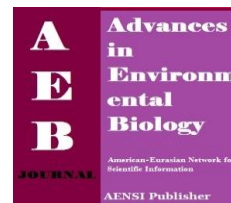




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A Study of the Influence of Cash Profit Payment on the Amount of Stock Exchange in Companies Accepted in Tehran Stock Market

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ABSTRACT

This research is to study the relations between the cash profit of the share and the amount of share transactions in the companies accepted in the stock exchange of Tehran so that its results can be taken as the basis of the decisions made by the investors and the other users. This research, in time and place, has been limited to Tehran stock exchange that has distributed the interest in cash between 1386 and 1390. The inductive method has been used in this research. The research theories are based on comparison and tested inductively based on the data. To study the cause and effect relationship between the variables of the rate of share transactions and cash profit I have used regression, correlation and SAS, STATISTICA software. The results achieved in this research show that there is no relationship between announcement and the payment of cash profit of the share and the rate of the share transactions of the accepted companies in Tehran stock exchange.

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INTRODUCTION

Economic units are established to gain profits. They hold functions and continue their activities. Shareholders and investors buy a profit unit for obtaining revenues and create the possibility for its activity. So, there is a direct relationship between the profit and economic activities.

Company's policy and financial decisions regarding the allocation of profit have significant role in pushing the savings generated by the private sector and public participation to have investment in economic units.

The profit from these departments is distributed among the shareholders in various ways. One of these methods is the distribution of profits between shareholder in cash dividends payments. In this type of payment the company could pay dividends profit to its shareholders, however, they lost their sources of financing.

Distribution or non-distribution of profits is done in various methods (cash, shares, etc.) and depends on the economic situation in each unit (local condition), and the economic conditions of the society in which it is located (external conditions). It is noteworthy that the economic perceptions and views of managers about the above conditions have a considerable impact.

In the present study, views and scientific theories of paying cash dividends and stock turnover are examined.

Conceptual Framework and Literature Review:

Conceptual Framework for Research:

Definition of Profits:

Profit is defined from different perspectives and based on this requires specific concepts, and this leads to different approaches presented for defining the profit.

In general, an increase in wealth which means an increase in the net assets of a profit-making unit in a fiscal period due to trading operations and financial event is defined as profit.

Considering the definition of profit, two approaches (theory) has been proposed as follows:

- a) approach (theory) of preserving capital
- b) approach (Theory) of transaction

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- a) Theory of preserving capital
- b) According to this theory, the first capital of a profit unit should be obtained at the end of the retention period in addition to the resources. The two competing views have been proposed here:

1) Theory of Preserving the Financial Capital:

In this theory, capital is synonymous with the net assets based on the amount of money that has been invested. The amount of money invested at the beginning, which must be preserved at the end of two periods is measurable by 1) the nominal value of money, 2) the purchasing power of money.

2) Theory of Preserving the Physical Capital or Production Capacity:

In this theory, capital is synonymous with the potential to produce goods or services, the capital is maintained if the capacity to produce goods or services for profit in one unit of time remains protected.

Theory of preserving capital links the two concepts of capital and profit and in fact the concept of profit is considered from the perspective of economics.

b) Approach (theory) of Transaction:

Unlike the theory of capital preservation, the income source components are reported in detail, such as revenues, expenses, operating income and non-operating income.

Considering the above fact, this theory has given way to report income, but if we consider the definition of profit, it means the difference between revenues and costs

$$\text{Cost} - \text{Income} = \text{Profit}$$

According to economic changes in society's wealth, the gross domestic product represents the profit (wealth) but according to the accounting profit is defined as the difference between income and interest expense.

Cash Dividend Stocks:

Generally the existence of profit, the company's cash available to pay dividends, the approval of the General Assembly or the suggestions of the board of directors are the most important factors in cash dividends payment of shares. The most common form of the distribution of the profit is cash dividend payment in which immediately after the announcement by the Board of directors and the approval of the General Assembly the entity is required to pay the dividend.

The Reasons for the Payment of Cash Dividends:

Companies pay dividends for various reasons some of which include:

- 1) Dividend provides stable income for shareholders so that by size of dividends they can adjust their living expenses.
- 2) Investors and buyers of securities focus on reports and annual dividend news
- 3) changes in the dividend may contain useful information for investors
- 4) If shareholders have become accustomed to paying cash dividends then it will cause some problems if the profit is stopped at once.
- 5) Inflation causes the current benefit to be more valuable than receiving it in future.
- 6) Lack of interest payments may encourage competitors to the offensive propaganda against the company.
- 7) Shareholders obtain their investment through profit or profit expectations for the return on to get the chance to sell their shares at a higher price.
- 8) If the amount of the tax is lower compared to taxes on dividends or interest on shareholders' equity often is with the tax breaks, it encourages companies to pay dividends.
- 9) Sometimes tax expenditures and transfers of shares of shareholders who need to sell their shares imply paying dividends.
- 10) Some of the business and tax regulations stop companies from accumulating unnecessary and excessive dividends.

Different views in Relation to the Payment of cash Dividends and Stock Turnover:

The views expressed on interest payments can be divided into two schools of thought including:

First school: the school of incomplete market which is a combination of four approaches: traditional approach, Walter Model, Gordon Model and Radical approach. Followers of this approach believe that paying dividends affects the share value. Some of the followers of this school believe that paying less profit and financially supporting the project from internal sources is better than paying more profit and supporting the project from external sources.

Some of other followers of incomplete market suggest that the profit units should pay a lot of share even if they have to distribute and sell the new shares. They think that the shareholders earn their living by the dividends and reduction of income leads them to sell the shares and bear the related costs. In addition, based on

the reasoning of this group the profit units can pay the profit to show their ability in obtaining cash and supporting the revenues. In sum, this group believes that receiving ordered profit guarantees the less risks than obtaining the profit by the shareholders. Regardless of reasoning more or less cash dividend payment the incomplete market theory focuses on this subject that because of pleasing costs of stock exchanges profit units ought to follow a stable policy in cash dividend payment.

Second School: it is the school of complete market and is based by Miller and Moudiliani. Accordingly, paying the profit do not affect the share value and is unrelated and insignificant.

Followers of this school believe that the costs of financial support from internal sources and external ones are the same and so the amount and type of the investment of a profit unit is not related to the related financial source. In each financial period the profit units can select proper policies and provide any needed cost more than the internal sources through distributing the shares (bonds).

According to this theory, in markets where the cost of trading the bonds and tax do not exist, paying the profit is not necessary.

They also state that the cost of trades is not so much and other factors in the incomplete markets can be ignored, too.

Background:

Researches Inside the Country:

Pourebahimi and Khosroshahi studied the relationship between the percent of shared profit and the volume of the trades related to 145 company members of Tehran Stock Market by multivariate linear regression and finally concluded that there is no significant relationship among the variables.

Aghaiee and Mokhtari, studied the effective factors on decision making of the investors and concluded that in deciding to buy shares which has a close relationship with the volume of traded shares and financial factors including paying the profit and profit for each share. However, the importance is less than the changes in the cost of the shares. In addition, it is shown that 90.5 percent of the investors prefer to invest in a company in which the profit of the share is paid regularly. So, decision making is affected by the cash value of the share.

Researches out of the country:

Based on the studies on this topic, various articles and researches have been obtained that are somehow similar to the topic of the present study including the studies of Beaver, Fleider, Holthausen&Verrecchia, Varian, Brown&Jennings, Crishman, Ying which were mostly related to the views about paying profit and how it affects the share trade.

Sowa (2006) studied the hypothesis of the effect of paying cash profit on the Stock market of Germany and his finding indicated that decreasing the cash profit does not show any information about the future performance of the company but his findings does not confirm evidence showing that increasing the cash profit gives some information about the future function of the company.

Beaver believes that the volume of the trades reflects the personal thoughts of the traders and in other words, the difference in the reactions of the traders is due to the difference in their personal information. Now, the information related to the profit is important for those who have less personal information and so are more affected by probable harms to their information. The total volume of share trades reflects the differences in the reaction of the traders.

Based on a research by Fielder in 1984, and Vorkai and Holtojen in 1990, it is believed that the volume of the trades is increased against the difference in information interpretation due to paying cash to the investors.

In Varian Analysis in 1985, it is assumed that the volume of the trades is related to the differences in previous beliefs.

Brown and Jenings and Krishman in 1987 used the two-period model. This model should not be interpreted completely. Although this model develops the thoughts of researchers about how paying profit affects the trade volumes though the differences in personal information.

Beaver in 1986 in his article stated that:

Changes in reactions to the costs is accompanied by the changes in ideas of the traders due to paying the profit, while the effect of profit on trade volume shows the total difference in reaction of the traders. He does his research with a perfect style and strong hypothesis and although the results are clear, and it does not seem that there is a need for simplifying the hypothesis related to that. The main result of the article was that the volume of the significant trades is a less index for information variable.

This article shows that the difference among the accuracy of the investors in share is like a potentially important factor influences the volume of the trades compared to the change in the costs. This can be important in other financial at accounting issues which are related to the quality of information by the investors.

Ying's Researches on the Volume of Exchanges:

Ying used the standard and Poors index and in combination of the share cost of the 500 companies in New York Stock market and considered the daily trade volume but faced two main problems including:

- 1) The cost of the share may change by dividing the shares.
- 2) Increasing or decreasing the share volume may be due to the number of the shares in the market so, he modified his information in this way:

1. He divided the share cost on the profit dividend of the shares which were announced in three months in New York.

2. The volume of the daily trades were divided by the all the shares of the day.

Since the above mentioned corrections caused lowering the numbers the number logarithm was used and then the variables (below) were defined for his research.

The last standard and poors index in a day that is modified by the profit sharing index: $P_{(t)}$

The volume of share trades in a day that is modified by the profit sharing index in the market: $V_{(t)}$

Logarithm of the $P_{(t)}$ above

Logarithm of $V_{(t)}$ above

Then the following variables were defined

$$DlogP_{(t)} = \log P_{(t)} - \log P_{(t-1)}$$

$$DlogV_{(t)} = \log V_{(t)} - \log V_{(t-1)}$$

His information were related to the daily hours of the New York Stock market form January 1957 to December 1964 and included 1500 working day and the following hypotheses were proposed:

H1: $\log V_{(t)}$ never affects the $DlogP_{(t)}$

H2: $DlogV_{(t)}$ never affects the $DlogP_{(t)}$

H3: $DlogP_{(t)}$ never affects the $DlogP_{(t+1)}$

H4: $D \log V_{(t)}$ never affects the $DlogP_{(t+1)}$

H5: $\log V_{(t)}$ never affects the $DlogP_{(t+1)}$

In order to test the hypotheses 1 and 2 an agreed table of 5 *5 was formed and the information related to each variable was divided into 5 categories and then other hypotheses formed a 3*3 table and then the hypotheses were tested through these tables. Table 1 is an example of his agreed tables.

Table 1: Ying Agreed Table.

Class		DlogP(t)					Total
		1	2	3	4	5	
$\log V_{(t)}$	1	46	80	105	53	25	309
	2	70	81	90	62	42	345
	3	46	47	76	66	44	279
	4	36	40	58	65	57	256
	5	34	46	80	82	69	311
	Total	232	294	409	328	237	1500

The first and second hypotheses of his research were rejected and then he concluded that:

1. Reduction in exchange volume is usually accompanied by a slight reduction in costs
2. A significant increase in the exchange volume is usually accompanied by increase or decrease in the share cost.

Significance of the Study:

The selected topic is one of the useful topics in the field of financial management. Now, a lot of researches are done in this filed every year. In addition, since the profit ratio is one of the indexes and factors of the users of the accounting information and so the results of the present research can be practically used to answer a lot of questions.

Investment in the stock market especially the share of the companies is done with the aim of obtaining profit and since these types of exchanges need the evaluation of the condition and state of every company, so investors tend to decide with the public information.

The present research is significant since the results of it can be used as a useful index. In addition, the results of this research are a guide for determining the proper index by Tehran Stock Market and provide the proper information for investors to decide.

Research Hypotheses:

In this research, the effect of cash profit on the exchange volume of the companies accepted in Tehran Stock Market is studied. Generally, the topic is studied that if the exchange volume of the tested companies which paid the cash profit during the years 2008 to 2010 has affected the volume of the exchanges or not?

Following research hypotheses are suggested:

H0: there is no significant relationship between the cash paid of the tested companies and the volume of the exchanges during the years 2008 to 2010.

H1: there is a significant relationship between the cash paid of the tested companies and the volume of the exchanges during the years 2008 to 2010.

Research Variables:

Two main concepts are considered in this research which is analyzed by the researcher in forms of dependent and independent variables.

5.1. Dependent variable: paying the cash profit according to the article 90 of the Iran trades laws are those confirmed in the general assembly of the shareholders to be divided which is obtained by dividing the number of the companies and profit and is to be distributed immediately, but the companies can postpone paying the cash for 8 month if some financial problems occur.

5.2. Independent Variable: the exchange volume includes the number of shares that are paid in a time interval in Tehran Stock Market.

Population:

Population of the present research includes all the companies accepted in Tehran Stock Market from 2008 to 2010.

First: they had distributed the shares periodically among the shareholders.

Second: there have been exchanges among them during the mentioned years.

Third: companies that have necessary information and so the companies with no information are omitted from the samples.

So the population of the present study includes the 68 companies which have all the above mentioned conditions.

Research Method:

In this research the deductive- inductive method and regression, correlation and SAS and STATISTICA are used to study the research variables.

Research Findings:

Descriptive Statistics of the main Research Variables:

In this part, in order to summarize the data and knowing the most of the variables, the descriptive findings such as mean, median, standard deviation are provided in the following table.

Cash Profit:

In this section a summary of the results related to the descriptive indexes are reported for the cash profit in Rials from 2008 to 2010.

Table 2: statistical indexes related to cash profit in Rials for each share in a year .

Statistical index variable	volume	total	mean	min	max	SD	Change coefficient
Cash profit	68	477120	7016/5	959	26475	4510/4	0/64

Table 2 shows that the cash profit in rials of the 68 companies has the average of 7016.5 and standard deviation of 4510.4 which the least cash profit is related to the company that have the cash profit of 959 rials for each share and the most cash is related to the company that have 26475 rials for each share. The distribution coefficient is 0.64.

Now, descriptive findings of the cash profit of the companies are studied per year.

Table 3: the statistical indexes of cash profit in Rials for each share per year.

Statistical index year	N	total	Mean	min	max	SD	Changes coefficient
2008	68	99143	1458/0	150	10167	1409/2	0/97
2009	68	87610	1288/4	100	4660	870/1	0/67
2010	68	100073	1471/7	31	6000	1059/3	0/72
2011	68	97096	1427/9	100	5950	1155/4	0/81
2012	68	93198	1370/6	32	7700	1344/5	0/98

According to table 3 it is seen that the highest profit per share is related to the year 2010 with 10073 Rials. However, the least profit per share is related to the year 2010 with 31 rials. The least total cash profit per share is related to the year 2009 with 87610 rials and the least and highest of cash paid per share was 100 and 4660 respectively. The highest cash profit paid compared to these years is related to the year 2008 with 10167 rials. In

addition, the lowest cash profit was for 2009 with 0.67 percent which indicates the least cash profit distribution per share in 2009 and the most distribution for 2012 with 0.98 changes.

Share Exchange Volume:

First a summary of the results collected related to the descriptive index for the years 2008 to 2012 are presented in table below.

Table 4: the statistical index related to share Exchange volume.

Changes coefficient	SD	max	min	mean	total	N	Variable / Statistical changes
1/40	16949717/1	92781625	377566	12102751/5	822987103	68	Exchange volume

Table 4 shows that the exchange volume of 68 companies has the average of 121.2751.5 and standard deviation of 1649717.1 which the least exchange volume is related to the company that has the exchange volume of 377566 rials for each share and the most exchange volume is related to the company that have 292781625 rials share. The distribution coefficient is 1.40.

Now, descriptive findings of the exchange volume of the companies are studied per year.

Table 5: the statistical indexes of exchange volume in Rials for each share per year.

Statistical index year	N	Total	mean	min	max	SD	changes coefficient
2008	68	116803079	1717692/3	244	32341821	4586102/9	2/67
2009	68	95882487	1410036/6	5720	11480431	2129478/1	1/51
2010	68	191041865	2809439/2	5477	45587577	6102975/6	2/17
2011	68	223301773	3283849/6	5800	35443303	6353398/9	1/93
2012	68	195957899	2881733/8	17928	29906290	5048585/1	1/75

According to table 5 it is seen that the highest exchange volume per share is related to the year 2011 with 2233.1773 Rials. However, the highest cash profit for each share with 10073 rials was in 2010, the least total exchange per share is related to the year 2009 with 95882487 rials and the least and highest of cash paid per share was 5720 and 11480431 respectively. The highest cash profit paid compared to these years is related to the year 2010 with 45587577 rials. In addition, the lowest change coefficient was for 2009 with 1.51 percent which indicates the least exchange volume distribution is in 2009 and is coherent with the findings of cash profit for each share in 2009 and the most distribution for 2008 with 2.67 changes coefficient.

Testing Research Hypotheses:

After descriptive statistics, and accounting the distribution of variables in this study first the hypotheses are explained and then by using the statistical techniques, each hypothesis is studied.

The results of the main Hypothesis:

The main research hypothesis is defined as:

“There is a significant relationship between the cash profit payment by the sample companies during the years 2008 to 2010 and their share exchange volume”.

The sum of cash profit paid in 2008 to 2010 are used for studying this hypothesis and based on the results of the statistical techniques, the hypothesis will be accepted or rejected.

The hypothesis can be shown as:

$H_0 : \rho = 0$ Main hypothesis is rejected

$H_1 : \rho \neq 0$ Main hypothesis is approved

In other words:

H0: there is no significant relationship between the cash profit paid per share and exchange volume of Tehran Stock Market.

H1: there is a significant relationship between the cash profit paid per share and exchange volume of Tehran Stock Market

The formula is shown below:

$$t = \frac{r\sqrt{n-2}}{\sqrt{1-r^2}}$$

1)

In which n is the sample volume and r is correlation coefficient (Pearson) calculated as below:

$$r = \frac{\sum_{i=1}^n \sum_{j=1}^n (x_i - \bar{x})(y_j - \bar{y})}{\sqrt{\sum_{i=1}^n (x_i - \bar{x})^2} \sqrt{\sum_{j=1}^n (y_j - \bar{y})^2}}$$

2)

According to the description mentioned above first, the correlation coefficient is calculated and then the significance of this coefficient is studied by t-test.

Table 6: The relationship between the total cash profit paid for each cash and the sum of the exchanges in the sample companies in Tehran Stock Market.

variable	mean	SD	N	correlation Coefficient	t statistics	P-Value
cash profit per share	7016/5	4510/4	68	-0/19	-1/60	0/115
Exchange volume per share	12102751/5	16949717/1				

As can be seen in table above, Pearson correlation Coefficient for the variables is -0.19 which is based on the P-value of 0.115 bigger than 0.05, the null hypothesis of significant relationship between the cash profit of each share and total exchanges is not rejected at 5 % significant level.

So, according to the above mentioned results with 95 confidence percent, we can say that:

“There is no significant relationship between the cash profit of each share and total exchanges during the years 2008 to 2010 in the sample companies accepted in Tehran Stock Market”.

So due to lack of linear relationship among the variables, it cannot be claimed that by increasing or decreasing one of two variables, the total cash profit and the volume of the share exchanges can be changed.

Results of Testing Secondary Hypotheses:

Based on the results of the main hypotheses, we want to study if there is a significant relationship between the cash profit paid per year and the exchange volume. So, the following tables report the result of studying the secondary hypotheses.

Table 7: the relationship between the cash profit and total of exchanges in the studied companies.

years	variable	Correlation coefficient	t statistics	P-Value
2008	cash profit per share	-0/14	-1/13	0/264
	exchange volume per share			
2009	cash profit per share	-0/11	-0/93	0/356
	exchange volume per share			
2010	cash profit per share	-0/16	-1/29	0/203
	exchange volume per share			
2011	cash profit per share	-0/17	-1/37	0/175
	exchange volume per share			
2012	cash profit per share	-0/14	-1/15	0/252
	exchange volume per share			

As can be seen in table 6 there is no linear significant relationship between the variables of the total cash paid per share and the total of the exchange volume in the companies listed in Tehran stock market. Now, according to the results of table 7, this hypothesis is defined per year and the same results are seen. In other

words, it can be seen that with 95 percent confidence there is no linear significant relationship between the cash profit and the exchange volume during the years 2008 to 2010.

Results and Discussion:

The policy of sharing the profit is one of the most important managerial issues and cash profit is a significant cash flow for most of the companies. In other words, deciding about cash profit payment and its amount is important in financial section of a company since this can affect the amount of cash paid as the profit to the investor and the amount of cash saved for re investing. It is shown that there is no relationship between the announcement and paying cash profit and the exchange volume of the companies /firms listed in Tehran Stock Market. So, cash profit payment should not be the only factor of investing in economic activities.

REFERENCES

- [1] Aghaiee, M., O. Mokhtarian, 2005. The study of the factors affecting the decision making process of the investors in Tehran Stock Market, *Accounting and Financial Accounting*, 11(36): 3-25.
- [2] Azar, A., M. Momeni, 1999. *Statistics and its application in management*, SAMT publication, 1st editon, Tehran.
- [3] Charlcs, C. ying, 1960. Stock market prices and volumes of sales, *Econometrica*, 34(3).
- [4] Hampton, W., 2002. *Financial Management 1*, Hamidreza Vakili Fard, Fouj Publication.
- [5] Hejazifar, R., 1997. Study of the paying profit on the cost and volume of the exchanges in Tehran Stock Market, Ph.D. Thesis, Tehran Univesity, Faculty of business management
- [6] Jahanigir, M., 2004. *The business rules with last corrections and attachments*, Didar Publication.
- [7] Khahi, G., 2004. *Research Method and Thesis Writing*, 1st edition, Tehran, Baztab Publication.
- [8] Pourebrahimi, M., A. Seyed Khosro Shahi, 2012. study of percent of the dividend and exchange volume in companies/firms accepted in Tehran Stock Market, *Financial Reports*, pp: 15-30.
- [9] Reymond, N., 2009. *Financial management*, 2nd edition, translated by Ali Jahani and Ali Parsaiee, 12th edition, SAMT.
- [10] Taghaviee, Mahdi, 2003. *Financial Management*, Payam Noor Publication.
- [11] Tarizade, F., 2003. The effect of the difference between the ESP real expectation of the buyers and the sellers of the stocks in Tehran Stock Market, *Economics*, pp: 52-53.
- [12] Tehran Exchange Market, *Performance Report*, 2010.
- [13] Tehran Exchange Market, *Performance Report from 2008 to 2010*.
- [14] Wan Huan, J., 2001. *Financial Management*, translated by Mohsen Dstgir, 4th edition, SAMT.