The Effects of Stock Dividend on Stock Return in Tehran Stock Exchange

Ebrahim Abbasi
Associate Professor at Alzahra University , Tehran , Iran
Abbasiebrahim2000@yahoo.com.

Behrooz Ebrahimzadeh
Master expert in Finance and lecture at University of Payamenur, Germi,Ardebil,Iran
Behrooz_eb@yahoo.com.

Amir Mohammadzadeh
Department of Insurance & Financial Management, University of Tehran, Iran
amir.mohammad@alumni.ut.ac.ir.

Abstract: This study is aimed at identifying the relationship between stock dividend issue and return rate of share of 100 firms from Tehran Stock Exchange during years 2007-2011 tending to issue stock dividend. Pearson correlation test was used to examine the relationship between stock dividend issues and return rate of share and results showed that there is no significant relationship between share return rate and the amount of stock dividend and also between stock dividend issue percentage and return rate of share.

Keywords: Stock Dividend; Return rate of share**.**

JEL Classification: G120

1. Introduction:

Firms divide the earnings among stockholders through a variety of ways including cash payments, issuing stock dividend and stock right. When firms want to prevent from cash to exit the firm, they move to issue stock dividend. Since every investor aims at maximum return, so examining the relationship between stock dividend issues is of considerable importance as one the ways to distribute earnings among stockholders and return rate of share. Evaluating share return of companies is of the most important issues with which the investors are dealing, hence the study is also aimed at identifying the relationship between stock dividend issue and return rate of share of all Tehran Stock Exchange firms between years 2007-2011 tending to issue stock dividend.

2. Theoretical Principles and Background of the Study:

Share return is among the principle criteria for decision making in stock exchange and on its own has information and dividing earnings is of the main factors affecting the share price and as a consequence stockholders' wealth [2]. In Iran, stockholders prefer stock dividend to cash earnings, however it is likely that major stockholders of some firms deceive minor stockholders or the public by issuing stock dividend and inflating their own share value and as a result hurt the public trust in market [11]. Some of financial intellects believe that if stock dividend percentage is low, issuing stock dividend will result in shareholders wealth increase, but some believe that since stock dividend leads to expanding the ownership of share and maintaining the cash in company, stock dividend has value and issuing it will lead to stockholders' wealth increase in a way or another [7,9]. A group of researchers consider higher return as the value of stock dividend, yet the other regard that the higher return of such share results from stock dividend's information content and stock dividend is not valuable on its own [10]. A basic record of issuing stock dividend goes back to Elizabeth Era, but share decomposition has become wide spread since early 20th century [12]. Stock dividend is share earnings transferred to stockholders in form of extra common share and instead of cash. Endowing stock dividend is one of the ways to divide share among stockholders [5, 7]. Earnings distribution in form of share does not lead to a change in assets, debts or equity, but to a transfer of an amount of retained earnings to capital account [4]. Like share decomposition stock dividend is also considered as a sign of success and promising future for the company from the view of investors and as a result stockholders are interested in such share [8]. To compensate for lack of cash and or crisis existing in the company, managers move to issue stock dividend while upon the issue and increase of the share number in stockholders' hand they will have a heavy responsibility for next profitability and the stockholders are waiting for higher earnings per share and dividend earnings [3, 5]. Relative lack of knowledge of managers and stockholders regarding the main essence of stock dividend and their next expectations show weak efficiency of the market [13].

Fama et al (1969) demonstrated that return rate of share before and after share decomposition is abnormal and the market will have positive reaction to share issue. Amido (2006) showed that the market does not react positively to news regarding declaration of cash earnings and share decomposition and cash earnings does not increase after declaration of share decomposition. Sinai and Mahmudi (2003) showed that share decomposition and stock dividend lead to severe increase of return till a month before assembly and considerable decrease after. Qaderi (2009) proved that firms endowing stock dividend have higher abnormal return percentage and their return of share is affected by stock dividend distribution.

3. Hypotheses:

Following questions were posed regarding literature review and foreign and domestic studies:

1. Is there any relationship between issuing stock dividend and abnormal return rate of share?
2. Is there any relationship between return rate of share and stock dividend percentage?
3. Is there any relationship between return rate of share and normal return rate of share on the assembly's date?

Statistical community of the study comprised firms listed in Tehran Stock Exchange during 2007-2011. 96 firms under study have been selected based on the following criteria: a) the firm selected is not of financial and investing brokers, b) firms with no cash earnings or stock right at the time of issuing stock dividend and only issued stock dividend. To measure variables, data banks and DVDs provided by Stock Exchange organization were used. For statistical analysis of the data, Excel and SPSS software and for hypothesis testing Pearson correlation coefficient test was used based on accumulative data. In defining variables of the study, stock dividend includes issuing common share via turning and transferring retained earnings into capital and distributing it among stockholders for free [1] and return rate of share includes return or reward of investing comprising current income and or asset increase indicated in percent.

Total abnormal return of share is calculated from the following equation (1):

$$1)\ \boldsymbol{R} = \frac{(\mathbf{P} - \mathbf{P0} + \mathbf{D1} + \mathbf{ra} - \mathbf{rs})}{\boldsymbol{P0}}$$

R= Total abnormal return rate of share
P= the first rate of share transaction after holding abnormal general assembly
P_0= the last rate of share transaction after holding abnormal general assembly
D1= dividend earnings per share
r_s= stock dividend advantages
r_a= increase percent of capital from cash income

Weekly rate of return for weeks around assembly is gained from the following equation (2):

$$2)\ \mathbf{R} = \frac{\mathbf{P} - \mathbf{P0}}{\mathbf{P0}}$$

P= price at the end of week
P_0= price at the beginning of the week

Expected price (theoretical price) is gained from equation (3):

$$3)\ \boldsymbol{TP} = \frac{\mathbf{P\beta}}{\mathbf{1} + \boldsymbol{d}}$$

TP= theoretical price
$P\beta$= the last price before assembly
d= stock dividend percent

To prevent from the common effects of share price on abnormal return rate of share, theoretical price per share is modified by market price index changes from equation (4):

$$4)\ \boldsymbol{ATP} = \boldsymbol{TP}\ \frac{\mathbf{Ina}}{\boldsymbol{Inb}}$$

Ina= market index after stock dividend,
Inb= market index before stock dividend

Abnormal return rate of share is gained from equation (5):

$$5)\ \boldsymbol{AR} = \frac{\mathbf{PA} - \mathbf{ATP}}{\boldsymbol{ATP}}$$

ATP= refined theoretical price
P_A= price after assembly

4. Hypotheses Testing and Results:

Testing H1:

H0: there is not any relationship between issuing stock dividend and abnormal return rate of share.

H1: there is a relationship between issuing stock dividend and abnormal return rate of share.

Here, it is presumed that issuing stock dividend with abnormal return rate is around assembly holding date. Descriptive statistics related to share during 2007-2011 are represented in Table 1 and results from Pearson correlation test between stock dividend and abnormal return rate of share are provided in Table 2.

Table 1: Abnormal Return Rate From 2007 – 2011

abnormal return rate	N	Negative	Positive	Mean	R
2007 – 2011Years	96	-45.85	142.67	6.33	495.53

Table 2: Pearson Correlation Test Results

variables / Test	stock dividend	abnormal return rate	
Pearson correlation	1	0.177	stock dividend
Sig	0	0.036	
Pearson correlation	0.177	1	abnormal return rate
Sig	0.036	0	

Results from Pearson correlation test showed that significant level is %36 and correlation between stock dividend and abnormal return rate is very weak. So, H0; there is not any relationship between issuing stock dividend and abnormal return rate of share is confirmed.

Testing H2:

H0: there is not any relationship between return rate of share and stock dividend percentage

H1: there is a relationship between return rate of share and stock dividend percentage

Descriptive statistics related to share during 2007-2011 are represented in Table 3 and results from Pearson correlation test between return rate of share and stock dividend percentage are provided in Table 4.

Table 3: Stock dividend Percentage From 2007 – 2011

Stock dividend Percentage	N	Negative	Positive	Mean	R
2007 – 2011Years	96	1.46	400.00	67.83	3319.41

Table 4: Pearson Correlation Test Results

Test \ variables	stock dividend percentage	return rate for 6 weeks	
Pearson correlation	1	0.108	stock dividend percentage
Sig	0	0.201	
Pearson correlation	0.108	1	return rate for 6 weeks
Sig	0.201	0	

Results from Pearson correlation test in Table 4 showed that significant level is 0.201 and correlation between return rate of share (retained for 6 weeks) and stock dividend percentage is very weak. So, H0; there is not any relationship between return rate of share (retained for 6 weeks) and stock dividend percentage is confirmed.

Testing H3:

H0: there is not any difference between return rate of share and normal return rate of share on the assembly's date.

H1: there is a difference between return rate of share and normal return rate of share on the assembly's date.

Table 5: Return Rate For 6 Weeks and Abnormal Return Rate

Stock dividend Percentage	N	Negative	Positive	Mean	R
return rate for 6 weeks	142	-0.14	0.26	0.041	0.006
Abnormal Return Rate	142	1.34	100.00	36.16	476.55

Results of Table 5 show that 6-week retained return rate of firms' share are in an average weaker than common return rate of share on assembly's date. So, it can be said that total return received by stockholders for stock dividend on the date of assembly is higher than 6-week retained return of share.

5. **Discussion and Conclusion**:

H1 testing showed that there is not a significant relationship between issuing stock dividend and abnormal return rate. Results do not go with findings of Fama, Fischer, Johnson and Rol (1969), Sinai and Mahmudi (2005) and Qaderi (2009), but goes well with findings of Amido (2006). H2 testing showed that there is not a significant relationship between percentage of issuing stock dividend and return rate (retained for 6 weeks) of share that goes with Amido's findings. H3 testing showed that return rate retained for 6 weeks is in an average lower than normal return rate of share on the date of assembly. Regarding the subject literature and results of the study, it can be suggested that significant and not selling stock dividend can create abnormal return for stockholders, but they should not hope for better return and benefits only by considering high percent of stock dividend.

6. Refrences:

1) Abbasi,E,.(2004). "Methods and theories of stock issue and market price". The science and cultural publication.Tehran-Iran,Second edition. p. 292.

2) Abbasi E, , and Ebrahimzade,b,. (2009). "Factors affecting the level of investment in listed companies in Tehran Stock Exchange". Quarterly Journal of Economic Modeling.Tehran,vol;3,No.4,pp.49-62.

3) Amidu,M and joshua,A,.(2006). "Determinants of Dividend Payout Ratios in Ghana", The Journal of Risk Finance, vol.7, pp.136-145.

4) Bhattacharyya,N,.(2007). "Dividend Policy" , managerial Finance, vol.33,No.1,pp.3-14.

5) Douglas,A,.(2007). "Managerial Opportunism and Proportional Corporate Payout Policy", managerial Finance, vol.33, No.1, pp.26-42.

6) Fama,fisher.jonson and roll,.(1969). "The adjustment of stock prices to new formation". Nternational economic review, vol.81, pp.963-982.

7) Fuller,k,.(2001), "The Impact of Informed Trading on Dividend signaling : A Theoretical and Empirical Examination. Journal of Economics", 15, 95-75.

8) Goddard, J., David, G. McMillan, (2006). "Dividend Smoothing vs Dividend signaling: Evidence from UK Firms", managerial Finance, vol.32, pp.493-504.

9) Ghaderi,Z,.(2010).Effect of bonus shares on stock returns in companies in Tehran Stock Exchange, Review of accounting and auditing, vol.26,pp.35-51.

10) Kerl,A and andreas,W,.(2005). "Price-Pressure in Financial Experts" ,Recommendations-The German Experience, University of Tuebingen.

11) Sinai,H and Mahmoudi,A,.(2005). The effect of news on stock returns of stocks and stock bonus earnings management in companies in Tehran Stock Exchange, Review of accounting and auditing, vol.39, pp.77-96.

12) Spies,k and fleck, a,.(1995). "Underperformance in long-run stock return following seasoned equity offering", journal of financial economics, volume 38 ,issue 3.

13) Tse, Chin Bun. (2005), "Use Dividend signal or not: An Examination of the UK Dividend Payout Pat terns" managerial Finance, vol.31,pp.12-33.