

## The Relationship between Changes in Balance Sheet Items and Income Statement with Changes DPS in Companies in Tehran Stock Exchange

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### ABSTRACT

In this study, the relationship between changes in balance sheet and income statement of changes in dividends per share (DPS) will be observed. In other words, the response of the Board of Directors of the bidders, and their approval of the shareholders as dividends per share, compared to a balance sheet and income statement of changes will be observed. To test hypotheses two multivariate regression models were used. The two control variables, firm size and industry type used as a measure of firm size control variable logarithm of sales (revenue). For variable control of the industry, an industry research hypothesis which is the part of population has done. The results showed that in the 95% confidence level, there is no relationship between changes in balance sheet and income statement, and changes in dividends per share. The same results of testing hypotheses based on the same industry gained too. A significant correlation between changes in balance sheet and income statement of changes in dividends per share was not confirmed.

**KEYWORDS:** balance sheet, income statement, dividends per share (DPS).

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### 1. INTRODUCTION

The interest of cash portions of any stock, because of its tangible, has special importance for the owner of stock as important for managers, so some part of manager's energy is for it that named as a "politic of dividing stock". (Baker et al, 2008)

In the method of company determined between stockholders. Since interest after accumulation should be divided in investment commercial unit, or in the form of stock interest between stockholders. (Bekae Ahmad, 2007)

In the recent years accumulation of interest, is one of the important sources in providing cash by stock of capital in private section. In any year, accumulated milliard Rials, and divided the number close to it between stock holders, in the form of interest of stock. The accumulated interest is the most important source of income of stockholders.

We can use of the accumulated interest for motivation of growing interest and finally affection in the value of stock in future. In another way, pay of the portion of stock considered available for stockholders (Aghajani Majid, 2011)

In Iran, according to the Article 239 of commercial law of dividable interest is such as net interest except the loss of the last fiscal years and another volunteer cash in addition of undivided able interests of the last years. According to the Article 90, the cash between stockholders, become value only after confirm of public community, and if there is interest, dividing 10% of interest for fiscal year is necessary between stockholders.

For Article 40 of commercial Law, paying interest to Stockholders, should be performed & months after deciding of public community. (Madrakian, 2012, 140)

Many issues has role in deciding for the rate of dividing interests, that one of dividing interests, that one of them is the fiscal situation of company. The fiscal invoices, and fiscal condition, fiscal activity and fiscal flexibility showed the condition fiscal of commercial unit. The fiscal condition of an commercial unit, involved the economic sources, fiscal structure, the cash rate and the ability of debts and the harmony capacity of it with the changes of perform space. Information about the fiscal conditions offered in balance sheet. The activity of the fiscal of commercial unit include the inter of under control sources of the commercial unit. Information about the fiscal activity offered in the form of interest or loss and in the form of comprehends interest or loss. (Iran of accounting standards, 2009, 759)

On the base of the above materials expected that the member of the board of directors as offers and stockholders as confirmers of the rate of the divide rate of any stock pay attention to the number of balance sheet and the Form of Loss and interest that showed the fiscal condition and fiscal activity of company.

In this research try for determining the relations between the changes of the materials of balance sheet and the form of the loss and interest of balance of divide interest of any stock for we can conclude that, Is it Possible that the Changes of divide interest of any stock, determine with the changes of balance sheet materials and the form of loss and interest?

## 2-LITERATURE REVIEW

Naser Garabi performed as research as an investigation of Relations between the changes of the condition of the current cash and the changes of the interest of any stock and the dividing interest of any stock in the accepted companies in the Tehran's bonds bourse, that the results indicated the interest of any stock and divide interest of any stock. (Kermani Saeed, 2007)

Saeed Kermani performed a research as an investigation the relation between the changes of the materials of balance sheet and the loss and interest with changes of the return of stocks in the accepted companies in the Tehran's bond bourse that the results indicated it that there is not the meaning for relations between the changes of the cashing with the changes of the interest at any stock and divide interest of any stock. (Kermani Saeed, 2007)

My Nader Noruzi performed a research as" relations between the material of balance sheet and the loss and interest and the rate of transaction s with the change of the return of the stocks in 1388 that the results indicated it that there isn't meaning for relations between the changes of the materials of balance sheet and the loss and interest and the rate of transaction with the changed of the return of stocks. (Noruzi Nader, 2010)

EvuLilieblom and his coworkers, in 2012, performed a research as "Is it possible that the divide interest transform the future interest in the stock marker of Nordik? In this research deal for the investigation of the information contents of the divide interest , that the results indicated of the weak relations of the information content of tow divide interest, and also it showed the un harmony between the divide interest and income and also showed that the little changes in company may be have important results. (Noruzi Nader, 2010)

Takur and his coworkers (2006) deal for investigation of the politic of the dividing interest and the important factor on bonds of Tunes. The results showed that the profitability and its state in direct and cash form of the stock market, pressured the paid divide interest) so, the ownership and fiscal condition hasn't effect on the rate of divide stock. . (Noruzi Nader, 2010)

Chen and his coworkers (2005) showed that there is negative meaningful relation between the interior ownership and the pay stock interest (Sarbanha Mohamadreza ,2004)

OLSON and Panmen. Performed their research the sample of an accepted company in the market of New York for 1971-1980. In this research the investigated the relations between accounting information of the return of stocks, they interpreted their results such that the accumulation of materials of loss and interest and balance sheet and receiving to the final numbers , result in delete some part of information . So the investor should pay attention to all of the number of the final numbers. In Moreover, increasing the time period, result in the reduce of the number of faults in determining the interest of company, and reducing the effects results of the publishing the fault information in the market. (Kermani Saeed, 2007)

### 2-1-The hypothesis of research

There is relation between the changes of the materials of balance sheet with the changes of the divide interest of stick.

There is relation between the changes of the materials of loss and\ interest with the changes of divide interestof stock

### 2-1-1- The variables of research

**2-1-1-1- The dependence Variables:** the changes of divide interest in any stock.

**2-1-1-2- The independence Variables:** The current asset and UN current asset the current debts, UN current debts the income of the owner of stock, incomes, cost.

**2-1-1-3- The control variables:** the size of the company (on the base of the sale log or used income), the kind of industry (the sub hypothesis test research deal for dividing the different industries that were from the statistic society.

### 3-METHODOLOGY

In this research for investigation of be or not to be of relations between any changes of any materials of balance sheet and the loss and interest with this change of divide interest of any stock used of the tow variables line Regression model. In another words at first studied the relation between any materials of balance sheet and loss and interest of stock for any years as compare with the last years and also investigates the relation in the form of accumulation.

#### 3-1- The method of gathering information

In this research information and the needed data for accounting the variable of research gathered by the formal site of bond bourse and also Tehran's bonds bourse.

#### 3-2- The statistic society of research

In this research the accepted companies in Tehran's bonds bourse considered as statistic society:

Form 2006-2010 has activity in bourse

The fiscal years of them is the of end of Esphanel

It wasn't part of the investment companies, banks and insurances.

It has interest in test period and divided it is interest.

After doing above limitations, the statistic society reach to 64 companies that all of them tested.

#### 3-3- The method of analysis of findings

The data that we gathered designed by using of the theory models in the last section and analyzed by using of two or multi variables Regression method or by SPSS software.

The percent of the changed of the materials of balance sheet and the loss and interest f any year as compare with last of any stock in any year as compare with the last year investiture and then analyzed by using of SPSS software the relations between them.

For stability of, information and the better Transforming of results, at first studied the data for any year and then treated for 5 years period, 2006-2010.

### 4- Findings.

The following tables showed the results of test of researches hypothesis.

There is meaning full relation between the changes of the current assets of changes of divide interest of any of any stock.

Table1- The investigation of the test's results of the asset's change with the changes of divide interest of any stock

year	a	b	r	r2	T	sig t	F	sig F	Durbin-Watson
2006-2007	-.617	0.000064	.000 <sup>a</sup>	.000	.001	1.000	.000	1.000 <sup>a</sup>	2.136
2007-2008	-.627	.008	.010 <sup>a</sup>	.000	.077	.939	.006	.939 <sup>a</sup>	1.708
2008-2009	-.697	.095	.123 <sup>a</sup>	.015	.978	.332	.957	.332 <sup>a</sup>	2.158
2009-2010	-.296	.130	.140 <sup>a</sup>	.020	1.117	.268	1.248	.268 <sup>a</sup>	1.691
5 year	4.759	.107	.184 <sup>a</sup>	.034	1.474	.146	2.172	.146 <sup>a</sup>	1.932

On the base of statistic T and meaningful level of statistic T, there is meaning full relation between independent variable, dependent variable in any years of 2006-2007, 2007, 2008, 2009, 2010, and also for 5 years period.

There is meaning full relation between the changes of the non-current assets of changes of divide interest of any of any stock.

Table2- The investigation of the test's results of the non-current's change with the changes of divide interest of any stock

year	a	b	r	r2	T	sig t	F	sig F	Durbin-Watson
2006-2007	-.560	0.036886	.057 <sup>a</sup>	.003	.452	.653	.204	.653 <sup>a</sup>	2.113
2007-2008	-.724	-.050	.068 <sup>a</sup>	.005	-.537	.593	.289	.593 <sup>a</sup>	1.711
2008-2009	-.729	.079	.101 <sup>a</sup>	.010	.797	.428	.636	.428 <sup>a</sup>	2.174
2009-2010	-.520	-.016	.019 <sup>a</sup>	.000	-.153	.879	.023	.879 <sup>a</sup>	1.630
5 year	5.577	.046	.099 <sup>a</sup>	.010	.785	.436	.616	.436 <sup>a</sup>	1.901

On the base of statistic T and meaningful level of statistic T, there is meaning full relation between independent variable, dependent variable in any years of 2006-2007, 2007, 2008,2009,2010, and also for 5 years period.

There is meaning full relation between the changes of the current debits of changes of divide interest of any of any stock.

Table3- The investigation of the test's results of the current debits change with the changes of divide interest of any stock

year	a	B	r	r2	T	sig t	F	sig F	Durbin-Watson
2006-2007	-.586	0.022229	.036 <sup>a</sup>	.001	.287	.775	.082	.775 <sup>a</sup>	2.123
2007-2008	-.676	-.034	.038 <sup>a</sup>	.001	-.297	.768	.088	.768 <sup>a</sup>	1.706
2008-2009	-1.058	-.206	.198 <sup>a</sup>	.039	-1.590	.117	2.529	.117 <sup>a</sup>	2.244
2009-2010	-.367	.100	.104 <sup>a</sup>	.011	.821	.415	.674	.415 <sup>a</sup>	1.621
<b>5 year</b>	5.410	.058	.107 <sup>a</sup>	.011	.847	.400	.717	.400 <sup>a</sup>	1.916

On the base of statistic T and meaningful level of statistic T, there is meaning full relation between independent variable, dependent variable in any years of 2006-2007, 2007, 2008, 2009,2010, and also for 5 years period.

There is meaning full relation between the changes of the non-current debits of changes of divide interest of any of any stock

Table4- The investigation of the test's results of the non-current debits change with the changes of divide interest of any stock

year	A	b	r	r2	T	sig t	F	sig F	Durbin-Watson
2006-2007	-.541	0.063997	.100 <sup>a</sup>	.010	.789	.433	.622	.433 <sup>a</sup>	2.133
2007-2008	-.491	.126	.172 <sup>a</sup>	.030	1.374	.174	1.888	.174 <sup>a</sup>	1.696
2008-2009	-.835	.004	.004 <sup>a</sup>	.000	.029	.977	.001	.977 <sup>a</sup>	2.153
2009-2010	-.505	-.008	.008 <sup>a</sup>	.000	-.065	.948	.004	.948 <sup>a</sup>	1.631
<b>year</b>	5.857	.027	.059 <sup>a</sup>	.003	.462	.646	.213	.646 <sup>a</sup>	1.886

On the base of statistic T and meaningful level of statistic T, there is meaning full relation between independent variable, dependent variable in any years of 2006-2007, 2007, 2008,2009,2010, and also for 5 years period.

There is meaning full relation between the changes of the Equity's of changes of divide interest of any of any stock.

Table5- The investigation of the test's results of the Equity's change with the changes of divide interest of any stock

year	a	b	r	r2	T	sig t	F	sig F	Durbin-Watson
2006-2007	-.494	0.081184	.112 <sup>a</sup>	.013	.886	.379	.785	.379 <sup>a</sup>	2.015
2007-2008	-.406	.156	.229 <sup>a</sup>	.053	1.856	.068	3.447	.068 <sup>a</sup>	1.835
2008-2009	-.466	.195	.298 <sup>a</sup>	.089	2.459	.017	6.047	.017 <sup>a</sup>	2.066
2009-2010	-.211	.199	.303 <sup>a</sup>	.092	2.501	.015	6.253	.015 <sup>a</sup>	1.628
<b>5 year</b>	5.497	.054	.169 <sup>a</sup>	.028	1.347	.183	1.814	.183 <sup>a</sup>	1.974

On the base of statistic T and meaningful level of statistic T, there is meaning full relation between independent variable, dependent variable in any years of 2006-2007, 2007-2008, and also for 5 years period. Also there is meaning relation between independent variable, dependent variable in years of 2008-2009 and 2009-2010, but on the base of statistic r<sup>2</sup>, the correlation is weak.

There is meaning full relation between the changes of the income's changes of Divide interest of any of any stock.

Table6- The investigation of the test's results of the income's change with the changes of divide interest of any stock

year	a	b	r	r2	T	sig t	F	sig F	Durbin-Watson
2006-2007	-.423	0.130199	.153 <sup>a</sup>	.023	1.218	.228	1.484	.228 <sup>a</sup>	2.067
2007-2008	-.537	.063	.069 <sup>a</sup>	.005	.541	.591	.292	.591 <sup>a</sup>	1.696
2008-2009	-.468	.236	.263 <sup>a</sup>	.069	2.148	.036	4.614	.036 <sup>a</sup>	2.181
2009-2010	-.432	.044	.056 <sup>a</sup>	.003	.439	.662	.193	.662 <sup>a</sup>	1.643
<b>5 year</b>	4.668	.112	.197 <sup>a</sup>	.039	1.579	.119	2.494	.119 <sup>a</sup>	1.921

On the base of statistic T and meaningful level of statistic T, there is meaning full relation between independent variable, dependent variable in any years of 2006-2007, 2007-2008, 2009-2010 and also for 5 years period. Also there is meaning relation between independent variable, dependent variable in year of 2008-2009, but on the base of statistic  $r^2$ , the correlation is weak.

There is meaning full relation between the changes of the expenses changes of Divide interest of any of any stock.

Table7- The investigation of the test's results of the expenses change with the changes of divide interest of any stock

year	a	b	r	r2	T	sig t	F	sig F	Durbin-Watson
2006-2007	-.372	0.161592	.174 <sup>a</sup>	.030	1.392	.169	1.937	.169 <sup>a</sup>	2.221
2007-2008	-.721	-.050	.063 <sup>a</sup>	.004	-.496	.622	.246	.622 <sup>a</sup>	1.692
2008-2009	-.692	.096	.101 <sup>a</sup>	.010	.800	.427	.640	.427 <sup>a</sup>	2.153
2009-2010	-.401	.071	.080 <sup>a</sup>	.006	.631	.530	.398	.530 <sup>a</sup>	1.636
<b>5 year</b>	5.355	.062	.114 <sup>a</sup>	.013	.902	.371	.813	.371 <sup>a</sup>	1.916

On the base of statistic T and meaningful level of statistic T, there is meaning full relation between independent variable, dependent variable in any years of 2006-2007, 2007, 2008, 2009, 2010, and also for 5 years period.

There is meaning full relation between the changes of the balance sheet of changes of Divide interest of any of any stock.

Table8- The investigation of the test's results of the balance sheet changes with the changes of divide interest of any stock

variables	2006-2007	2007-2008	2008-2009	2009-2010	5 year
a	-.084	-.400	-.223	.007	-.504
b1	-.011	.014	.140	.019	.561
b2	.023	-.043	.022	.003	-.024
b3	-.005	-.018	-.280	.087	-.870
b4	.084	.112	-.064	-.087	.059
b5	.023	.152	.183	.199	.020
R	.267 <sup>a</sup>	.288 <sup>a</sup>	.475 <sup>a</sup>	.340 <sup>a</sup>	.407 <sup>a</sup>
r2	.071	.083	.226	.116	.166
t1	-.091	.133	1.457	.146	1.670
t2	.270	-.453	.224	.026	-.131
t3	-.055	-.155	-2.196	.681	-2.498
t4	.982	1.173	-.558	-.648	.456
t5	.225	1.690	2.327	2.213	.392
sig t1	.928	.895	.151	.884	.100
sig t2	.788	.652	.823	.980	.896
sig t3	.956	.877	.032	.499	.015
sig t4	.330	.246	.579	.519	.650
sig t5	.823	.096	.024	.031	.696
F	.727	.856	2.774	1.241	1.888
sig F	.630 <sup>a</sup>	.533 <sup>a</sup>	.019 <sup>a</sup>	.299 <sup>a</sup>	.099 <sup>a</sup>
Durbin-Watson	1.975	1.840	2.175	1.653	1.905

On the base of statistic T and meaningful level of statistic T, and also statistic  $r^2$  There is meaning full relation between independent variable, dependent variable in any years of 2006-2007, 2007, 2008, 2009, 2010, and also for 5 years period.

There is meaning full relation between the changes of the income statement of changes of divide interest of any of any stock.

Table9- The investigation of the test's results of the income statement's change with the changes of divide interest of any stock

	2006-2007	2007-2008	2008-2009	2009-2010	5 year
a	-.061	-.958	-.416	-.171	4.817
b6	-.442	.495	-.005	-.462	1.212
b7	.102	-.088	-.110	.027	-.994
r	.292 <sup>a</sup>	.208 <sup>a</sup>	.294 <sup>a</sup>	.229 <sup>a</sup>	.426 <sup>a</sup>
r2	.085	.043	.087	.052	.426 <sup>a</sup>

<b>t6</b>	-1.411	1.563	-.013	-1.458	1.743
<b>t7</b>	.769	-.803	-.729	.235	-3.228
<b>sig t6</b>	.163	.123	.989	.150	.086
<b>sig t7</b>	.445	.425	.469	.815	.002
<b>F</b>	1.863	.907	1.894	1.107	4.429
<b>sig F</b>	.146 <sup>a</sup>	.443 <sup>a</sup>	.140 <sup>a</sup>	.353 <sup>a</sup>	.007 <sup>a</sup>
<b>Durbin-Watson</b>	2.139	1.634	2.115	1.714	1.808

On the base of statistic T and meaningful level of statistic T, there is meaning full relation between independent variable, dependent variable in any years of 2006-2007, 2007-2008, 2009-2010 and also for 5 years period. Also there is meaning relation between independent variable, dependent variable in for 5 years period, but on the base of Statistic  $r^2$ , the correlation is weak.

**4-1- The test result of derisibly industry conclusions:**

Test hypotheses based on the division of industries, there is not significant Relationship between the dependent variable and the independent variables.

**5-conclusions**

The main purpose of this study was investigates the relationship between changes in balance sheet items and income statement with changes DPS.

According to the above materials and all of the limiting of this research, in the basic test offered in the form of comparing in the years of 2006-2007, 2007-2008, 2009-2010 and Sears period and there isn't accepted meaningful relations between the changes of the materials of balances of the divide interest of any stock in accepted company.

Many factor maybe in the relations between independency and dependence variables, such as the fouowiny:

In analyzing the used data in this research used of two variable and multivariable R egression variables In this model only is inanity data , and don't investigated the effect of quality factors for the changes of divide interest of any stock.

Table10- The test result of separation industry conclusions:

Type of Industry	Number of company	Test results of the independent variables of current assets, non-current assets, current liabilities, non-current liabilities, equity, revenue and expenses associated with variable changes in dividends per share	Test results of balance sheet and profit and loss changes with changes in dividends per share
Automotive and Parts	10	Not accept	Not accept
Cement, lime and gypsum	6	Not accept	Not accept
Food products Vashamydny	5	Not accept	Not accept
Ceramic Tile	5	Not accept	Not accept
Machinery and equipment	5	Not accept	Not accept
Chemical products	9	Not accept	Not accept
Pharma	9	Not accept	Not accept

The divide stock in art of the quality factors such as politic company, the abroad; limits for commercial unit don't investigate cell in bioresearch.

Our findings indicate that There is meaning full relation between the changes of the current assets, non-current assets , current debits ,non-current debits , Equity's ,income's , expenses, balance sheet, income statement of changes of divide interest of any of any stock

The income and cost as two studies variable in this research/counted on the base of accounting bases by the method of responsibility. So in the pay of the interest of stock the faced with problem, rete fore there isn't meaningful relation between the changes of income and cost with changes divide interest of any stock in such companies:

**6- The offers of the future research:**

According to the investigates issues for performing research is such us the following.

The relation s between the materials of balance sheet and loss and interest and cash investigated with the changes of divide interest of any stock.

Moreover than balance sheet and loss and interest, the change of capital, investigated the current relation and another relation s with the changes of divide interest of any stock.

According to cited materials in the society and sampling section, the fiscal industry because of different in the kind of activity deleted that this research performed for fiscal mediator industry.

According to the cited sections. Because of time limitations from 2006, the number of the statistic society were low, and because of increasing the accepted companies, in bonds bourse in 2009, proposed that this research perform for 88 and the next years,

Proposed investigate the relations between any of changes in the section of assets, long term asset, current debt, long term debt and the changes of divide interest of any stock.

#### **REFERENCES**

- 1- Aghajani, Majid, Relationship between Corporate Governance Mechanisms and dividend policies of the companies listed on the Stock Exchange.2011, university of Ghom.
- 2- Baker H. Kent, Shantanu Dutta, Samir Saadi, 2008," Impact of Financial and Multinational Operations on Manager Perceptions of Dividend", Global Finance Journal, WWW. Elsvier.com.
- 3- Baker H. Kent, Tarun K. Mukherjee, Ohannes George Paskelian, 2006," Hiw Norwegian Managers View Dividend Policy", Global Finance Journal, Vol. 17, PP. 155-176.
- 4- Bekaue, Ahmad, Accounting Theory, Jhon Wiley, 2007"Revisiting the Dividend Puzzle Do all of the Pieces now fit?" Review of Financial Economics, Vol. 11, PP. 241-261.
- 5- Iran of accounting standards, 2009, audit organization, N160.
- 6- Kermani, Saeed, Relationship between balance sheet and profit and loss changes with changes in the stock returns of listed companies in Tehran Stock Exchange, 2007, Master's thesis university of Azad Science and Research.
- 7- Madrakian, Hasan, 2012, Financial Management.
- 8- Noruzi, Nader, The relationship between changes in balance sheet ,profit and loss and trading volume in the stock returns of listed companies in Tehran Stock Exchange, 2010, Master's thesis university of Azad Tehran Markaz.
- 9- Sarbanha, Mohamadreza, The effect of dividends on stock prices of companies, 2004, magezine of Accounting Studies, N2.