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Test of the effect of speculative price bubble and cost of capital on the relative net profit of the group of banks and credit institutions listed on the Tehran Stock Exchange

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Abstract

The main goal of this research is to test the effect of speculative price bubble and cost of capital on the relative net profit of the group of banks and credit financial institutions admitted to the Tehran Stock Exchange (30 cases). Tehran's securities during the time period of 2016-2019 are based on the econometric approach of panel data. For this purpose, firstly, while stating the theoretical foundations and background of the research, in the next step, the specification and estimation of the research model was done based on the relevant diagnostic tests, finally using the fixed effects method. The estimation results confirm the positive and significant relationship between the independent variables (real cash dividend in a previous period, which indicates the price bubble of rational speculation in the research model, and the capital cost variable) on the relative net profit of the selected sample. Thus, the first hypothesis of the research, which states that the price bubble of rational speculation has a significant effect on the relative net profit of the group of banks and credit institutions admitted to the Tehran Stock Exchange, was confirmed. Also, the second hypothesis, which states that the cost of capital has a significant effect on the relative net profit of the selected sample, was confirmed. At the end, suggestions based on the research results have been presented in order to moderate the effect of speculative price bubble and strengthen the effect of capital cost on the relative net profit of the selected sample.

KeyWords: Cost of Capital, Banks and Credit Institutions, Relative Net Profit, Speculative Price Bubble,

Introduction

The concept of bubble has entered the economic literature since the 17th century. Despite this issue, the price bubble has not been subject to scientific research until the end of the 20th century. Since the introduction of the term bubble in the Iranian capital market in 1382, any rapid increase in prices is mistakenly assumed to be a bubble, while this is not the case, because a bubble occurs when speculation in a certain financial instrument, such as stocks cause the price to increase and this action leads to more speculation. In this situation, the market price reaches a completely irrational level. A bubble is usually

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faced with a sudden drop in prices, which is interpreted as a market crash. The concept of the word bubble comes from the fact that prices grow like a soap bubble and finally burst and fall violently. Bubbles are often created by the emergence of real improvements in the level of productivity and initial profitability of a company or industry, but history has shown that in this situation investors exaggerate the basic capabilities of this economy when interpreting the amount of short-term changes. do (Greenspan, 2002).

Research Background

Rational (logical) and irrational (irrational) bubble and the effects of the bubble

It seems that the cause of the bubbles is a cognitive and emotional balance, but often when this phenomenon occurs, scientists try to find an explanation for it that does not contradict the collective explanation; Therefore, people sometimes ignore the concern about overprice markets by citing the new economy where the rules of stock valuation do not apply. This thinking helps the bubble to spread further and everyone invests more with the intention of finding more stupidity. Also, some analysts, relying on the collective opinion, state that price movements really reflect rational expectations of fundamental returns. Big traders become so powerful that they drive the crowd and create the stock market bubble. (Perminove, 2005).

For empirical asset markets, observers can compare the stock price with the expected return on the stock held (which the tester communicates to traders). In both cases, investment funds with fixed capital of the country and experimental markets, the stock price had deviated from its fundamental value. The Nobel laureate, Dr. Vernon Smith, has shown in his work the phenomenon of investment funds with fixed capital in the form of a graph of the price and net asset value of the Spanish fund in 1989 and 1990.

At its peak, the Spanish fund was trading at nearly $35, nearly three times its net asset value of $12 per share. At the same time the Spanish fund and other sovereign wealth funds were traded at a significant premium, the number of sovereign wealth funds available increased greatly, and many issuers created new sovereign funds and sold these IPOs at high prices. It only takes a few months for the country's mutual funds to return to their normal exchange rate. Those who bought them for nothing are called greater fools and will be suppliers for some time. (De long, 1990)

On the other hand, regarding the effect of price bubble, it can be said that the increase in the price of shares will attract investors. Not all investors will be willing to study the inherent characteristics of a stock, and for them the price increase alone is reason enough to invest. Additional investment, in turn, leads to price drift, thus completing the positive feedback loop. Like all dynamic systems, financial markets also have a variable equilibrium, which is referred to as price volatility. However, a self-equilibrium (negative feedback) usually occurs: when prices rise, people are often eager to sell and few people are willing to buy. This issue limits the swing. However, when positive feedback occurs, the market, like other systems with positive feedback, experiences an increase in disequilibrium. This is seen in financial bubbles, where asset prices quickly rise above perceived economic value, and then fall rapidly. Of course, it goes without saying that investment managers, like mutual fund managers, hedge in part because of similar performance to their peers. Taking a conservative position during a bubble leads to unfavorable performance for peers. This causes clients to go elsewhere and investment managers to incur losses (compensation). (Shiratsuka, 2003)

The concept of speculation

Speculation is one of the words that has become popular in the economic literature of our people, as a word with a negative connotation. Sometimes we may see articles and analyzes in publications that refer to speculators in a very negative way, to the extent of smugglers or economic terrorists. Of course, the fact is that if speculation becomes widespread in an economic market, and on the other hand, speculators in a financial market are limited to a special group with special assets or special privileges, then speculation may be detrimental to the health of that market. cause serious damage. But it is better to be familiar with the general concept of speculator and speculation in order to use this word (or adjective) in a more accurate way. In the simplest definition, speculation is defined as follows: Entering into risky financial transactions in order to profit from fluctuations in the value of a product or service is called speculation. Speculation is usually contrasted with investment. But what exactly is the difference between this concept is not agreed upon by everyone:

Sometimes, investors and speculators are compared with each other in terms

of their decision time horizon. From this point of view, someone who bought a house and kept it empty and unused and sold it years later, is an investor and someone who buys a house because of its reasonable and cheap price (for example, because the owner of the house needs cash) and sell it to another person in the coming days or months, he is called a speculator. Sometimes, investors and speculators are compared in terms of the amount of risk they take on their trades. An investor is considered to be someone who makes conservative decisions or takes reasonable risks, and a speculator is considered to be the behavior of someone who takes large risks like gambling. In this definition, a person who is active in the field of commerce, if with the aim of reducing the risk of his transactions, after announcing the price to the customer, provides the currency needed for his transaction, his decision is considered as an investment. By doing this, the merchant ensures that he will not suffer a loss due to a sudden change in the value of money. Of course, it is natural that, unlike some of his colleagues, he will not earn double profits due to currency price fluctuations.

Research background

In this section, we will review other researches as follows:

Abdul-Malki et al., (2019), in an article entitled, Investigating the existence of price bubbles in the Tehran stock market using the LPPL approach, believe that financial bubbles are one of the main issues that the modern economy is dealing with today. be In this research, in order to investigate the existence of a bubble and to predict the subsequent fall of the price index and cash yield in the period of 2014-2016, the power law model of logarithmic periodicity has been used. Next, to ensure the presence of logarithmic periodicity in the data, Lomb spectral analysis has been performed on the data. The results showed a good fit of the data with the model and also the Lomb spectral analysis confirmed the existence of logarithmic periodicity; Therefore, it can be concluded that the data behaves according to the LPPL model. The model has identified a bubble in this period of time and has also provided a reasonable prediction of the critical time of this bubble.

Abbasi Gholamreza and others (2017), in an article entitled "Investigation of the role of price bubble in creating fluctuations in the Tehran Stock Exchange (selected companies of

petrochemical and automobile industries)", state that the stock exchange as a part of The capital market plays a very important role in directing savings to economic production sectors in all countries. In their research, they investigated the price bubble in selected companies of Tehran Stock Exchange. In this research, the existence of a bubble during the 6-year period from 1388 to 1393 has been investigated using the Manai test for the price-to-earnings ratio (p/e) for selected companies in the automotive and petrochemical industries. The results of the test indicate that at the 99% confidence level, 63% and 95% and 90% confidence level, 50% of the investigated companies have price bubbles.

Nadi Qomi Vali and others (2018), in their article titled "Bubble analysis on stock returns", believe that the bubble phenomenon in the stock market and in general in all markets is a real phenomenon that can cause There will be losses for investors. The most important problem that every investor faces in the capital market is deciding to choose the right securities and assets for investment and forming the optimal stock portfolio. For this purpose, the studied sample includes 81 active companies in the Tehran Stock Exchange during the years 1388 to 1392 based on the completed model of Famau French, which were selected by screening method. The results of this research reveal that out of 5 market factors, company size, book value to price, momentum and bubble, only 2 factors, momentum and bubble, affect abnormal returns.

Hatfi Majid and others (2016), in a research titled "Asset premium puzzle with regard to bubble risk and Epstein-Zein return preferences function in Iran Stock Exchange", used RTADF tests to detect the bubble and determine the bubble occurrence date. The results of their research show that the stock market has experienced six bubble periods and it was non-bubble in 65% of the studied period. Also, in this study, Epstein-Zine preference function is estimated using GMM method. At this stage, estimating the value of the conditional substitution elasticity parameter is very important, because it is expected that the bubble risk will be used to explain part of the stock market risk. The results of the estimated model showed that, firstly, the bubbles in the securities market have strengthened the risk factors. Secondly, economic factors in the Iranian securities market are very risk averse. Thirdly, based on the traditional approach, it is not possible to provide a comprehensive explanation of the asset premium

puzzle, but the new approach is able to explain 90% of the asset premium.

Rasakhi et al., (2015), in a research entitled, Determining Price Bubble Periods: A Case Study for the Tehran Stock Exchange Market, state that until now, several methods have been used to detect price bubbles in asset markets. has been According to the criticisms of the previous tests, in this research, the right unit root of the Generalized Supreme Dickey-Fuller sequence (SADF) and Generalized Supreme Dickey-Fuller (GSADF) tests are used to discover and The determination of bubble periods in the Tehran Stock Exchange market has been used during the period of 10:10, 2014-1381:01. The results of the tests confirm the explosive behavior and the existence of multiple bubbles in the Iranian stock market. In addition, all three evaluated indicators (total price, price-to-profit and total real price indices) jointly indicate the existence of a bubble in the time periods of 2018:05-2018:03, 2018:08-2018:06 and 2019: They show 1390-12:02. Also, based on all three indicators, Iran's stock market was not a bubble in 2014.

Nazi and DA Silva (2020), using both conventional accumulation and threshold accumulation models, investigated the existence of rational bubbles in 18 stock markets according to the estimation results of both models in the stock markets of Chile, Indonesia, Korea, and the bubble Philippines There are exploding bubbles and collapsing bubbles in the stock markets of China, Brazil, Venezuela, Colombia, Chile, Indonesia, Korea and the Philippines. Cheng and Lu (2009), using annual data, examined the S&P stock price over the period 2004-1871. The research results rejected the existence of a price bubble.

Suvan and Kalo (2019), conducted a study and investigated whether the restrictions imposed on the price in the capital market are really unfair or not, they used game theory, the use of game theory models showed If the costs of supervision and review in the capital markets go up, in this case it will be useful to apply price restrictions. Of course, laws related to price restrictions can lead to less disclosure of economic information and create an opening for corruption and inefficiency of the law. Costs naturally increase if the capital market system is inefficient. Static market mechanisms can have positive and negative feedbacks for the capital market in any way.

Anderson and Brooke (2019) explained their five-factor model in the London Stock Exchange during the period from 1980 to 2012 by adding two new factors

of momentum (tendency to past performance) and bubble to the three-factor model of Fama and French. The research results indicate that among the five risk factors (market factor), size, ratio of book value to market value and momentum and bubble, only three market factors, momentum and bubble are significant.

Bidel, Ma and Song (2019) declared conservatism as one of the influential factors in reducing the risk of bankruptcy of companies. In their research, they acknowledged the negative relationship between conditional and unconditional conservatism on bankruptcy risk. In fact, the results of their research indicate that the more conservatism in companies, the lower the probability of bankruptcy.

Siari and Morgan (2018) in an article using the information of 1500 American companies in the period of 1990-2011, the role of financial ratios as the most informational content in determining a set of industry characteristics is investigated. Then, they investigated this problem using logistic regression technique and concluded that financial ratios are actually a reflection of industry characteristics and the information content of specific ratios is different among different industries. Also, the findings show the different effects of industry characteristics on companies, and as a result, there is a need to build industry-specific financial bankruptcy models.

Methods and Methodology

This research is post-event type in terms of execution and correlation, in terms of purpose, it is of applied type, and in terms of data type, it is observational type (descriptive or non-experimental). The purpose of applied research is to develop applied knowledge in a specific field. . Correlation research also determines the degree of relationship between variables. For this purpose, according to the measurement scales of the variables, suitable indicators are selected (Sarmed et al., 2017). In post-event research, the researcher examines the possible cause of the dependent variable (in this research, relative net profit). Because the independent and dependent variables have occurred in the past (the quantitative values of the mentioned variables during the years 2014-2019). The statistical population of the research includes 41 companies from the group of banks and credit institutions admitted to the Tehran Stock Exchange, according to the latest report of the Central Bank of Iran in May 2019, based on systematic elimination and for the period from 2014 to 2019, there are finally 30 banks and A credit institution has been selected as a sample size. Also, the method of collecting information from the Kodal site and the Rahvard software is new. The data collected in this research are analyzed by EVIEWS.10 software

Research hypotheses

The first hypothesis: Speculative price bubble (logical) has a significant effect on the relative net profit of selected companies of banks and credit institutions active in Tehran Stock Exchange.

The second hypothesis: the cost of capital has a significant effect on the relative net profit of selected companies of the group of banks and credit institutions active in the Tehran Stock Exchange.

Research model and variables

In general, it is based on the model of Miao Wang and MC Sunny Wang (2015), which of course is based on the model of McQueen and Turley (1994). The McQueen and Thorley model states:

$$r_{t+1} = \alpha_1 RD_t + \alpha_2 DD_t + \theta' X_t + u_{t+1}$$

On the other hand, in Wang's (2015) model,X_t the vector of independent variables is the main one. which includes: the dependent variable has a break and the real annual dividend variable. The variable measuring the price bubble D/p_{t-1} representing the annual dividend, which is obtained by using the total of the twelve-month dividend, its numerical value (quantitative value). The residual ε_{it} is the deviation of the actual return from the expected return based on fundamental risk and autocorrelation, hence it indicates abnormal return. Therefore, according to the factors affecting the relative net profit of the selected banks and credit institutions (based on conventional theories) as well as the variables considered and effective in this research (in particular) on the real total return of stocks, the following model is the main model of the research for The test of its hypotheses will be considered. Therefore, the model related to this research is set and considered as follows:

$$NRP_{it} = \beta_0 + \beta_1 CoC_{it} + \beta_2 \frac{D}{p}_{it-1} +$$

$$\beta_3 OCF_{it} + \beta_4 L_{it} + \beta_5 RE_{it} + \beta_6 S_{it} + \varepsilon_{it}$$

So that the variables are:

1. NRP_{it}: The relative net profit for the i-th company in period t is calculated from the following equation:

$$NRP_{it} = (RP_{it})/A_{it}$$

2. RP_{it} : Net profit of i-th company at the end of time period t
3. A_{it} : Total value of company i's assets at the beginning of period t
4. Cost of Capital (COC): It is entered into the system based on

the system performance criteria from the theory of constraints. According to the following relationship, which shows the involvement of the dividend accounting profit in the calculation of the cost of capital, as well as the direct relationship between the profit and the stock return, it is expected that the effect of this variable on the relative net profit of the selected banks and credit institutions group will be positive. One of the approaches for calculating the capital cost of common stock is the dividend discount model. In this method, the cost of existing ordinary shares will be calculated from the following relationship:

$$K_e = \frac{D_0(1+g)}{P_0} + g$$

Sothat:

K_e : Common stock capital cost: $D_0(1+g)$ Expected dividend that will be paid at the end of the first year.

P_0: the current market price of the company's common stock, g: the expected dividend growth rate.

5. Leverage (L): It is the ratio of the total liabilities to the total assets of the company (Hass Yeganeh et al., 2009). This variable is entered into the model based on the first criterion (system performance) of the theory of constraints.

6. Dps_{it-1}: Actual cash dividend in a previous period: This ratio shows the market's expectations of the company's future profitability growth. We know that the cash dividend is a percentage of the expected profit per share, which is in the ratio P/E On the other hand, to calculate the P/E ratio, we divide the current price of the company's stock in the market by the expected net profit. Dps_{it-1} It is a continuous variable that has been used to design the model of the P/E ratio of each share compared to the year before the bubble occurred. (variable measuring the price bubble based on the studies reviewed in the research background and the base article; Wang model, 2015).

7. Retained Earnings (RE): In accounting, it refers to a percentage of the profit of a joint-stock company, which has not been paid to shareholders in the form of dividends, and which the company in question has kept to reinvest in its core activities, or to

pay off debt. Retained earnings are recorded on the left side of the balance sheet under the equity column. By adding the net profit or subtracting the net loss from the accumulated profit at the beginning of the period, the dividend payable to the shareholders is obtained. This independent variable is included in the model based on the second criterion of the theory of constraints (investment). Companies can finance and invest from this source from the accumulated profit in development projects.

8. Size (S): It is the natural logarithm of the total book value of the company's assets or the amount of the company's capital before the capital increase.

Results

After performing the unit root (which confirmed the significance of the research variables) and collinearity tests, the appropriate estimation method for the research model was selected based on the F-tests of Limer and Hausman as follows.

Limer's F test: As table number (1) shows, prob<0.05 and the calculated value of Limer's F statistic is significant. Therefore, the null hypothesis that the data are mixed is rejected, and in fact the opposite hypothesis, which indicates the suitability of the FE method for model estimation, is accepted.

Table 1. Summary of the Limer F test method

Prob	d.f	F
0.000	33.521	55.5214521

Source: research tissues

Hausman test: After Limer's F test determined that the width from the origin is not the same for different sections, the next step should be to distinguish between two alternative approaches, i.e. fixed effects and random effects, using Hausman's test. In the Hausman test, the H0 hypothesis of the independence of the explanatory variables is a disturbance component, and if it is rejected, the fixed effects method is consistent and the random effects method is inconsistent, and the fixed effects model must be used. The results of this test are given in the table below.

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Table 2. Summary of the Hausman test method

prob	d.f	Hausman
0.0032	6	4.032145

Source: research tissues

As table number (2) shows, it is prob<.05. Therefore, the H0 hypothesis is rejected and the fixed effects approach is considered as the best method to estimate the research model.

Estimation of the research model based on the method of fixed effects and hypothesis testing

In this part, according to the previous topic regarding the selection of the aforementioned method, the estimation of the research model is done in order to test the first hypothesis of the research. Table No. (3) shows the results related to the estimation of the research model during the years 2014-2016. Based on the results of the estimation of the research model, it is clear that according to the positive sign for all the coefficients of the variables of this model and also the probability is smaller than 0.05, it can be said that the variables COC (capital cost), OCF (operating cash), L (financial leverage)), RE (accumulated profit), S (company size) and the variable DPt-1 represents the real speculative price bubble or the real cash dividend in a previous period (which we have shown in the working file of the software with DP) positive effect and have a significance on the relative net profit variable of the group of selected banks and credit institutions (NRP).

Table 3. The results of the estimation of the research model to test the first hypothesis of the research

Prob	t statistic	Coefficient	Variable
0.0000	3.32514	0.031254	C
0.0000	4.25145	0.412145	COC
0.0000	3.95214	0.084514	OCF
0.0000	5.02145	0.063251	L
0.0000	2.36254	1.362514	RE
0.0000	4.25471	1.635412	S
0.0001	3.21457	1.084512	DP
Prob=0.000	**1.89=DW**	**Adjusted R^2=0/95**	**Regression statistics**

Source: research findings *significance level of 5%

Conclusion

In a more comprehensive interpretation of how the variables of the research model influence and test their significance (with the aim of testing the first and second hypotheses of the research), we can analyze and interpret each variable as follows.

The findings of the first hypothesis test of the research: the variable (D/p) it-1 or the actual cash dividend in a previous period, which we have shown in the research model with the symbol DP, represents the market's expectations from the perspective of the state of profitability growth. The future of the company and, of course, the variable measuring the price bubble (based on the model of Young and MC Young; 2015). On the other hand, based on previous studies, we know that the balanced form of speculation helps to adjust supply and demand and provide liquidity, and its unfavorable form causes dissatisfaction among traders and investors, as well as creating bubbles in prices and extreme fluctuations in prices and price returns. It leads to high stock (abnormal returns) (Asadi et al., 2016). For the DP variable (the ratio of cash dividends to the price in the previous period or price bubble measurement index), it is observed that the sign of the corresponding coefficient is also positive and completely significant (prob equal to 0.0000). So that a unit increase in DP has caused an increase of 1.084 in the relative net profit of the group of selected banks and credit institutions. Therefore, according to the positive and significant impact of the bubble measurement variable in the research model of this research, the result of the first main hypothesis test, while confirming (accepting) this hypothesis, shows that this finding is in line with the research of Asadi et al. (2006) and Wang and MC Wang (2015).

The findings of the second research hypothesis test: COC (cost of capital) variable, according to the calculation relationship of the cost of capital based on the divided accounting profit and also the direct relationship between the profit and the stock return, the effect of this variable on the relative net profit of the bank group is expected. and selected credit institutions are positive. So, based on the estimation of the research model, it can be seen that one-unit increase in the COC variable has been able to increase the relative net profit variable of the selected banks and credit institutions by 0.41 units. (Confirmation of the second hypothesis) Of course, the result of the significance test of the effect of this variable in fitting the research model is also consistent with the research result of Wang and MC Wang (2015).

Regarding the variable impact of operating cash (COF) according to Wilson's (1986) research, the set of accrual figures and cash from operations together have an increasing informational content compared to the informational content of profit and that there is a positive association and relationship between the components There is an accrual and operating cash flow (COF) with the company's stock returns. Also, the result of the significance test of the effect of this variable in fitting the model of this research is consistent with the research result of Wang and MC Wang (2015). Thus, for the OCF variable, the estimation of the research model shows that the operating cash variable coefficient has a

positive effect of 0.084 units on the relative net profit of the selected banks and credit institutions, and it is significant according to prob<0.05.

The financial leverage variable (L) is entered into the model based on the first criterion of the theory of constraints (system performance). According to the study of Yazdinia and Rahimi Dastjardi (2008), there is a positive and significant relationship between the financial leverage and the relative net profit of the selected banks and credit institutions. The result that was also confirmed in the model of this research. So that for variable L (financial leverage) it is observed that the sign of the corresponding coefficient is also positive and significant (prob<0.05). For this variable, one-unit increase in L causes about 0.063-unit increase in the relative net profit of the group of selected banks and credit institutions. Of course, the result of the significance test of the effect of this variable in fitting the model of this research is also consistent with the result of Wang and MC Wang (2015).

For the variable of retained earnings (RE), according to the calculation relationship for the relative net profit of the group of banks and selected credit institutions, in the form of capital increase from the accumulated profit (before and after the general meeting), it is observed that the accumulated profit with a positive sign in The relative net profit deduction statement of the selected banks and credit institutions group has appeared and its increase can cause an increase in the relative net profit of the selected banks and credit institutions group. Therefore, we expect the sign of the coefficient related to this variable to be positive (and of course statistically significant) in the estimated research model. As the estimation results show, the coefficient of variable RE (accumulated profit) is positive and significant (Prob<0.05). Of course, the result of the significance test of the effect of this variable in fitting the model of this research is also consistent with the result of Wang and MC Wang (2015).

The size variable of the company (Size) is also among other factors that have attracted the attention of specialists, since large companies have access to cheaper financial resources, they have more efficiency and profitability, and as a result, higher stock returns. The model estimation result of this research is also in line with this theoretical discussion and has been approved. So that for the variable S (company size) it is observed that the sign of the corresponding coefficient is also positive and completely significant (probe equal to 0.000). That is, a unit increase in S has caused a 1.63 increase in the relative net profit of the group of selected banks and credit institutions. Of course, the result of the significance test of the effect of this variable in fitting the model of this research is also consistent with the result of Wang and MC Wang The size variable of the company (Size) is also among other factors that have attracted the attention of specialists, since large companies have access to cheaper financial resources, they

have more efficiency and profitability, and as a result, higher stock returns. The model estimation result of this research is also in line with this theoretical discussion and has been approved. So that for the variable S (company size) it is observed that the sign of the corresponding coefficient is also positive and completely significant (prob equal to 0.000). That is, a unit increase in S has caused a 1.63 increase in the relative net profit of the group of selected banks and credit institutions. Of course, the result of the significance test of the effect of this variable in fitting the model of this research is also consistent with the result of Wang and MC Wang (2015).

Therefore, in a general view, it can be said that the coefficients of the estimated model of the research, exactly in accordance with the theoretical expectation and based on the base article and the background of the research, had a positive and significant effect on the relative net profit of the selected group of banks and credit institutions (dependent variable). Therefore, the first hypothesis that states that rational speculation has a significant effect on the relative net profit of the selected banks and credit institutions can be accepted. It should also be mentioned that due to the high F statistic and zero prob for the significance of the whole regression, it can be said that the mentioned model has one hundred percent significance. The results of the estimation of the research model, as well as the adjusted coefficient of determination (R^2) equal to 95% and Durbin-Watson's statistic (DW) equal to 1.89, respectively, indicate the high goodness of fit of the model and the absence of acute autocorrelation.

Suggestion

The result of the first hypothesis test of the research: according to the results of the estimation of the research model (which was mentioned in detail in the fourth chapter) for the group of selected banks and credit institutions, it showed that according to the positive sign for all the coefficients of the variables of this model and Also, the probe is smaller than 0.05, it can be said that the variables COC (cost of capital: to test the second research hypothesis), OCF (operating cash), L (financial leverage), RE (retained earnings), S (company size) and variable (DP (t-1) which represents the price bubble of rational speculation (and the important and desired variable in the first hypothesis) or the real cash dividend in a previous period, has a positive and significant effect on the relative net profit of the selected banks and credit institutions. . Therefore, both research hypotheses can be accepted. Of course, the variable (D/p) it-1 or the actual cash dividend in a previous period, which we have shown in the research model with the symbol DP, represents the market's expectations of the company's future growth prospects and also the variable measuring the bubble. price (based on Young and MC Young model; 2015). On the other hand, based on

previous studies, we know that the balanced form of speculation helps to adjust the supply and demand and provide liquidity, and its unfavorable form leads to dissatisfaction among traders and investors, as well as creating bubbles in prices and extreme price fluctuations. (Asadi et al., 2016). For the DP variable (the ratio of cash dividends to the price in the previous period or price bubble measurement index), it is observed that the sign of the corresponding coefficient is also positive and completely significant (probe equal to 0.000). Therefore, according to the positive and significant impact of the bubble measurement variable in the model of this research, the test result of this hypothesis is the same as the research of Asadi et al. (2016) and Wang and MC Wang (2015). Therefore, it should be considered in government and individual decisions (investors in the stock market).

According to the results of this research, the following suggestions are presented:

1. Considering the positive and significant effect of the variable of the rational (logical) price bubble, i.e. the changes in the stock price compared to its intrinsic value, along with the financial variables of this research in the research model, it is suggested that governments with policies of increasing influence of financial variables, the positive effect of the bubble Adjust the price which is mainly caused by speculation in the Iranian stock market.

2. Considering the positive and significant effect of the capital cost variable on the relative net profit of selected banks and credit institutions in Iran, it is suggested that the selected sample active in the Iranian stock market with policies of increasing influence of this financial variable, the positive effect of the capital cost on the profit The relative net worth of the group of selected banks and credit institutions is to strengthen.

3. In general, based on the results obtained from the estimation of the research model, it is suggested to strengthen the financial variables to improve the relative net profit for the selected group of banks and credit institutions, considering their positive and significant impact.

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