-0/773024	19109/50	-14772/10	RET
4.89	-0/379564	0/003734	-0/001417	CFO
0.09	2.517.367	4.894.535	12321.34	SIZE
2.51	0/914911	32744/48	29958/27	LEV
0.40	-1/910/749	0/177730	-0/339598	RET^2
0.07	1/056334	0/565090	0/565878	T
R^2=0/38 D-W=2/6			F=1/63 PROB-F=0/0022	

Results of model estimation with panel data synthetic regression method (dependent variable: anomaly vibrancy of Stock returns) show that coefficient of model determination is equal with 0.38. Meaning that 38 percent of changing in dependent variable of anomaly vibrancy of Stock returns are explained by significant variables in model. Also Durbin-Watson statistic index is equal with 2.60 and because this amount is in interval between 1.5 and 2.5 so we could conclude that faults of model are not correlated.

Table 7: results of model estimation with synthetic data method (panel data)

dependent variable: anomaly vibrancy of Stock returns (VAR)				
Prob.	t-Statistic	Std. Error	Coefficient	Variable
٠/٠٠٠٠	-4/494/714	30528/16	-137215/4	C
0/015	-2/427/077	37745/30	-91610/73	VCFO
0/0084	-2/651/714	46031/96	-122063/6	BM
0/0721	1/805/159	0/002442	0/004408	CFO
0/0075	2/692/585	11682/08	31455/00	SIZE
0/000	5/077/355	72063.45	365891/8	LEV
0/000	4/18/214	0/089956	0/376126	RET^2
0/003	-2/434466	2/898900	-0/201233	T
R^2=44 D-W=1/70			F=2/97 Prob-F=0/0000	

Results of model estimation with panel data synthetic regression method (dependent variable: anomaly vibrancy of Stock returns) show that coefficient of model determination is equal with 0.44. Meaning that 44 percent of changing in dependent variable of anomaly vibrancy of Stock returns are explained by significant variables in model. Also Durbin-Watson statistic index is equal with 1.70 and because this amount is in interval between 1.5 and 2.5 so we could conclude that faults of model are not correlated.

Interpretation of results

Variable of cash flow vibrancy in company (VCF) with significant level of less than 0.05 has significant impact on dependent variable. In fact, this variable with negative coefficient has reverse impact on finance reporting quality.

Variable of book value to market value (BM) with significant level of less than 0.05 has significant impact on dependent variable. Negative coefficient of this variable shows that increasing in quality of the finance reporting concluded to reduction in the anomaly vibrancy of Stock returns.

Variable of proportion of Shares owned by investors (INST) and yearly Stock returns (RET) with significant level of more than 0.05 have no significant impact on dependent variable. So these variables have no significant impact on anomaly vibrancy of Stock returns.

Variable of operational cash flow with significant level of less than 0.10 and confidence level of 0.90 has significant and positive impact on the variable of anomaly vibrancy of Stock returns.

Variables of corporation size (SIZE), finance leverage (LEV) and square of yearly Stock returns (RET^2) have positive impact on the variable of anomaly vibrancy of Stock returns.

Table 8. total results of the research

Result of hypothesis	results	Variable's name	Summary signs
Proved	With significant level of less than 0.05 has significant impact on dependent variable. In fact, this variable with negative coefficient has reverse impact on anomaly vibrancy of Stock returns.	Vibrancy of cash flow in company	VCF
Proved	With significant level of less than 0.05 has significant impact on dependent variable. In fact, this variable with negative coefficient has reverse impact on anomaly vibrancy of Stock returns.	Vibrancy of cash flow in company	BM
rejected	With significant level of more than 0.05 has no significant impact on dependent variable. So these variables have no significant impact on anomaly vibrancy of Stock returns.	Yearly Stock returns	RET
Proved	With significant level of less than %10 and with confidence level of %90 has positive and significant impact on variable of anomaly vibrancy of Stock returns.	Operational cash flow	CFO
Proved	With significance level of less than 0.05 and positive coefficient in above model was significant and also it has positive and significant coefficient on dependent variable.	Corporation size	SIZE
Proved	With significance level of less than 0.05 and positive coefficient in above model was significant and also it has positive and significant coefficient on dependent variable.	Finance leverage	LEV
Proved	With significance level of less than 0.05 and positive coefficient in above model was significant and also it has positive and significant coefficient on dependent variable.	Square of yearly Stock returns	RET^2

Suggestions about the research

Based on calculated correlated coefficient can concluded that time lapsing has reverse impact on anomaly returns of stocks. In other word, with time lapsing the anomaly returns of stock was reduced while in many countries anomaly returns of stock has ascendant procedure but this variable in Tehran stock exchange has descending procedure. The cause of this matter comes back to the codified rules in Tehran stock exchange. One rule is concern about daily vibrancy limit of stock price in companies proportion to the trade of yesterday that it can not be more than an allowable limit (this allowable limit up to year of 2008 is 3.5 percent and it is %4 for the year of 2010 up to now). Other rule is concern about needful base volume for fixation the ending price of stock in a trade day, which in this day at least the whole stocks of company must be traded till the ending price of stock fixes, otherwise the ending price of stock in a trade day, will be equal with weighted average of prices of trade stock multiply in proportion of number of traded stock to base volume of it.

Finally we could conclude that the organization of Tehran stock exchange in implementation of owned control policies based on reduction of market vibrancy was successful and based on this sentence we could suggest to the experts to persuade these policies.

Suggestions for future works

1. It is suggested evaluate the long-term and short-term effects of finance reporting quality of chosen companies with a dynamic pattern and then extract the long-term and short-term effects of it.

Reference

1- Bushman, R and Smith, A. (2011). Financial accounting information and corporate governance. Journal of Accounting and Economics 31,P:237-333.

2- Dechow, P, Ge, W and Schrand, C. (2009). Understanding earnings quality: A review of the proxies, their determinants and their consequences. Paper presented at the Journal of Accounting and Economics conference.

3- Fink, J, Fink, K, Grullon, G and Weston, J. (2010). What Drove the Increase in Idiosyncratic Volatility during the Internet Boom? Journal of Financial and Quantitative Analysis 45: pp 1253–1278.

4- Fama, E and French, K. (1993). Common risk factors in the returns on stocks and bonds. Journal of Financial Economics 33: pp 3–56.
5- Jafari Samimi, Ahmed, Yahya¬Zadeh Fard, Mahmoud Amin Zadeh, Rahim. (2005). Evaluate the relationship between risk and non-systematic portfolio of equity in Iran, Journal of Economic Research, No. 69, Ss239-260.
6- Khoshtinat, Mohsen. (1998). The effects of financial statements on the judgment of investors in investment decisions, studies accounting and auditing, the sixth year, 24 and 25.
7- Tehrani, Reza and Poorebrahimi, M. (2009). Comparing the performance of different models for the prediction and analysis of the effects of asbestos and volatility Tehran securities exchange volatility behavior. Economic research, Year 13, No. 40, p. 149.
8- Wei, S and Zhang, C. (2006). Why did individual stocks become more volatile? Journal of Business 79: pp 259–292.
9- Zhang, C. (2010). A Re-examination of the Causes of Time-Varying Stock Return Volatilities. Journal of Financial and Quantitative Analysis 45: pp 663–684.