FINANCING ACTIVITIES AND RETURNS OF STOCK VALUE AND GROWTH

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ABSTRACT: *The overall goal of this research is to investigate the financing activities and future value and growth stock returns in the stock market. The sample included 116 companies listed in the stock which their data over 6 years (1386 to 1391) was analyzed statistically as a testing period. According to the results, there is no significant statistically difference between value stock returns and growth stock returns. Also, there is no difference between value stock returns and growth stock returns in companies that are financed out of the company.*
It seems that investors and capital market participants do not pay attention to growth or value of shares on the market and show no reaction to it.
However, according to the findings, measures financed out of the company are different significantly in companies with value stock returns and growth stock returns, and this difference also exists in cases in which financed out of the company. Accordingly, it is probably that suppliers of company's capital (Owners and credit providers) pay attention to value or growth of shares of the company or its symptoms in their own investment decisions. Based on these results, there is an inverse relationship between the book value ratio to stock value of future stock returns. This finding means the high book value of the company compared to their market value causes their reduction of future stock returns.
While, according to the findings, there is a direct relationship between measures financed out of the company with future stock returns. It seems that companies in the sample could use financial resources from outside the firm beneficently, and apply it in order to increase stock efficiency.

Keywords: Stock Returns, Free Cash Flow, Financing, Stock Value, Stock Growth .

INTRODUCTION

Investors invest on the basis of various reasons. Risk and return are two important factors in the investment decision process. Investors in order to invest in risky stock market expect remuneration due to imposed risk on them. Therefore, high-risk stock market should have a higher efficiency; to compensate for the extra risk [1].

One of the most common classifications of the risky stocks is based on growth stocks and value stock. Growth stock is a stock whose value is higher than the market average in comparison to cash flows, profits, dividends and their book value. Growth stock belongs to companies that have not become mature yet and refuse from distributing profits as far as possible. These companies generally have good investment opportunities [2].

Previous empirical evidence indicates that the value (growth) impact on future stock returns potentially. Lakvnyshvk et al (1994) and Laporta (1996) expressed that this phenomenon is caused by investors' errors in predicting the future performance of the company.

These evidences suggest that the value stock will be pricing less than the intrinsic value and the growth stock will be pricing more than the intrinsic value. Because investors evaluate the shares' past poor performance as a basis of pessimistic prediction for future productivity growth prospects and vice versa. In this regard, Ducasse et al (2002) suggested that the value and growth reflect a rationale for accepting higher risk by investors [3].

Some experimental evidence [4,5], showed that activities which cause the company's capital enhancement or reduction, influence on future stock returns and have an inverse relationship with it. This reflects the impact of financial activities on capital market reaction. Laqran and Ritter (1995) consider it as a result of managers' opportunistic incentives. They stated that managers of companies whose shares are valued higher than the intrinsic value (or valued less than

intrinsic value) benefit from incorrect pricing of capital market for the issuance and sale of shares in this market. In this regard, Rungan (1998) showed that the companies plan to enhancement their capital; try to manipulate profit reported through increasing discretionary accruals and thereby provide the expected return on investment [3].

In the present study, these two perspectives, which are about influence of the value factor (growth) and financing activities outside the company, are combined with each other. It seems that external financing decisions disclose managers' confidential information. For example, financing may show low pricing for the value stock or high pricing for the growth stock.

Bali et al (2010) Showed that a value stock companies which are redeem shares, experience higher future value stock. And growth stock companies which are issue shares, experience lower future value stock [6].

Hardlis et al (2012) examined the relationship between the book value ratio to stock value with out of the company' financial measures, and found that there is a close relationship between growth factor (value) with an external financing activities. Consequently, it appears besides that growth factors (value) influence on the company's future stock returns, may also affect the financing procedures.

The important issue in this study is paying attention to the role of growth factors (value) and financing activities outside the company, in forecasting future stock returns of firms. In this regard, different financing schemes in companies with value stock and growth stock has been investigated and capital market reaction to these procedures be reviewed.[7].

LITERATURE REVIEW

Pontiff and Schall (2009) tested the effect of Book value to Market value ratio on the returns. They used the book value ratio to stock value to predict returns, because the book value represents the expected cash flow. The results show that there is a general positive correlation between Book value to Market value ratio and returns. When we consider other variables as independent variables, predictive ability of this ratio to explain the returns is more significant statistically [8]. The Blazenko and Yufen (2010) formed two portfolio of growth and value stock for the years 1976 to 2007 in a study entitled "Value Versus Growth in Dynamic Equity Investing". They offer new measures to assess the expected return by using dynamic evaluation model of equity and named this new measure "constant growth expected return". Their results show that the returns enhancement with increased profitability is more for value stock than growth stock [9].

Papanastasopoulos et al (2013) examined the relationship between abnormalities in growth factors (value) with external financing by taking a developed value index (growth) in their study. The findings show that firms with low free cash flow performance experience lower stock returns and vice versa. But, only when capital decrease (or increase), an investor can buy (or sell) stocks of companies with high free cash flow performance. Regardless of financial method, these results are strong [3].

Tehrani and Khan Ahmadi (2010) performed a study named "Equity investment strategies based on the migration of value- Growth in Tehran Stock Exchange". In this study, it is confirmed that the companies stocks' value-growth migration can be used to improve the portfolio performance. After presenting the investment strategies based on the migration of value- Growth, the relationship between calculated variables on the basis of financial statements and returns of companies which component of investment portfolio was investigated by using factor analysis. Based on factor analysis, result showed that there is a direct relationship between portfolio returns

which based on investment strategy and the rate of returns operating capital ratio to equity [10].

ArabSalehi et al (2012) study the relationship between environment's risk, corporate strategy and capital structure performance in companies listed in the Stock Exchange. The results showed that there is a significant relationship between the environment's risk and free cash flow per share, environment's risk and rates of return on equity, and capital structure and free cash flow per share, too[11].

RESEARCH HYPOTHESES

To achieve the research objectives, hypotheses are defined as follows:

1. Return on equity and return on stock value growth are significantly different.
2. Financing measures out of the company, in companies with value stock, are significantly different from companies with growth stocks.
3. Return on equity is significantly different from return on growth stocks in companies that are financed out of the company.
4. Financing measures out of the company, in companies with value stocks, compared with those with rising stocks, in cases that have had financing out of the company, are significantly different.
5. The ratio of book value to market value relates with future stock returns.
6. Financing measures out of the company relate with future stock returns.
7. Free cash flow performance relates with future stock returns.

THE POPULATION OF THE STUDY

In the present study, to test hypotheses, classified and audited financial data of companies listed in Tehran Stock Exchange has been used. To select the proper sample, systematic sampling (screening) has been used in this study. Table 1 shows the selection and extraction of appropriate research sample according to the sampling methods, considerations, data, and information in the Stock Exchange.

Table 1: Sampling Selection and Extraction

The number of companies that have been present in stock from 2007 to 2012.	310 companies
The number of companies have not been among investment firms and financial intermediation.	218 companies
The number of firms whose financial year end in March.	157 companies
The number of firms that have not changed their financial year during the study period.	151 companies
The number of companies whose trademarks are active and did not stop their trademarks more than 4 months of the year.	116 companies
The number of companies whose data has been collected (final sample).	116 companies

RESEARCH HYPOTHESES AND HOW TO CALCULATE THEM
RETURN ON EQUITY (DEPENDENT VARIABLE)

Return on Equity (RET) of companies, includes value changes, profits, cash and other benefits paid during the year;

these figures are calculated and extracted through applying Rahavard-e-Novin Software. The calculation method is as follows.

$$RET_{i,t} = \frac{(P_{i,t} - P_{i,t-1}) + D_{i,t}}{P_{i,t-1}}$$

In which
RET: Total return of shares during one financial year
P: value of shares in the capital market
D: Distribution of benefits of stock ownership in the financial period including dividends, bonus shares, priority etc.
Also, in the present study, adjusted returns based on size (SRET) is also considered as one of the measures of stock market reactions (RB) calculated from the difference between stock returns and stock market returns.

$SRET_{i,t}=RET_{i,t} - R^B_t$

R^B: annual returns of the stock market whose figures are published periodically by the Stock.

FINANCING MEASURES OUT OF THE COMPANY (INDEPENDENT VARIABLE)

In the present study, external financing indexes of Bradshaw et al (2006) have been used.

$XF_t = \Delta E_t + \Delta D_t$

ΔE: incoming cash flow resulting from the issuance of shares
ΔD: incoming cash flow from facilities
According to Dechow et al (2008), indirect method has been used to estimate financing measures and total accruals.

$\Delta E_t=\Delta(TA_t - TL_t) - NI_t$

TA: total assets of the company
TL: total debt of the company
NI: net profit

$\Delta D_t= \Delta (STD_t + LTD_t)$

STD: Current received facilities
LTD: Long-term received loans
To calculate total accruals (TAC), the following equation is used.

$TAC_t=\Delta (TA_t - C_t) - \Delta (TL_t - STD_t - LTD_t)$

According to previous research, to have the same scale of the variables, external financing indexes and accruals are divided by total assets.
Free cash flow returns (measure of the differentiation of stock to growth and value)
According to [3], free cash flow returns have been used to separate the stock of sample companies to growth stock and value stock. This measure is calculated by the following ratio.

$FCF/MV=\frac{FCF}{MV}$

FCF: Free cash flow is calculated from the difference between net profit and total accruals.
MV: market value is calculated by multiplying the number of shares in the market value per share at four months after the financial year.
According to [3] , after calculating the above criteria, year-company of sample companies is classified based on these criteria. Year-companies of first and second deciles are classified as growth stock, and year-companies of ninth and tenth deciles are grouped as value stock.

HOW TO TESTING FIRST TO FOURTH HYPOTHESES

To test first to fourth hypotheses, paired t-test is used. In this regard, according to the grouping criteria based on free cash flow returns, average returns and financing indexes, growth stock is compared to the value stock. Thus, the general form of statistical hypotheses is as follows.

$H0: \mu_1 - \mu_2 = 0$
$H1: \mu_1 - \mu_2 \neq 0$

$\mu1$: Average return on equity or financing indices of companies with value stock
$\mu2$: Average return on equity or financing indices of companies with growth stock

THE FIFTH HYPOTHESIS TESTING METHOD

$RET_{i,t+1}= \beta_0+ \beta_1 BM_{i,t} + \beta_2 TAC_{i,t} +\beta_3 SG_{i,t}+\varepsilon_{i,t}$

BM: the ratio of book value of equity to capital market value (as independent variables)
TAC: total accruals (as a control variable)
SG: sales growth rate obtained from the sale difference of period t and period t-1(as a control variable).

THE SIXTH HYPOTHESIS TESTING METHOD

$RET_{i,t+1}= \beta_0+ \beta_1 XF_{i,t} +\beta_2\Delta E_{i,t}+ \beta_3\Delta D_{i,t}+\beta_4 TAC_{i,t} +\beta_5 SG_{i,t}+\varepsilon_{i,t}$

The seventh hypothesis testing method

$RET_{i,t+1}= \beta_0+ \beta_1(FCF/MV)_{i,t} + \beta_2 TAC_{i,t} +\beta_3 SG_{i,t}+\varepsilon_{i,t}$

THE RESULTS OF THE FIRST HYPOTHESIS TESTING

The results of the tests are presented in Table 2.

STUDIED VARIABLES: RETURN ON EQUITY

Results presented in Table 1 show that the significance level of t-statistic, for the mean comparison test, is 0.878 and a higher than 0.05. So, there is no convincing evidence to reject the H0 hypothesis and, accordingly, there is no statistically significant difference between the average return on equity shares of sample companies with growth stock and average equity of the sample companies with value stock. This finding is inconsistent with the claims in the first hypothesis; therefore, this hypothesis is rejected at the 95% confidence level.

THE RESULTS OF TESTING THE SECOND HYPOTHESIS

Results presented in Table 3 show that the significance level of t-statistic, for the mean comparison test, is less 0.05 for all three external financing indices. So, there is convincing evidence to reject the H0 hypothesis and, accordingly, statistically, there is significant difference between the average external financing indices of sample companies with growth stock and average external financing indices of the sample companies with value stock. This finding is consistent with the claims in the second hypothesis; therefore, this hypothesis is rejected at the 95% confidence level.

THE RESULTS OF TESTING THE THIRD HYPOTHESIS

Results presented in Table 4 show that the significance level of t-statistic, for the mean comparison test, is more 0.05 for the stock return. So, there is no convincing evidence to reject the H0 hypothesis and, accordingly, statistically, there is no significant difference between the average value stock return in companies with external financing and average growth stock return in companies with external financing. This finding is inconsistent with the claims in the third hypothesis; therefore, this hypothesis is rejected at the 95% confidence level .

Table 2: Results of the first hypothesis testing

Population	Number of Observations	Mean	Mean Difference	Levene's test (Homogeneity of variance)		Mean Comparison test	
				f-statistics	Significance (P-value)	t-statistics	Significance (P-value)
0	140	0/1431	-0/0127	0/231	0/631	-0/154	0/878
1	140	0/1558					

Table 3: Results of testing the second hypothesis

Studied Variables: ΔE

Population	Number of Observations	Mean	Mean Difference	Levene's test (Homogeneity of variance)		Mean Comparison test	
				f-statistics	(P-value)Significance	t-statistics	(P-value)Significance
0	140	85855	-334796	1/813	0/091	-2/012	0/045
1	140	420651					

Studied Variables: ΔD

Population	Number of Observations	Mean	Mean Difference	Levene's test (Homogeneity of variance)		Mean Comparison test	
				f-statistics	Significance (P-value)	t-statistics	(P-value)Significance
0	140	27832	-707160	1/235	0/087	-3/022	0/003
1	140	734992					

Studied Variables: XF

Population	Number of Observations	Mean	Mean Difference	Levene's test (Homogeneity of variance)		Mean Comparison test	
				f-statistics	Significance (P-value)	t-statistics	(P-value)Significance
0	140	0/04422	-0/16126	1/674	0/121	-13/445	0/000
1	140	0/20549					

Table 4: Results of testing the third hypothesis

Studied Variables: Ret

Population	Number of Observations	Mean	Mean Difference	Levene's test (Homogeneity of variance)		Mean Comparison test	
				f-statistics	Significance (P-value)	t-statistics	Significance (P-value)
0	96	0/1812	0/02543	0/499	0/481	0/268	0/789
1	140	0/1558					

Table 5: Results of testing the fourth hypothesis

Studied Variables: ΔE							
Population	Number of Observations	Mean	Mean Difference	Levene's test (Homogeneity of variance)		Mean Comparison test	
				f-statistics	Significance (P-value)	t-statistics	Significance (P-value)
0	96	125206	-295445	1/674	0/11	-1/47	0/143
1	140	420651					
Studied Variables: ΔD							
Population	Number of Observations	Mean	Mean Difference	Levene's test (Homogeneity of variance)		Mean Comparison test	
				f-statistics	Significance (P-value)	t-statistics	Significance (P-value)
0	96	40589	-694403	1/31	0/211	-2/456	0/015
1	140	734992					
Studied Variables: XF							
Population	Number of Observations	Mean	Mean Difference	Levene's test (Homogeneity of variance)		Mean Comparison test	
				f-statistics	Significance (P-value)	t-statistics	Significance (P-value)
0	96	0/0644	-0/141	1/021	0/305	-9/953	0/000
1	140	0/20549					

Table 6: Results of statistical analysis for the fifth hypothesis testing

$RET_{i,t+1} = \beta_0 + \beta_1 BM_{i,t} + \beta_2 TAC_{i,t} + \beta_3 SG_{i,t} + \varepsilon_{i,t}$

variable	coefficient β	t-statistics	significance level
fixed coefficient	18/0	357/3	000/0
BM	268/0-	113/5-	000/0
TAC	011/0	744/0	756/0
SG	012/0	092/2	011/0

Adjusted determination coefficient   :   137/0   F Chio statistics: :677/2
Durbin-Watson Statistics   :   218/2   significance level of F Chio: :005/0
F Statistics   :   229/11   Housman Statistics: :245/22
significance level F Statistics   :   000/0   significance level of Housman   :000/0

Table 7: Results of statistical analysis for the sixth hypothesis testing

$RET_{i,t+1} = \beta_0 + \beta_1 XF_{i,t} + \beta_2 \Delta E_{i,t} + \beta_3 \Delta D_{i,t} + \beta_4 TAC_{i,t} + \beta_5 SG_{i,t} + \varepsilon_{i,t}$

variable	coefficient β	t-statistics	significance level
fixed coefficient	125/0-	215/2-	027/0
XF	978/0	534/2	011/0
ΔE	361/0	918/2	008/0
ΔD	46/0-	979/0-	327/0
TAC	314/0	041/0	967/0
SG	007/0	92/2	007/0

Adjusted determination coefficient   :211/0   F Chio statistics   :   969/2
Durbin-Watson Statistics   :956/1   significance level of F Chio   : 003/0
F Statistics   :78/13   Housman Statistics: 245/22
significance level F Statistics   :000/0   significance level of Housman   :   000/0

Table 8: Results of statistical analysis for the seventh hypothesis testing

$RET_{i,t+1} = \beta_0 + \beta_1 (FCF/MV)_{i,t} + \beta_2 TAC_{i,t} + \beta_3 SG_{i,t} + \varepsilon_{i,t}$

variable	coefficient β	t-statistics	significance level
fixed coefficient	015/0-	405/0-	685/0
(FCF/MV)	001/0-	42/0-	674/0
TAC	004/0-	366/0-	713/0
SG	003/0	308/2	004/0

Adjusted determination coefficient :   115/0   F Chio statistics: 389/2
Durbin-Watson Statistics   :   956/1   significance level of F Chio   : 005/0
F Statistics   :966/5   Housman Statistics   :   193/11
significance level F Statistics   :000/0   significance level of Housman   :004/0

THE RESULTS OF TESTING THE FOURTH HYPOTHESIS

Results presented in Table 5 show that the significance level of t-statistic, for the mean comparison test, is less 0.05 for two external financing indices. So, there is convincing evidence to reject the H0 hypothesis and, accordingly, statistically, there is significant difference between the average external financing indices of sample companies with growth stock and average external financing indices of the sample companies with value stock. This finding is consistent with the claims in the second hypothesis; therefore, this hypothesis is accepted at the 95% confidence level.

THE FIFTH HYPOTHESIS TESTING RESULTS

According to the findings presented in the above table, the estimated coefficient for the variable BM ($\beta 1$), which shows the relationship between the ratio of book value to market value of shares with future stock returns of sample companies, is – 0.268 and the significance level is 0.000. This finding suggests that, statistically, there is an inverse significant correlation among these variables. In other words, future stock returns of firms, with higher stock market value to book value, are less. This finding is consistent with the claims raised in the fifth hypothesis and, thus, this hypothesis is accepted at the 95% confidence level.

THE SIXTH HYPOTHESIS TESTING RESULTS

According to the findings presented in the above table, the estimated coefficient for the variable XF ($\beta 1$), which shows the relationship between the external financing indices and future stock returns of sample companies, is 0.978 and the significance level is 0.011. This finding suggests that, statistically, there is a direct significant correlation among these variables. In other words, future stock returns of firms, which financed higher financing through external financing, are less. This finding is consistent with the claims raised in the sixth hypothesis and, thus, this hypothesis is accepted at the 95% confidence level.

THE SEVENTH HYPOTHESIS TESTING RESULTS

According to the findings presented in the above table, the estimated coefficient for the variable (FCF/MV) ($\beta 1$), which shows the free cash flow performance relationship with future stock returns of sample companies, is – 0.001 and the significance level is 0.674. This finding suggests that, statistically, there is no significant correlation among these variables. In other words, free cash flow performance does not have a role in future stock return. This finding is inconsistent with the claims raised in the seventh hypothesis and, thus, this hypothesis is rejected at the 95% confidence level.

SUMMARY AND INTERPRETATION OF THE RESULTS OF THE RESEARCH

The results show that the value stock return does not differ from return on growth stock of sample companies in during the study period. The results suggest that Iran's capital market participants have not separated growth stocks from value stock, or to earn from their investment, did not need such a breakdown. In this context, it is likely that investors in the capital market have not had enough knowledge to identify growth stocks from value stock, hence, their reactions to these two types of shares were different. According to the findings, it is argued that the differences in the ways of financing of firms with growth stock and those with value stock can potentially affect the performance of these companies and this is especially significant in periods when the economy faced with inflation because in these periods, using financial resources outside the company reduces the cost of capital. The results also show that the indices of external financing of companies have a direct relation with future stock returns. Based on these findings, it can be argued that the capital markets evaluates external financing as an ideal event and have offered higher values for the shares of companies that have mostly used such methods of financing. Also, it is possible that companies which have mostly used external financing have higher profitability and hence their stock returns have been more.

PRACTICAL SUGGESTIONS

1. Shareholders and capital market participants are suggested to separate these two types of shares through considering growth stock and value stock criteria and take their investment decisions based on this separation and according to the horizon of investment.
2. The executives are recommended to consider external financing and how to improve it as a financial resource management strategy and try to use such resources favorably in inflation periods.
3. The executives are recommended to continuously control free cash flow level in the company and try not to leave company's cash resources unused and use them in new investment project and values for shareholders.

RESOURCES

1. Petkova, Ralitsa and Zhang, Lu. Is Value Riskier than Growth?, Journal of Financial Economics,(2005)
2. Fama, Eugene F. and Kenneth R. French . The Anatomy of Value and Growth Stock Returns, Financial Analysts Journal, 63, 6, 44-54. (2007).
3. Papanastasopoulos. G, Dimitrios Thomakos and Tao Wang . Corporate financing activities, fundamentals to price ratios and the cross section of stock returns. Journal of Economic Studies. Vol. 40 No. 4, 2013 pp. 493-514 (2013).
4. Michaely, R., Thaler, R., Womack, K., Price reactions to dividend initiations and omissions. Journal of Finance 38, 1597}1606.(1995).
5. Ritter, J., The long-run performance of initial public o!erings. Journal of Finance 42, 365}394. Sharpe, W.F., 1964. Capital asset prices: a theory of market equilibrium under conditions of risk. Journal of Finance 19, 425}442.(1991).
6. Bali, T., Demirtas, O. and Hovakimian, A. "Corporate financing activities and contrarian investment", Review of Finance, Vol. 14, pp. 543-584 , (2010) .
7. Hardlis et al . the relationship between the book value ratio to stock value with out of the company' financial measures,(2012) .
8. Pontiff and schall . Book - to -Market Ratios as Predictors of Market Returns. The University of Neworleans, school of Business Administration, LA70148 , (2009).

9.   Blazenko, G,W, and Yufen, Fu . Value Versus Growth in Dynamic Equity Investing, Journal of Investing,19, 1, 25-31 (2010).

10. Tehrani, R. And Fatemeh Khan Ahmadi , Investment Strategies in Stock on the Basis of Value –Growth in Tehran Stock Exchange. Journal of Financial Research Accounting. Second Year , No. 1, Seq. 3, (2010) .

11. Arabsalehi, M. et al. The impact of environmental risks, corporate strategy, and capital structure on the performance of listed companies in Tehran Stock Exchange. Journal of Financial Accounting, N. 13. (2012).