



Identification and prioritization of effective factors on willingness of private investors to receive dividends

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Abstract. Purpose of this study is to determine the fact that what the belief of private investors about dividend policy is. In other words, this study by assuming that the factors affecting the willingness of investors to receive dividends in terms of importance are different, was examined. Also the effect of education, income, age of individual investors tend to get dividends on them were investigated. The present study is a Practical Research. The population studied in this research were all real investors who had invested in the Tehran Stock Exchange and of these, 300 were selected by simple random sampling, the findings were analyzed by SPSS software. In general, it was concluded that the level of education, income and age tend to effect on dividends received by individual investors. One-sample t-test results showed that according to the rating of Friedman: Factor of income, tax theory, the theory of choice between profit share or sale of securities of publishing company, agency costs and transaction costs, the greatest impact on the willingness of investors to receive their dividend.

Keywords: Stock Exchange, the theory of behavioral finance, investment, dividends, shareholder

1. INTRODUCTION

Mobilization and allocation of capital, has a very important role in the country's economic growth and development. Stock Exchange, is the most common way to mobilize and optimize the allocation of capital. By improving efficiency, Stock Exchange plays its role in achieving these goals better. By providing accurate and timely information to investors, the possibility of correct decision making is enabled for them. When the investor decides to invest in shares, the first problem he faces with the choice of which share to buy. Therefore, if information is available in a timely manner investors will not be confused and with confidence they can use this information to make decisions.

2. RESEARCH METHODOLOGY

Research Methodology is actually a set of processes that help to determine which data from where, how and by what means is collected. Because the present study investigates distribution of a statistical population's characteristics and questionnaire is used for data collection, is from collection of survey researches; and on the other hand, because it is looking for the relationship

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between the variables based on study purposes, assessing the effect of variables and assumptions is reviewed by SPSS software, it is also from collection solidarity researches.

2.1. Statistical population of research

Statistical population studied in this research, are all companies that have invested in the Tehran Stock Exchange. It should be noted that people should necessarily be the current owner of the shares on the stock exchange or that in the last three years have invested in the stock exchange. Note that the number of these people over time is variable and not fixed. The number of people in this study relates to the period of study.

2.2. Sampling method

The method used in this study is a simple random sampling, because this method is popular in descriptive studies and easy to do. The results also obtained from simple random sampling has functionality to generalize to the entire community. Thus, this method has a scientific value.

2.3. Determine the volume of sample

Determining the sample size, has extreme importance in building confidence and about the results and generalization of test results to the society. There are different methods for determining the sample size that the most accurate method, is mathematical method. Sample size is the total number of elements in the sample

2.4. Evaluate the reliability of measurement tools and data collection of study

A good test should have a number of desirable features such as objectivity, ease of performance, practicality, ease of interpretation, validity and reliability

2.5. Research questionnaire

Questionnaire as a common practice in survey research, contains a number of questions about measured parameters of population. These questions should by using special techniques and also scales to be designed in a way so that researchers by using them can gather desired information or find out through respondents' attitude.

Questionnaire consists of two parts as follows:

- General questions (characteristics responder): In general questions it has been tried to collect General information and demographics and ownership of the stock of respondents.
- Specific questions: This section consists of 32 questions. In the design of this section it has been tried to make questions of questionnaire to be understandable as possible. To design a set of five questions, one of the most common option Likert scale that is a range from strongly agree to strongly disagree was used

Table 1: Valuation of likert spectrum.

Completely agree	agree	Not sure	Disagree	Completely Disagree
5	4	3	2	1

3. CLASSIFICATION AND DATA ANALYSIS

3.1. Descriptive statistics

In this section we discuss descriptive statistics of study

Table 2. Frequency Distribution of gender.

Gender	Abundance	percent	Valid percent	cumulative percentage
male	162	53/8	54	54
female	138	45/8	46	100
total	300	99/7	100	100

According to the statistics shown in the table above, approximately 54% of the 300 respondents are male and about 46 percent of them are female.

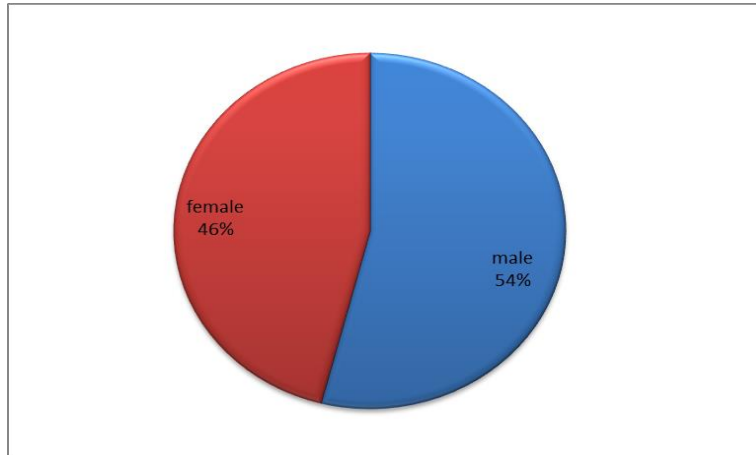


Diagram 1. Frequency Distribution of gender.

Table 3. Frequency Distribution of age.

Age range	Abundance	percent	Valid percent	cumulative percentage
Under 50 years	232	77/1	77/3	77/3
Over 50 years	68	22/6	22/7	100
total	300	99/7	100	100

According to the results of this table, about 77 percent of respondents are under 50 years of age and about 23 percent of them are over 50 years old.

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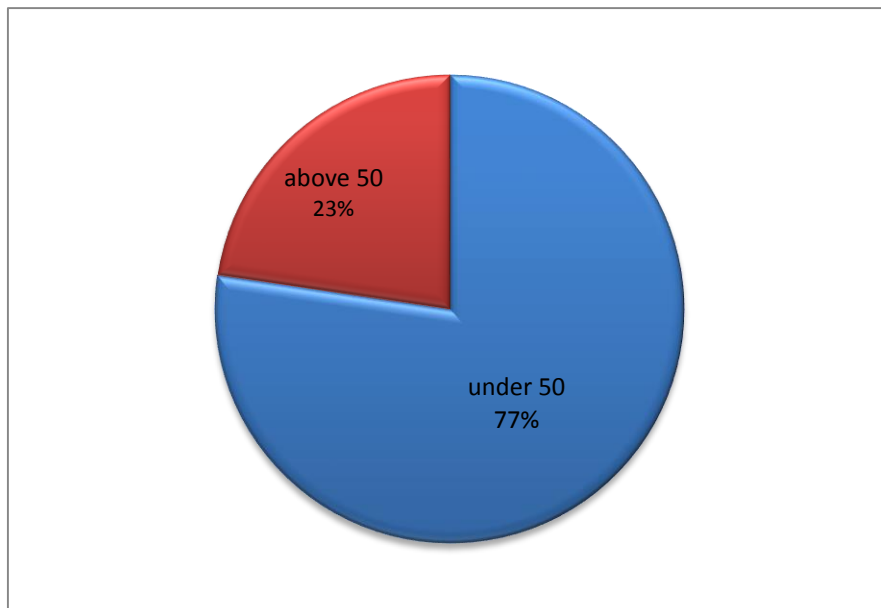


Diagram 2. Frequency Distribution of age .

Table 4. Frequency Distribution of university education.

Educational status	Abundance	percent	Valid percent	cumulative percentage
With education	224	74/4	74/7	74/7
Without education	76	25/3	25/3	100
total	300	99/7	100	100

According to the table above, 74% of respondents have a college degree and 25 percent of them do not have a college education.

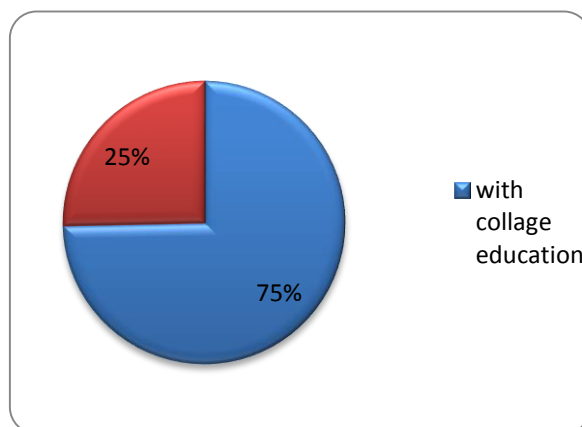


Diagram 3: Frequency Distribution of university education

Table 5. Frequency Distribution of income

State of income	Abundance	percent	Valid percent	cumulative percentage
Under 2 million tomans in month	157	52/2	52/3	52/3
above 2 million tomans in month	143	47/5	47/4	100
total	300	99/7	100	100

According to the information table, of the 300 respondents, about 52 percent have incomes below 2 million (low income) and 48% of those are with income above 2 million (income).

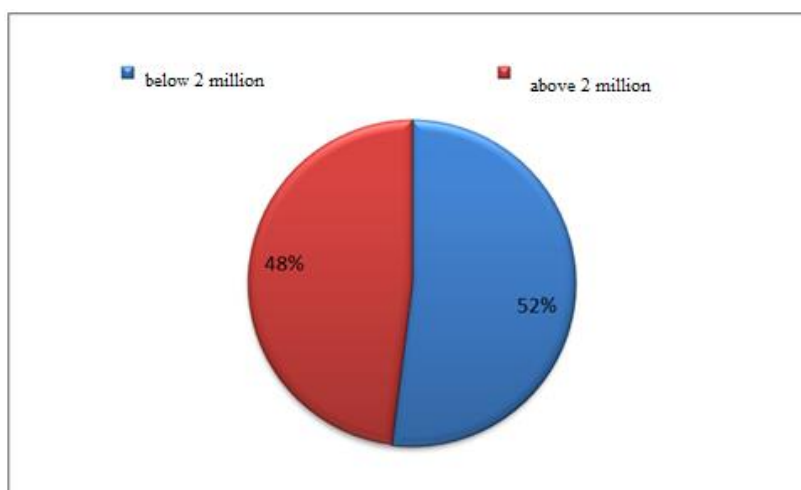


Diagram 4. Frequency Distribution of income.

Table 6. Frequency Distribution of share ownership in the last three years.

share ownership in the last three years	Abundance	percent	Valid percent	cumulative
has been a share owner	212	70/4	70/7	70/7
has not been a share owner	87	28/9	29	99/7
No reply	1	0/3	0/3	100
total	299	99/7	100	100

According to the table above, 70% of respondents, in the last three years have had share and 29% had no share.

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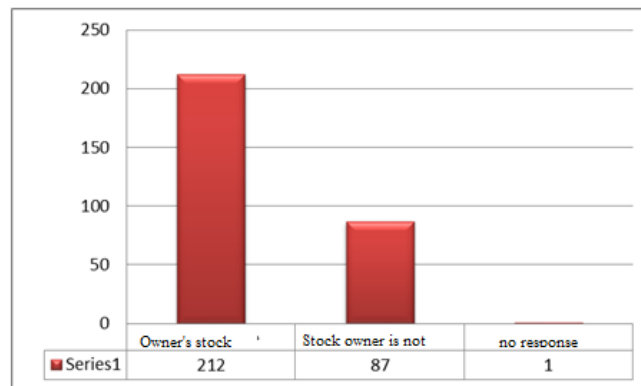


Diagram 5. Frequency Distribution of share ownership in the last three years.

3.2. Inferential statistics

3.2.1. Cronbach's alpha

Cronbach's Alpha is a coefficient, which reflects positive correlation of the members of the collection to each other. Cronbach's Alpha is calculated based on average internal consistency among the questions that are in one concept. The closer the index is to 1, meaning higher internal consistency and homogeneity would be. Alpha coefficient calculated in this study between the different items is listed below.

Table 7. Cronbach's Alpha of items.

Items	Cronbach's Alpha
Dividend irrelevance theory	0/72
Transaction costs	0/83
Resolution of uncertainty	0/75
less impact from accounting manipulation	0/85
Free cash flow	0/80
Agency costs	0/76
Signaling theory	0/75
Choose between profit share or the sale of the company	0/87
Income taxes	0/75
Behavioral Finance	0/72

Due to the fact that amount of Cronbach's Alpha for validity of the questionnaire is equal to at least 7.0 and all items have standard rate of alpha, so it can be said that the questionnaire has minimal sufficient reliability

3.2.2-Test of average of a society (T single-sample)

Test of average of a community-based distribution of T, is a parametric test where the subject is that average population is how much more or less than a fixed amount. This test since we are dealing with one variable is used to test hypotheses. For this test, we assume the average obtained for each variable in a sample's T-test must be equal to or greater than 3

$$\begin{cases} H_0 : \mu = 3 \\ H_1 : \mu \neq 3 \end{cases}$$

Table 8. Descriptive statistics of variables

amount	average	Standard Deviation	the average of standard error	Hypothesis
300	3/3167	0/75385	0/04352	Dividend irrelevance theory
300	2/3950	0/91338	0/05273	Transaction costs
300	3/3911	0/57606	0/03326	Resolution of uncertainty
300	3/1333	0/61927	0/03575	less impact from accounting manipulation
300	3/8656	0/62053	0/03583	Free cash flow
300	2/4617	0/90946	0/05251	Agency costs
300	2/5142	0/81145	0/04685	Signaling theory
300	2/4883	1/01281	0/05847	Choose between profit share or the sale of
300	2/4600	0/85391	0/04930	Income taxes
300	3/1692	0/49615	0/02865	Behavioral Finance
300	4/2117	0/47972	0/02770	age
300	3/4350	0/80857	0/04668	education
300	3/7767	0/89412	0/05162	income

According to the table above, the average obtained for the theory of Modigliani and Miller is equal to 3.31 that due to average being greater than number 3 and also due to the significant level of appropriate, H1 assumption is rejected, and H0 assumption is confirmed meaning that Miller and Modigliani's theory affect the willingness of shareholders to receive dividends

3.2.3. Test of friedman rating

Friedman test is a nonparametric test that to compare three or more than three dependent groups that at least are measured in the ratings level are used. This test can also be used in continuous data (distance or relative). But when calculating the data their rating is considered. Friedman test is equivalent to non-parametric test of dependent F is analysis of variance of repeated measures. In this case for implementation of variance analysis of repeated measures there is no necessarily of assumptions such as normality, equal variance and scale being continuous. So in analysis of variance of repeated measures if one or all of basic assumptions are rejected Friedman test is used. In this test the null hypothesis states that the distribution of the observations are the same in repeated measures.

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Table 9. Test of rankings of Friedman.

Hypothesis	average Rating
Dividend irrelevance theory	8/53
Transaction costs	5/29
Resolution of uncertainty	9/08
less impact from accounting manipulation	8/05
Free cash flow	11/04
Agency costs	5/41
Signaling theory	5/42
Choose between profit share or the sale of	5/36
Income taxes	5/42
Behavioral Finance	7/91
age	12/48
education	8/53
income	5/29

Table 10. Friedman test.

Friedman test	Amount	K two	Degree of freedom	Significant level
	300	1/924	13	0/000

In Friedman test factors that have lower ratings than the average have higher impact. Graphical representation of Table 9 is shown in diagram 6.

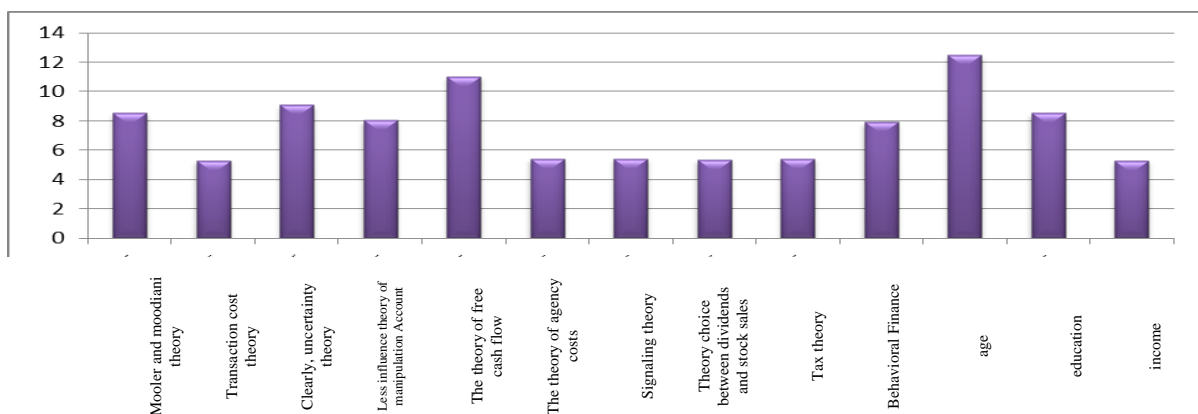


Diagram 6. The results of the ranking of Friedman.

According to the rating of Friedman factors of income, tax theory, the theory of choice between profit share and sale of share to publishing company, agency costs and transaction costs have the most impact on the willingness of investors to receive dividends.

4. DISCUSSION AND CONCLUSION

In this section, the results obtained in the previous sections are presented in the form of inferential statistics. The results of the relationship between the variables are expressed as well.

4.1. Summary of descriptive statistics

In terms of gender, 54% of 300 respondents were male and 46% female. In terms of age, about 77 percent of respondents were under 50 years of age and about 23 percent of them were over 50 years old. In terms of education, 74% of respondents have a college degree and about 25 percent of them were with no college education.

In terms of income, of 300 respondents, 52 percent of them had income below 2 million (low income) and 48% of them were with income above 2 million (high income) And finally, 70% of respondents had share in the last three years, and 29% have had lack of share

4.2. Conclusion of inferential statistics

4.2.1. The results of cronbach's alpha

Due to the fact that minimum amount of Cronbach's alpha for validity of the questionnaire is 7.0 and all items of theory of Miller and Modigliani, Transaction cost theory, the theory of Resolution of uncertainty, the less influence the manipulation of accounting theory, free cash flow theory, the theory of agency costs, signaling theory, the theory of choice between profit share or sell shares to the company release, the theory of taxation, finance behavioral had standard alpha. So we concluded that questionnaire has the minimal sufficient reliability.

4.2.2. Friedman test results rankings

According to the rating of Friedman factors income, tax theory, the theory of choice between profit share and sale of shares to the publishing company, agency costs and transaction costs have the greatest impact on the willingness of investors to receive their dividend.

4.3. Proposals

For future studies the following cases are recommended:

- Implementation of national-level research and comparison between different companies and in different cities in order to examine the relationship between variables of study in comparative mode.
- Evaluation of confounding variables affecting the relationship between the variables of the study in order to improve results.

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