

# Presenting a profit forecasting model based on behavioral tax of companies listed on the Tehran Stock Exchange

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## Abstract

The purpose of this study was to provide a profit forecasting model based on the behavioral tax of companies listed on the Tehran Stock Exchange; Research method in terms of purpose, basic-applied in terms of data type, quantitative; Depending on the time of data collection, it was a combination (time series and cross-sectional) and according to the method of data collection or the nature and method of research, survey and library. The statistical population of the first part of the study included all companies listed on the Tehran Stock Exchange. To determine the samples of this part of the research, a systematic sampling method was used, which was finally selected as a sample by applying the desired filters to 120 companies. The second group of the statistical population of this study included all investors in the Tehran Stock Exchange who were selected using the cluster random sampling method and the Cochran Orkut formula of 385 people as a sample. Modern Rahdavar and Tadbiardazar database software and the distribution of researcher-made questionnaires based on standard questionnaires were used to collect the data. In the inferential and quantitative sections, we used two models of data panel regression and structural equations to answer the research questions. The results showed that behavioral variables such as management overconfidence, stock price information efficiency, stock price synchronization, information efficiency, reluctant effect, mass effect, emotional bias, cognitive bias and exponential bias Corporate profits are effective Also, indicators of economic confidence and information reliability affect the interaction between behavioral decisions and corporate profits.

Keywords: Behavioral Finance, Profit, Mass Behavior, Overconfidence.  
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## 1 Introduction and Statement of the Problem

The topic of behavioral sciences in the field of finance and investment is one of the new topics that have recently been raised in investment and finance sciences. The issue of behavioral finance has been the most important financial debate in the last two decades, and the attention of financial and economic researchers in this field is increasing. In the financial and economic field in general and investment in particular, they considered the right way to maximize equity (or sometimes profit) to go through rational decision-making. The theory of rational decision-making claims that decision-makers create different strategies and look for specific logical methods to solve problems according to the type of problem, time and environment of decision-making. Eugene Fama's findings about efficient markets paved the

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way for this thinking and increased the power of spreading this view in the world. After the efficient market hypothesis was proposed in the 1960s, much research has been conducted on these assumptions and their ability to explain capital market trends. The theory of traditional finance in the efficient market is based on (EMH) and believes that stock prices can fully reflect all relevant information in the financial market, so public investors cannot generate abnormal returns through information analysis get public [1]. By the late 1980s, some behavioral researchers realized that the EMH could not fully explain the market phenomenon, even though investment decisions were not fully rational. When investors are faced with unfavourable conditions (confusion) for their interests, they make different decisions. They may follow the recommendations of professional investors or gather relevant information to generate profits from favorable investment decisions [9]. In general, if the investor's decision-making process is in accordance with the logical path that includes the identification method, the demand for financial products and the evaluation of alternatives, such an investment will be considered logical. In addition, according to the practical observations of the behavior of individual investors, investors themselves usually have the ability to understand rationality. Because investors consider their company's commercial announcement or process selection as a rational decision-making behavior, the performance of many investors still apparently shows behavioral biases. According to prospect theory, investors will sell stocks in order to cash in on investment gains, but they may prefer the risk of owning a stock rather than selling the stock for a loss, which is called the propensity effect [13]. In addition to the propensity effect, there are other types of investment biases. For example, if investors overestimate their ability to make accurate predictions, they may be considered highly confidential. Also, investment biases can lead to a decrease in return on investment [6]. Mass behavior is another behavioral bias that exists among investors, in this type of behavior, investors use market signals or the ideas of professional investors as the basis of their decision-making [4]. Therefore, the effects of investment biases should be one of the biggest concerns of individual investors. With the rule of the behavioral financial paradigm and the challenging of standard financial theories due to their inability to explain the anomalies observed in the capital market, studying and researching the behavioral and psychological issues of investors has gained special importance, because according to the experts and according to experts in this field, the main cause of such anomalies in the capital market is the behavioral and psychological issues of investors. Based on this, in recent years, extensive studies have been conducted on various behavioral issues in the stock markets of the world. In the mentioned research, the different behaviors of investors that can somehow affect the performance of the market and its efficiency are scientifically studied and investigated. Before the introduction of behavioral finance in financial management and economics, the behavior of investors in the capital market was interpreted based on the theory of economic utility, while numerous scientific investigations and research in the field of behavioral finance determined the importance of psychological factors. Although the theories of behavioral finance are new and their history goes back a decade ago, the issue of the involvement of psychological and behavioral characteristics of people in purchasing decisions goes back to earlier periods. Therefore, in the present study, we are looking for an answer to the question, what model for predicting profit based on behavioral finance can be presented in the Tehran Stock Exchange?

## 2 Literature and Research Background

Behavioral finance is related to the influence of psychology on financial and market decision making. The volume of literature on behavioral finance has expanded significantly over the past decade. In this field, the concepts of financial economics and psychology are integrated in order to create more accurate models of human behavior in financial markets. When investors remain in uncertain conditions, or when the forecast level is low, they prepare themselves for unwarranted beliefs that may cause them to remain and even progress in such an environment [15]. According to Linter, behavioral finance studies how to interpret and act on the basis of information to make structured investment decisions by individuals [11]. According to Olsen, behavioral finance does not try to define rational behavior or decision-making as biased or condemned behavior, and its purpose is to understand and predict the consequences and systematic effects of the financial market from psychological decision-making processes (Olsen, in other words) Behavioral finance seeks to influence psychological processes in decision making. Shefrin states that: "Behavioral finance is the study of how psychology affects financial decisions and financial markets" [13]. In general, it can be said that behavioral finance is a combination of classical economics and finance, with psychology and decision-making science, which seeks to explain and describe unusual phenomena observed in the financial field [2].

The theory and method of calculating the company's profit is at the center of management and financial accounting literature. Despite the number of articles on profit measurement and calculation methods, the "profit concept" is still subject to various interpretations, and each school of thought claims that it is superior to other schools from a theoretical point of view. Basically, regarding the better or more accurate calculation of company profit. There are four schools of thought:

**The school of classics:** which is characterized by observing the assumption of the unit of measurement as a self-evident matter and observing the principle of historical price. This method is called historical cost accounting or traditional accounting. The classical school considers the accounting profit as the profit of the company.

**Neoclassical school:** its characteristic is to pay attention to the change in the general level of prices and not to observe the assumption of the unit of measurement. In this method, the historical price principle is followed. The mentioned method is called accounting based on the historical price adjusted based on the general price level. In this school, the profit of the company is the adjusted accounting profit based on the general price level.

**Extreme school:** Its characteristic is the use of current value to calculate and determine value in two ways:

**Accounting based on present value:** financial statements based on present value do not adjust according to the change in the general price level. The profit of the company is the profit based on the current value.

**Current value accounting adjusted based on the general price level:** Financial statements based on the current value are adjusted according to the change in the general price level. The profit of the company is the adjusted current profit [7].

Shams et al. [14] investigated the effect of experience on risk-taking, overconfidence and collective behavior of managers of investment companies in Tehran Stock Exchange. The results of data analysis with univariate and multivariate ordinal probit and Tobit regression models show that there is an inverse significant relationship between managers' experience and risk-taking, and a direct significant relationship between their experience and collective behavior. Also, there is a relationship between experience and overconfidence. It differs based on the type of overconfidence, but in general, it can be said that there is an inverse significant relationship between experience and overconfidence. Khoshtaint and Nadi Qomi [10] investigated the relationship between overconfidence behavior and investors' returns. The results have provided weak evidence about the existence of the behavioral characteristic of overconfidence among the participants of the Iranian securities market. Mahzoun in a research titled investigating the relationship between individual, professional and personality characteristics, investigated the common behavioral tendencies among investors and capital market activists and determined the relationship between the identified tendencies and the individual, professional and personality characteristics of each of the subjects. The results of his research show that professional investors in financial institutions are not immune to the influence of behavioral biases in their decisions and specifically gender, age, level of experience, level of education, level of monthly income, level of wealth and personality type have a significant effect on showing Some systematic errors in judgment include overconfidence, illusion of control, mental accounting, self-control, optimism, self-confirmation after the fact, anchoring and adjustment and representation. Hockbart [5], in his research, concluded that managers who overestimate their profitability prefer issuing debt securities to issuing shares in cases of financing. Managers feel that the capital market has undervalued their stocks. In a study, Ishikawa and Takashipe [8] examined the relationship between managers' overconfidence and the choice of financing in Japanese companies. Their results show that overconfident managers prefer debt to issuing shares in the form of public and limited offerings. Glaser et al. [3], regarding overconfidence in professional and non-professional managers, showed that professional and experienced managers compared to non-professional and inexperienced managers in performing many of their tasks, especially identifying and recognizing trends, predicting fluctuation and change Share prices are more reliable.

### 3 Research methodology

The purpose of this research is practical research because the purpose of this research is to provide a model based on the behavioral finance of companies for companies admitted to the Tehran Stock Exchange. Also, the current research is an experimental research in terms of research type. According to the geographical scope of the research, the statistical population for panel data variables includes all the companies accepted in the Tehran Stock Exchange Organization, whose shares are traded in the main hall or the first market during 2009 to 2018, and at the same time, the sample member companies of the society. Statistics, taking into account the spatial and temporal scope of the research, are performed according to the following criteria:

1. have been admitted to the Tehran Stock Exchange at least since the beginning of the fiscal year 2018;
2. Sample companies should not be investment and financial companies (banks);
3. The sample companies have not been stopped during the years 2009 to 2018 so that the stock price is considered normal;
4. Companies whose fiscal year ends on March 29;
5. The financial year of the sample companies has not changed during the years 2009 to 2018;

6. The information needed for the research should be submitted and available to the stock exchange by the end of the fiscal year 2017.

The statistical population of the second part of the research, which is collected using a questionnaire, includes all investors in the Tehran Stock Exchange, and using the Cochran-Orcott formula, the number of statistical samples is over 385 people. To collect panel data, we use the latest Rehavard and Tadbir Pardaz softwares, and questionnaire tools are used to measure cross-sectional variables. The questionnaire used in this research is the questionnaire of Rostami et al. (tendency and mass effect) with 17 items, the gardening and recovery questionnaire (sensitivity disorders) with 13 items and the questionnaire of Hosseini (cognitive disorders and bias(iconography)) is used with 15 items on the five-point Likert scale.

## 4 Research model and variables

In the current research, the panel data regression model is used to provide the profit prediction model based on behavioral finance using panel data. The profit prediction model based on behavioral finance can be presented in the form of the panel data model below.

$$\begin{aligned} prof_{it} = & \alpha_0 Oc_{it} + \alpha_1 Resped_{it} + \alpha_2 rp_{it} + eci_{it} + \alpha_3 ini_{it} \\ & + \alpha_4 oc_{it} \times eci_{it} + \alpha_5 oc_{it} \times ini_{it} + \alpha_6 resped_{it} \times eci_{it} \\ & + \alpha_7 resped_{it} \times ini_{it} + \alpha_8 rpec_{it} + \alpha_9 rp_{it} \times ini_{it} + \varepsilon_{it} \end{aligned} \quad (4.1)$$

**Profit:** profit of companies

**OC:** Overconfidence

**res<sub>ped</sub>:** informational efficiency of stock prices

**r<sub>p</sub>:** Synchronization of stock returns

**eci:** economic confidence index

**in<sub>i</sub>:** information confidence index.

To measure management overconfidence, two virtual variables have been used. The first criterion is excess investment (OVERCON1); If the residual of the regression of total assets growth on sales growth is greater than zero, the number one is assigned and otherwise the number zero is assigned. One of the signs of optimistic managers is that compared to the company's sales, they make excessive investments in assets[16]. In this research, it will be used to measure the informational efficiency of stock prices using the method of Howe and Moscovitens. To measure the synchronization of stock returns, following the researches, first the regression model (4.2) is estimated using time series data for each year, for each company on a monthly basis:

$$RET_{i,\Theta} = \beta_0 + \beta_1 MRET_{\Theta-1} + \beta_2 MRET_{\Theta} + \beta_3 IRET_{\Theta-1} + \beta_4 IRET_{\Theta} + \varepsilon_{i,\Theta} \quad (4.2)$$

where:

**RET<sub>i,Θ</sub>** : return on the company's stock in the current month.

**MRET<sub>Θ-1</sub>** : market return in the current month (market return comes from the difference between the first index of the period and the end of the market period divided by the first index of the period).

**MRET<sub>Θ</sub>** : market return in the previous month.

**IRET<sub>Θ-1</sub>** : industry return related to the company in the current month (industry return comes from the difference between the first index of the period and the end of the industry period divided by the first index of the industry period).

**IRET<sub>Θ</sub>** : Industry performance in the previous month.

**ε<sub>i,Θ</sub>** : regression model error.

Regression (4.2) is performed by the number of years of participation for each year. Then, the synchronization of stock returns is calculated using the coefficient of determination of the above-proportional model (2):

$$SYN_{(i,t)} = \ln \left( \frac{R_{(i,t)}^2}{1 - R_{(i,t)}^2} \right) \quad (4.3)$$

where

**SYN:** Synchronization of the company's stock returns this year.

The coefficient determined from the regression (4.2) is for each year-company: R2.

To calculate economic certainty; Based on the factor analysis method, firstly, KMO and Bartlett's sphericity tests are used to check the appropriateness of the variables. To calculate the company's information reliability, the information quality assurance criterion is used. Assurance is the quality of the company's information, which is calculated using the residual model of McNichols[12].

## 5 Experience and data analysis

### 5.1 Descriptive Statistics

The table below presents the central and dispersion statistics of the research variables.

Table 1: descriptive statistics of research variables

Variable	Average	minimal	maximum	standard deviation
$prof_{it}$	2.743	0.418	4.816	0.842
$Oc_{it}$	0.417	0	1	0.605
$Resped_{it}$	3.816	0.824	7.428	0.387
$rp_{it}$	2.250	0.145	4.842	0.926
$eci_{it}$	7.265	4	16	3.426
$ini_{it}$	0.741	0	4.178	0.397
$oc_{it} \times eci_{it}$	0.163	0.006	0.261	0.433
$oc_{it} \times ini_{it}$	0.269	0	0.876	0.580
$resped_{it} \times eci_{it}$	1.048	0.054	6.887	0.617
$resped_{it} \times ini_{it}$	0.095	0.002	0.324	0.397
$rpeci_{it}$	0.341	0	0.881	0.346
$rp_{it} \times ini_{it}$	0.863	0.039	5.217	0.711

As can be seen, the descriptive statistics of the variables are indicative of the general situation of the research variables.

#### -Unit root test and stationarity of variables

In this research, Levin, Lin and Chu test was used to check the significance of the research variables, and the test results are presented in the following table:

Table 2: Levin, Lin, Chu's panel unit root test

Variable	Statistics of Levin, Lin, Chu	Probability value	Result
$prof_{it}$	7.263	0.000	Active on the level
$Oc_{it}$	12.943	0.000	Active on the level
$Resped_{it}$	10.558	0.000	Active on the level
$rp_{it}$	9.594	0.000	Active on the level
$eci_{it}$	8.627	0.000	Active on the level
$ini_{it}$	11.512	0.000	Active on the level
$oc_{it} \times eci_{it}$	13.675	0.000	Active on the level
$oc_{it} \times ini_{it}$	15.226	0.000	Active on the level
$resped_{it} \times eci_{it}$	9.325	0.000	Active on the level
$resped_{it} \times ini_{it}$	17.336	0.000	Active on the level
$rpeci_{it}$	8.434	0.000	Active on the level
$rp_{it} \times ini_{it}$	11.994	0.000	Active on the level

As it can be seen, the assumption of no mana has been rejected at the 95% probability level. Therefore, all the variables are at the level of Mana.

### -Chow's test (Limmer's)

With the help of eviews software, we performed the Chow test for the models, and the results are shown in the following tables: The value of the probability value indicates the rejection of the null hypothesis of using the pooling

Table 3: Chow test results

statistics	Probability value
8.516	0.00

model. Therefore, the data panel model can be used for the model.

### -Hausman test

The result of the Hausman test for the research model is as follows.

Table 4: The result of the hausman test

Model	Statistics X <sup>2</sup>	Probability value	Type of effect
First	5.491	0.000	Fixed effect

The result of the Hausman test for the models implies the rejection of the null hypothesis that the random effects are appropriate, and therefore the fixed effects model should be used to estimate the model.

## 5.2 Model estimation and interpretation method

The estimation results of the research model using the fixed effects model method are presented in the table below. The results show that there is a significant relationship between all the independent variables and the dependent variable (profit of companies) because their probability value is less than the standard value of 0.05%.

Table 5: Model estimation results

Variable	Coefficient	standard deviation	The value of the t statistic	Probability value
$Oc_{it}$	-0.416	0.348	-5.830	0.000
$Resped_{it}$	0.434	0.761	5.354	0.000
$rp_{it}$	0.511	0.259	6.472	0.000
$eci_{it}$	0.217	0.849	3.942	0.007
$ini_{it}$	0.367	0.330	5.341	0.000
$oc_{it} \times eci_{it}$	-0.147	0.518	3.107-	0.019
$oc_{it} \times ini_{it}$	-0.234	0.446	-4.076	0.004
$resped_{it} \times eci_{it}$	0.494	0.374	5.534	0.000
$resped_{it} \times ini_{it}$	0.480	0.517	5.273	0.000
$rpeci_{it}$	0.617	0.636	6.947	0.000
$rp_{it} \times ini_{it}$	0.561	0.294	5.761	0.000
R <sup>2</sup>	0.103			
F statistic	24.781			
The probability value of the F statistic	0.000			
Watson camera statistics	1.947			

## 5.3 Structural equation modeling

### -Descriptive statistics of research data and variables

The mean and standard deviation of the influencing factors are equal to:

The above table shows that all the variables have an average higher than the average of 3 and it shows the dispersion and standard deviation of the data for each of the variables.

Table 6: Results of descriptive statistics of research variables

	standard deviation	Average
Desired effect	0.820	3.72
mass effect	0.982	3.59
Emotional outbursts	1.027	3.88
Cognitive distortions	0.902	3.56
exponential bias	1.286	3.91
Profit	0.735	3.44

### -Checking the normality of the data

In the present study, confirmatory factor analysis was used using Smart PLS software. According to the table below, due to the significance level exceeding 0.05, it can be stated at the 95% confidence level that the assumption that the data is normal is accepted.

Table 7: K-S test to check normality

Variables and components	Significance level of K-S test
Desired effect	0.058
mass effect	0.067
Emotional outbursts	0.065
Cognitive distortions	0.057
exponential bias	0.062
Profit	0.066

### -Examining relationships in the form of structural equations model

Based on factor loadings, the index that has the highest factor load has a greater contribution to the measurement of the relevant variable, and the index that has smaller coefficients plays a smaller contribution to the measurement of the relevant construct. Figure 1 shows the conceptual model of the research to investigate the sub-hypotheses in the mode of estimating the standard coefficients of the structures. According to the results and standard coefficients, it can be said that the largest amount of the influencing factor on the profit of the companies was from the mass effect because it had the highest path coefficient (0.726), also the exponential bias had the least impact on the company's profit equal to 0.474.

### -Examining relationships based on the partial least square method (PLS)

Another type of relationship between hidden variables in the structural equation model is the direct effect type. Direct effect, which is actually one of the components of structural equation models and shows the directional relationship between two variables. This type of effect actually expresses the assumed causal linear effect of one variable on another variable. Within a model, each direct effect specifies and expresses a relationship between a dependent variable and an independent variable. In Table (8), direct effects, t-statistics and influence based on data analysis are given and the ranking of factors Effectiveness has also been done based on the same path coefficients, which can be seen in the last column of the effectiveness rating.

As it is known, all behavioral variables affect the profit of companies.

## 6 Conclusion and suggestions

### 6.1 Overconfidence of the manager affects the profit of the companies.

The results of the research showed that the manager's overconfidence has a significant effect on the company's profit at the 95% level, and this effect is reversed, that is, as the manager's overconfidence increases, the company's profit decreases. The null hypothesis of the t-test conducted during the estimation of the model in the previous chapter indicated that the manager's overconfidence had no effect on the dependent variable, i.e., the profit of the companies.



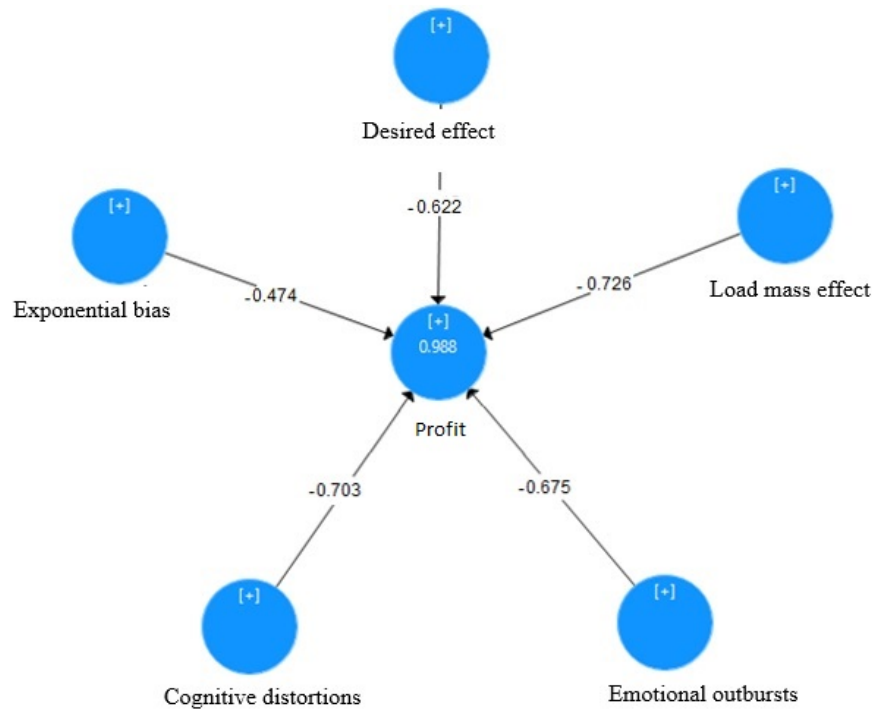


Figure 1: The conceptual model of the research in the mode of estimation of standard coefficients and elimination of variables with low factor loading

Table 8: Examining direct effects and t-statistics

Hypotheses	path coefficient ( $\beta$ )	t statistic	sig	Priority
Desired effect $\rightarrow$ profit of companies	-0.622	-4.715	>0.01	4
mass effect $\rightarrow$ profits of companies	-0.474	-3.126	>0.01	5
Emotional distortions $\rightarrow$ profit of companies	-0.703	-7.157	>0.01	2
Cognitive distortions $\rightarrow$ profit of companies	-0.675	-6.263	>0.01	3
Exponential bias $\rightarrow$ profit of companies	-0.726	-7.524	>0.01	1

## 6.2 - The synchronization of stock returns has an effect on the profits of companies.

The results of data analysis showed that the synchronization of stock returns has a significant effect on the profits of companies at the 95% level, and this effect is direct, that is, with the increase of synchronization of stock returns, the profits of companies also increase. The null hypothesis of the t-test conducted during the estimation of the model in the previous chapter indicated that the synchronization of stock returns had no effect on the dependent variable, i.e., the profit of the companies.

## 6.3 Willing effect affects the profit of companies.

The null hypothesis of the t-test performed during the estimation of the structural equation model implies that the variable of propensity has no effect on the dependent variable, i.e., profit of the companies, now if the probability value obtained for the propensity effect is less than 0.05 in the estimated models, it can be He stated that the null hypothesis of the t-test was rejected and the tendency effect has a significant effect on the profit of the companies. According to the estimated model in the previous chapter, it can be said that this hypothesis has been confirmed.



This comes from the fact that with the emergence of the desire effect and the tendency of people to give up profits and sell stocks with high profits, the stock prices of growing companies decrease and their profitability decreases.

#### **6.4 Mass effect affects the profit of companies.**

The null hypothesis of the t-test conducted during the estimation of the structural equation model indicated that the mass effect variable has no effect on the dependent variable, i.e., the profit of the companies, now if the probability value obtained for the propensity effect is smaller than 0.05 in the estimated models. It can be stated that the null hypothesis of the t-test is rejected and the mass effect has a significant effect on the profits of companies. In justification of this, it can be stated that the behavior of the shareholders and their group movement in buying or selling some shares causes the sustainability of the decisions of the companies to be doubted based on the mass movements of the shareholders and as a result they cannot make effective decisions in the direction of profitability.

#### **6.5 Emotional stress affects the profits of companies.**

The null hypothesis of the t-test conducted during the estimation of the structural equation model indicated that the variable of emotional distortions has no effect on the dependent variable, i.e., the profit of the companies, if the probability value obtained for emotional distortions is less than 0.05 in the estimated models. It can be stated that the null hypothesis of the t-test is rejected and emotional distortions have a significant effect on the profits of companies. It is obvious that emotional behavior ultimately leads to anti-profiteering behavior that endangers the interests of companies and shareholders, so it ultimately leads to a drastic reduction in the profits of companies.

#### **6.6 Cognitive distortions affect the profits of companies.**

The null hypothesis of the t-test conducted during the estimation of the structural equation model indicated that the variable of cognitive distortions has no effect on the dependent variable, i.e., the profits of the companies, if the probability value obtained for cognitive distortions is less than 0.05 in the estimated models. It can be stated that the null hypothesis of the t-test is rejected and cognitive distortions have a significant effect on the profits of companies. According to the estimated model in the previous chapter, it can be said that this hypothesis has been confirmed. Incorrect arguments of shareholders in the analysis of stock behavior and profit or loss of companies' shares lead to a behavior contrary to the company's profitability process, which leads to companies losing.

#### **6.7 Imagery bias affects the profits of companies.**

The null hypothesis of the t-test performed during the estimation of the structural equation model indicated the non-influence of the sampling bias variable on the dependent variable, i.e., the profit of the companies. Now, if in the estimated models, the probability value obtained for sampling bias is less than 0.05. The null hypothesis of the t-test was rejected and that sampling bias has a significant effect on the profits of companies. The judgments that the past trend of the company's shares create in people's minds lead to the creation of biases on the part of people regarding the company's shares. The title of a company is widely recognized that even the increase in the stock price and its profitability cannot change the attitude of people towards these stocks.

#### **6.8 Determining the role of economic certainty on the interaction between the informational efficiency of stock prices and corporate profits**

According to the results of the analysis, it can be stated that the zero hypothesis of the t-test conducted during the estimation of the panel data model in the previous chapter indicates the ineffectiveness of the variable of the intersection of the information efficiency of the stock price and economic confidence on the dependent variable, i.e., profit. companies, now if in the estimated models the probability value obtained for the intersection of the information efficiency of the stock price and economic certainty is less than 0.05, it can be said that the null hypothesis of the t-test is rejected and the intersection of the information efficiency of the stock price and economic certainty is on the profit Companies have a significant impact. Economic certainty along with high information efficiency of the stock price can enlighten the mind of every shareholder regarding the future of each share, so that the shareholder can predict the future of the share regardless of the economic changes and fluctuations see and decide to keep or sell it. In this way, the profit of the companies will be more stable and will have less changes.

### 6.9 The information confidence index has an effect on the interaction between behavioral decisions and company profits.

According to the results of the analysis, it can be stated that the null hypothesis of the t-test conducted during the estimation of the panel data model in the previous chapter indicates the ineffectiveness of the intersection variable of the manager's overconfidence and information confidence on the variable. It was dependent, meaning the profits of the companies, now if in the estimated models the probability value obtained for the intersection of the overconfidence of the manager and the confidence of information is smaller than 0.05, it can be said that the null hypothesis of the t-test is rejected and the intersection of self-confidence Too much manager and information confidence has a significant impact on the profits of companies. According to the estimated model in the previous chapter, it can be said that this hypothesis has been confirmed. It is obvious that decision-making in a situation where there is complete certainty of stock price information can solve the issues related to the sale or holding of shares and increase the predictability of the stock price, so companies can take the necessary measures to maintain the company's profit.

In this research, the profit prediction model based on behavioral finance of the companies listed in the Tehran Stock Exchange was designed with the two methods of structural equations and panel data regression, and in this regard, the following suggestions are presented.

- It is suggested that companies use moral and psychological filters to select the CEO, because the moral characteristics of the CEO can have a direct impact on the profitability of the companies.
- Companies use other information channels to inform shareholders about company changes and shareholding conditions, in addition to the Tehran Stock Exchange issuers' information site.
- Policy-making at the macro level of the stock exchange and the Ministry of Economic Affairs to synchronize stock prices and stock market indices with the country's economic situation and transparency of the impact of stocks and stock market indices on the country's economic situation and the country's macroeconomic and political variables.
- Increasing the internal controls and supervision of the stock exchange organization on the disclosure of publishers' information and the verification of financial statements and information notices of companies.
- In addition to relying on the shareholders' legal department, it is recommended that companies use other means to stimulate stockholders, such as stock promotions and pre-emptive rights, in order to control stock prices and prevent sudden increases or decreases in stock prices, which sometimes do not have a logical process.

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