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IDENTIFICATION OF SPECULATIVE BUBBLES IN TEHRAN STOCK EXCHANGE, A SYSTEM DYNAMICS APPROACH

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ABSTRACT

Speculative bubble, is a phenomenon in which the price of an asset, increasingly, non-logical and process, increases. Research results show, bubbles, nonlinear, and usually, the stock price is determined by conventional methods, such as using the present value method, the benefit cost ratio (earnings) per share, and cannot, share value to determine, as well. In the conventional approach, and a system is taken into account, the cascade approach, or linear phenomena, but the system approach, the result is a system of thought, is adopted, the nonlinear approach. In this study, the bubble in Tehran Stock Exchange has been studied from the viewpoint of system theory, using a methodology that theory, the dynamics of the system. In this study were identified, two of the most influential factors on the bubble: 1- Operating assumption changes the speed ratio of the share; 2 - Managing large purchases. Investors are assumed to change more quickly than a share is higher, the price volatility, may be greater. Also, major purchases, due to the large inertia that leads to a special mental atmosphere and along with it to make the move, small shareholders.

KEYWORDS: Stock Market Bubble, Prices, System Dynamics, The Hypothesis of Dynamical

During the bubble phenomenon, the value of a share increases, the irrational process, however, it is reasonable to expect that the value of shares of a company may, subject to its current value, and forecast its future position, but sometimes the price changes , to the extent that it cannot be compared with the actual value. Uncontrolled growth of prices, in many cases, the price will be accompanied by a sudden collapse of the stock market, those shareholders who, knowing that later this fall, a sudden, severe losses will be incurred as well. On the other hand, there are sharp fluctuations in the stock market raises the risk that these factors also could reduce the attractiveness of the stock.

Such behavior is observed in many markets for stocks. Concerns about a bubble in the stock, the look that is achieved, then break the bubble, not necessarily people who have benefited from rising prices, your profit is not lost, but the class of shareholders, the effect of market sentiment, and After growth, have begun to buy shares, will fall with it.

THEORY AND THE CONCEPT OF A PRICE BUBBLE

Despite that, the price bubble, it looks simple, not easy to define, and the financial experts over its definition, there is no single point of view, but also including properties that are upside price P / E above. May actually increase prices is due to market participants' spontaneous rumors.

Joseph Astigliter, in 1990, it is believed that, if prices do not reflect the intrinsic value of the good, it has a significant impact on the diversion of resources, and diversion of resources, the effects of the bubble. Flod and Garber, in 1980, the main cause of the bubbles, as spontaneous expectations, and this is considered to lead to price changes, and ultimately, away from the intrinsic value and market price, which is a sign of a bubble's.

Of Hamilton, and Whitman, in 1985, it has been proved that, in environments where traders' expectations play an important role in shaping economic events that may be expected to lead to a particular position (following a sharp rise in prices), and even unrelated variables, creating expectations, have an essential role, and cause price bubbles provide. In an efficient market, stock price changes, the result of a change in investors' expectations due to new information about the fundamental factors which investors are available.

More reactive behaviors, lead to bubbles. But the fact is, not raised, the borderline between price bubbles, and more responsive, and looks, word bubble, used by analysts and professionals in the stock market, and the theoretical research literature words, more action, word is valid, however, due to the multitude of words, even in the theoretical literature, this term is used in this research.

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From a mathematical perspective, a price bubble phenomenon is nonlinear. That is not a linear process upside, but the upside makes up only part of the phenomenon, and then, with the formation downside (crash) phenomenon, which is filled bubbles. In general, the use of word bubbles, it's the prices like soap bubbles, which are to the point that they burst and fall sharply. According to research done by many, the price bubble formation process is separable into the following steps:

• The rapid growth of prices

• Sudden change in public perceptions, and behavior of investors

• The loss of public confidence towards the next bubble (reverse expectations formation)

• Update Event Sales volume (abnormal volume of trading in the capital markets)

• Bubble burst and prices fall

• Correct price (close to intrinsic value)

LITERATURE

Studies in the 1980s, the study of price bubble, has used econometric models, and investigate the properties of period price (or prices) and dividends (or cash index). The main focus of the study was that, if the stock price (or prices), excess volatility, than using the efficient market hypothesis, prediction, or not?

To that end, Campbell and Schiller in 1987, offered a proposal to apply unit root tests, and collectively, to study the equilibrium relationship between the stock price and the fundamental factors involved in the share price, the dividends and discount rates. They initially tested, the cash index price index data for the period 1986 - 1871, and assuming the discount rate (control variable) in this interval is fixed, so raised, the research hypothesis, compared with a profit if the stock price in cash, the increase is greater, or in other words, if you set the price and collect some cash profits, so there is no price bubble.

In other words, the hypothesis, and the plain language of mathematics, it can be said that, if the Series D / P is stationary, ie no structural failure, and the unit root in the series is rejected, there is a price bubble. The result of the hypothesis test showed that the price index and the cash index, S & P500 together, so there is a price bubble, could not be verified. Then the two scholars, enter the discount rate, the model developed, and by repeating the previous methodology, the same result is achieved. A year later, in 1988, Diba and Grossman (1988), also using unit root tests and the mass, R Campbell and Schiller reiterated. Their results also did not support the existence of a bubble in stock prices in the United States.

In later years (1991), Evans and Karmza and Dadman, in 1955, began to criticize the methodology of the test mass and unit root, in order to verify the existence of price bubbles. Dadman and Karmza stated that these models, do not have the ability to search and identify any bubbles, so that the change in sample size, insufficient data series or special features related to the series, such fluctuations may the ability of such tests to detect bubbles may affect price.

Evans also argues that these models fail to detect important part of the bursting of the price bubble and its collapse. According to Evans, these tests have been true in the case of linear processes, and efficiency, while the bubble is a nonlinear process. However, this research could provide a model that does not have such a defect. But in the years since 1995, conducted several investigations, the price bubble, the New York Stock Exchange, the results of 80 studies (Campbell and Schiller, Diba and Grossman) was different.

Smith, Sochank and William, in 1988, the hypothesis stated that, due to risk aversion, and transaction share price below intrinsic value in a period of increased prices in the next period, and this, will lead to a price bubble. Porter and Smith (1995), risk aversion, as the main factor in this regard was rejected.

Hall (1996), in their study, found no evidence of a relationship together, the series of cash earnings and price range. Therefore, there is no bubble hypothesis is rejected. In another study, which was conducted by Eva in 2005, given to him by the New York Stock Exchange in the period 1998-1988 be examined and found results similar to Han, in 1996. Explain differences in study late twentieth century and early twenty-first century, two main reasons can be proposed. The first reason for this difference is related to the period of investigation. Recent studies 90s and early 21st century will also be included.

In the course of time, the Internet Company's stock price on the New York Stock Exchange, has been growing dramatically, and many hypothesize that this

growth has been the price bubble, and numerous studies confirm this hypothesis.

A study by, Zira In 1999, the price bubble in developed markets was conducted, and the results obtained from the growth in the stock price due to an exaggerated release of information about the status of the company is formed. This may be the case that, handled the boundaries of new technology, and new product known in the industry, or to say its future is unclear. But after determining the extent and boundaries of technology or a new product, some market actors, and find that, exaggerated information and news of interest is expressed or growth (expected) possible is not. At this point, the fall in prices is inevitable.

In other research, in 2005, Brooks and Katsaris to check price bubble began in the 10 Industry Index S & P500, for the period 2001-1976. Them in this study concluded that, the price index 7 industry (70%), bubble-like behavior is observed, and this behavior is more evident, especially in the industrial price index, IT, telecommunications and media and communications.

Thus, the last decade of the 20th century and the early years of the 21st century, can be seen as the rising bubble Stock Indices America. Mass, root and branch, so that the new methodology has allowed the discovery of more accurate bubbles.

In research, the interesting point is that the rise in share prices of the ring, allowing it to act in the opposite direction. In fact, if the price drops reasons for a period, and shareholders, after a while, compared to a negative return of contributions, be informed, ask them to buy a few shares, or a reduction in demand, the supply share price, having descended again, and this cycle leads to a sharp drop in prices.

Price bubble in the Tehran Stock Exchange, especially the dynamics of the system, much research has been done. Ford in 1385, the company's 23 research firms Tehran Stock Exchange, which has a history of accepting at least 10 years old, and had a turnover and liquidity as well as selected samples, using unit root test, the period the first time in 83 years, to the end of Year 84, concluded that the stocks of 20 companies, has experienced a price bubble.

RESEARCH METHODOLOGY

The aim of the present study is to obtain information about the existence of a systematic relationship between certain factors, the price bubble, the companies accepted in Tehran Stock Exchange. For this purpose, we have used the system dynamics approach.

Definition of Dynamic Systems

The dynamics of the system, it is believed that changes and developments in, the rule of law are, they can be identified, based on its evolution towards the desired direction. Without knowing the rules governing the event, entering the field of business and management, and policy, and generally taking any decision in the future will be far from reality. The system dynamics approach, which is based on the tools they need to figure out the rules, the analyst said.

Scientists in this field, "Thinking in terms of graphs over time", as an integral part of the system dynamics approach is considered. In other words, to solve any problem we have to know it as variables that have certain values, and typically change over time, we define. Forster now argues that every dynamic system that changes over time, it has four hierarchical structures, and can be used for any type of mobility, the various phenomena, such a structure would provide. The structure is:

1 - Borders closed

2 - Feedback loops

3 - Or state-level variables

4 - Variable rate

Closed Borders, with a target bit, and some are determined. The border closed feedback loops, which interact with each other, and the effects loop, represents the desired behavior. The feedback loop, the system is considered the cornerstone. In this theory, the traditional view is presented, the flow of influence between phenomena, thought of as one-sided.

The main stages of the dynamic system

Any dynamic system, three basic steps are:

1 - Conceptual Stage

2 - The amount

3 - Phase analysis and evaluation

1 - The conceptual model, at this stage, and symptoms of the problem areas, explaining, and internal variables describing the behavior, the model turns, the system draws close range, and the product the general framework of the model.

Dynamic modeling of conceptual process steps, as follows:

A - Identify the Problem

B - Aimed at modeling

C - Set within a closed system

D - The feedback

2 - The amount: general framework model, which was depicted in the conceptual stage, at some stage, the actual figure is closer phenomenon. Determining the type and amount of each of the variables, the model is ready for construction; the model uses simulation software to implement. At this point, the mathematical relationship between the variables that are within the system boundary, delivers software Vensim.

In this study, data variables, using library resources, collections, and then use a statistical test, examined the relationship between them, and finally using regression mathematical relationship they were extracted for use in software VEnsim.

3 - Phase analysis and evaluation: The dynamic hypothesis, after some stage, and the implementation of a computer, can be traced back to the conceptual stage, and the rest of the test and evaluation, to be more precise. Usually, in each iteration and knowledge model, the problem is greater than, in fact, the dynamics of the system, the initial recognition and, more understanding continues. The dynamics of the system is started, the initial recognition and continue to be, more understanding. Software vensim, allowing for more or less off the bottom of each variable, and the results will be presented at the same time, on the other variables in the model.

ASSUMPTIONS AND VARIABLES

Statistical hypothesis

This study aimed to answer these questions will shape, whether price bubbles, and interfere with the transfer of the right, the market could cause the stock price increases, the existence of price bubbles can exist in a dynamic The price of the stock during the time period studied, explain. In fact, the main hypothesis of the study is that "the factors of price bubbles in the sample companies, there is a dynamic relationship." This means that, among these factors, there are causes and effect relationship, and the loops, mutually intensifies each other, and their relationship, not a one-way communication. The main hypothesis to be tested is divided into sub-hypotheses.

Sub-hypotheses

2 - First hypothesis: Differences profit from buying and selling a share, compared with a profit without risk of price bubbles in the sample companies is effective.

3 - Second hypothesis: the ratio of price to earnings per share (P / E), price bubbles in the sample companies is effective.

Variables

1 - The difference in profit from buying and selling a share, compared with a profit without risk: This variable is defined as the distance in one day benefit from an investment in shares, with distance gains of the same amount of capital investment in risk-free mode, is shown. Increasing this variable demand increased, resulting in changes to the price.

2 - Change in assumptions relative to the price of a share when the expectations and beliefs of the people, than the price of a share and it will change. The value of this factor varies in different markets, depending on the behavior of investors, which are traded in the market. This variable is the answer to this question is that, after several days, the observed increase in the price of a share, investors will attempt to buy it? The software varies VEnsim, different amounts of data, and its effect on the dependent variable is shown. In this study, this variable is supposed to be, with two or less (much less 2 days and 10 days) models, and its effect on stock volatility is measured by the software.

3 - turnover by investors: the volume in stock trading is a marker that indicates the level of the stock demand, increasing the share of demand for ordinary investors and potential utility of the agent is to share, and their investment encourage new investment, and thus lead to higher demand and rising stock prices.

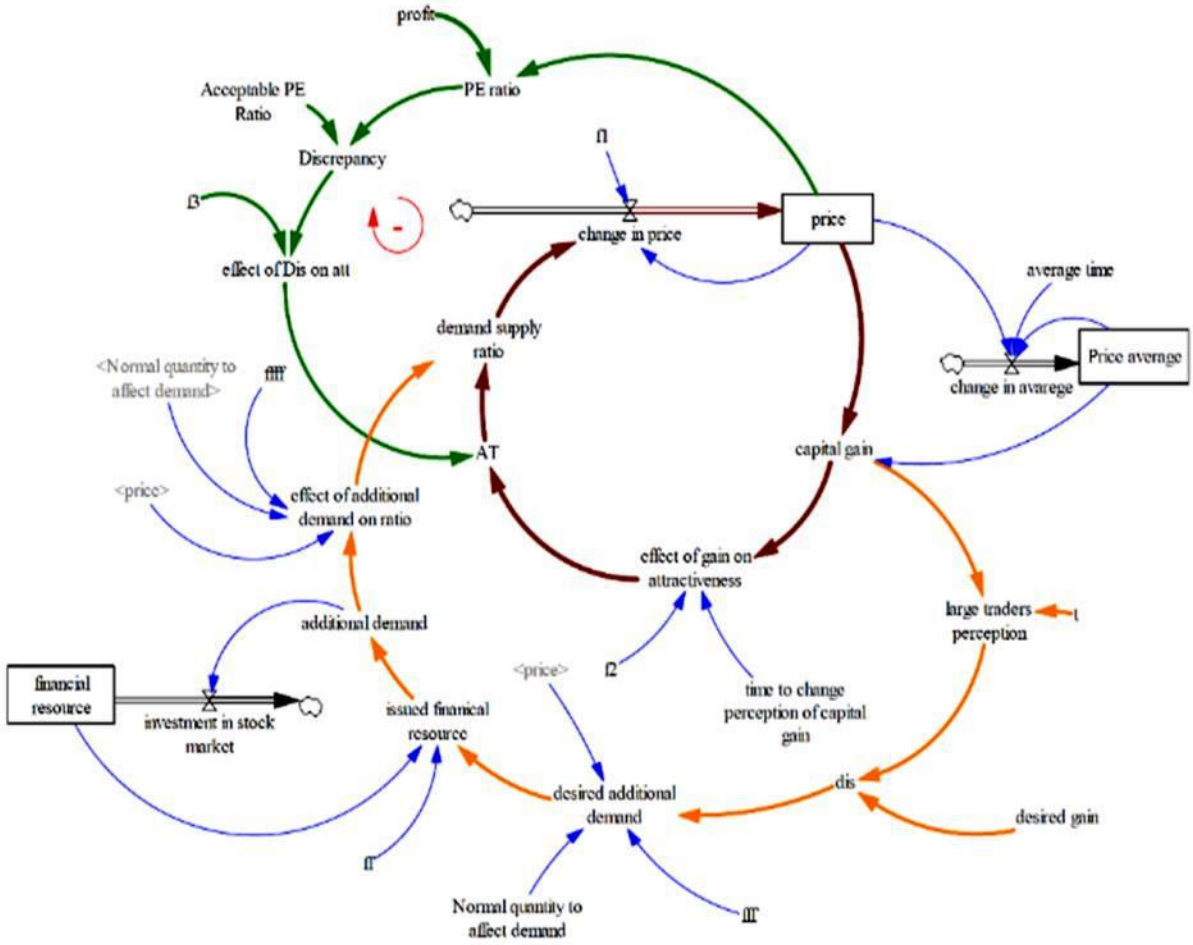
4 - Increase daily source of demand when these variables increase the daily volume of demand, relative to the start of the period under review shows.

5 - Increase supply daily, to the point when these variables increase the amount offered, compared to the initial performance study shows.

Hypothesis of dynamical

Dynamical hypothesis, is the result of cause and effect relationships. Some factors affecting bubble prices are correlated, hence, the formulation of this hypothesis, an effort that is, phenomena that form a closed loop, the influence of changes, can be derived.

Figure 1: Shows the Basic System Model



Causal - ring graphs

Diagrams Causal - ring, while explaining causal relationships between two or more variables in order to determine the effect of them. The effect on the variable of interest, it does take place, either directly or indirectly through intermediate variables.

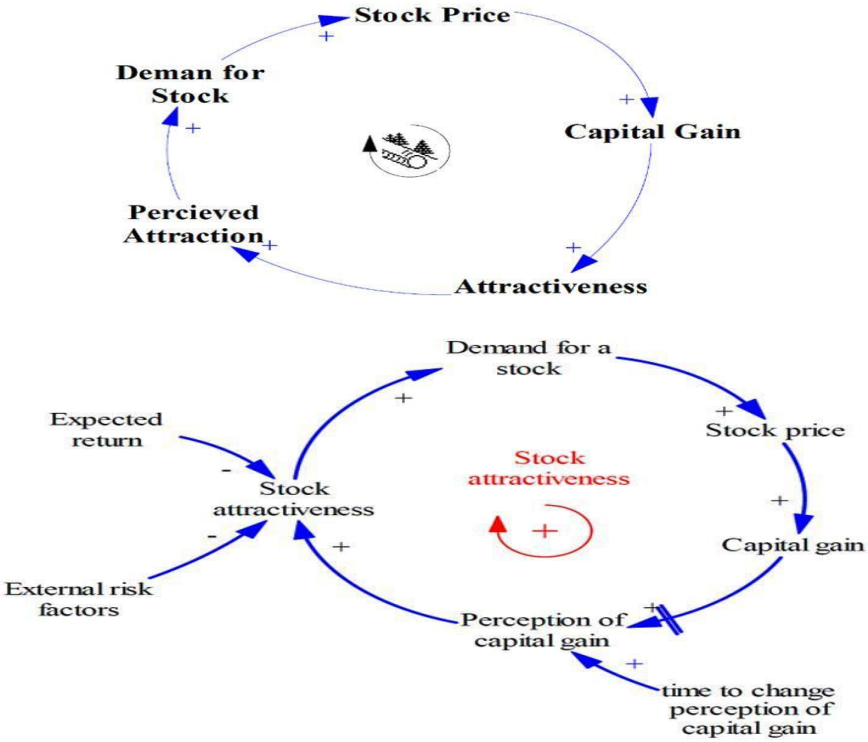
As noted above, the volume of transactions by investors in the stock exchange is a marker that indicates the level of the stock demand, increasing the share of demand for regular and potential investors, the shares are deemed desirable, and their to encourage new investment, and thus lead to higher demand and rising stock prices. In other economic systems, which demand changes than price, is modeled, we know that, with rising prices, the demand is low. For example, a constant supply of fruit, high demand for the fruit, raises prices, and high prices will reduce demand for the fruit. In this case, the effect of increasing prices, reducing demand on the buyer in mind, it is worth the price of the fruit, and we have compared their purchase, and based on that, to have lost its appeal.

In the stock example, the impact of price increases on demand reduction, in this way is, however, noteworthy that, in this case, before prices peaked, market

participants, the use of The price difference today, tomorrow, to buy shares flock, and, indeed, unusual behavior, "the price increase will result in increased demand" form.

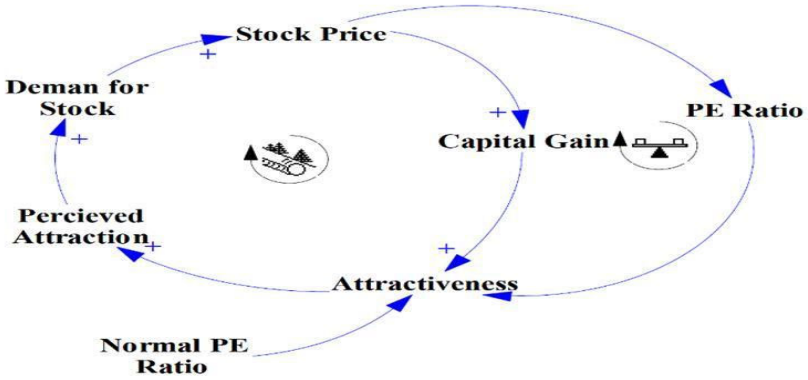
In terms of causality and cyclic graphs, it can be stated that the turnover rate, the decrease in stock prices, stock levels and price gap existing be low, thus forming an inverse relation tions. , this creates a negative loop that is.

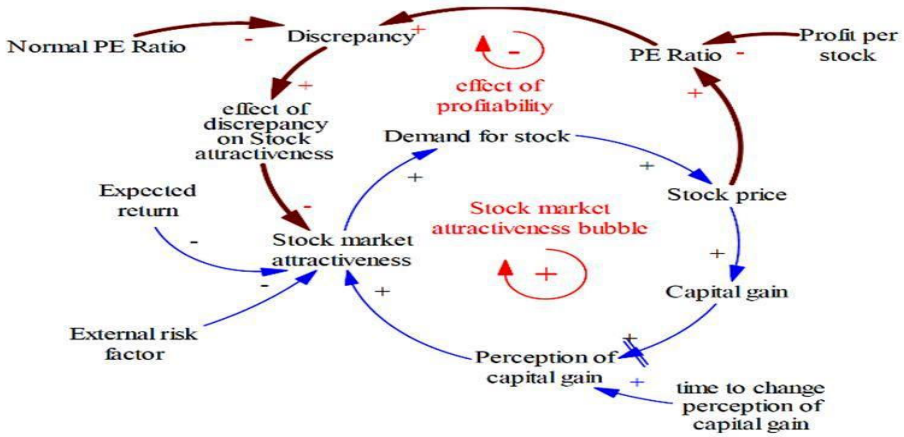
Figure 2: Split Rings Turnover, with an Average Stock Price



Also, the gap is more, government affairs, which he says, using the necessary tools, to reduce the gap, which one of these policies, the distribution of the Bonds, encouraging investment in other parallel markets, the system creates a negative loop. However, it is recommended to shareholders that they have less access to information and analysis of financial statements, investments in shares of companies which has a diversified portfolio of stocks, so they are not in the direct path of risk taking, and consequences arising from volatility and stock price bubble.

Figure 3: Reel slot adjustment cost





In conjunction with subsystem owned price gap, the difference between the price-to-earnings ratio of true and false, the decline in prices negatively affected, which represents the fact that, whatever the cost to income ratio increases, the amount of influence Bubbles rising price increases. The high value of its usual amount, showing the underlying stock price is high. Over this ratio, usually associated with a predicted increase in the estimated profit share, and is usually normal, expected, the proportion of companies in the industry, is a rank close together.

Thus, if the reason for the increase in this ratio is not present, the share price in the market, to achieve a ratio of "price to earnings" reasonably reduced. It is considered as a feedback to stakeholders, and the ratio "price to earnings" is somehow balanced share price, shareholders would see that the relative growth compared to similar cases in other stocks have is the risk of rising prices suffer, and their application to the low supply. Maximize profits and minimize losses on investments as the main criteria for decision-making and efficient, the mobility of capital owners, are discussed. However, in some situations, the behavior occurs, based on the fundamental principles governing stock market is not. In this case, the action "and excretory mass" of investors to buy and sell shares on the stock, the stock price, without any economic justification and rationale, can affect. This phenomenon, called "speculative bubbles in stock" is known.

In this study, we have tried to use a nonlinear approach to identify factors influencing the price bubble in Tehran Stock Exchange, according to the role and importance in the growth and prosperity of the country, in order to Increase investment and growth, deeper and more informed perspective, the bubble growth causes stock prices to be.

Collection and analysis of statistical data

The data used in this study consisted of cash returns (TEDIX) in the form of monthly, quarterly, the site of the Tehran Stock Exchange and is regulated by the collection. Time domain data used in this study date from 2000 to 2012. Graph (1), the historical trends of the stock yields for the period studied, showing that . As can be seen, the stock price index, as of mid 2004, the upside is that this process has been started since 2003, but has been declining since mid-2004. Also, the diagram (4.2), it can be noted that the yields of stocks, a trend slowly, during the years of the show. It should be noted that the data were examined, the effect of baseline factors on stock prices, including housing index, the index of industrial production, inflation and exchange rates, which were seasonally from 2000 until 2012 have been prepared 's.

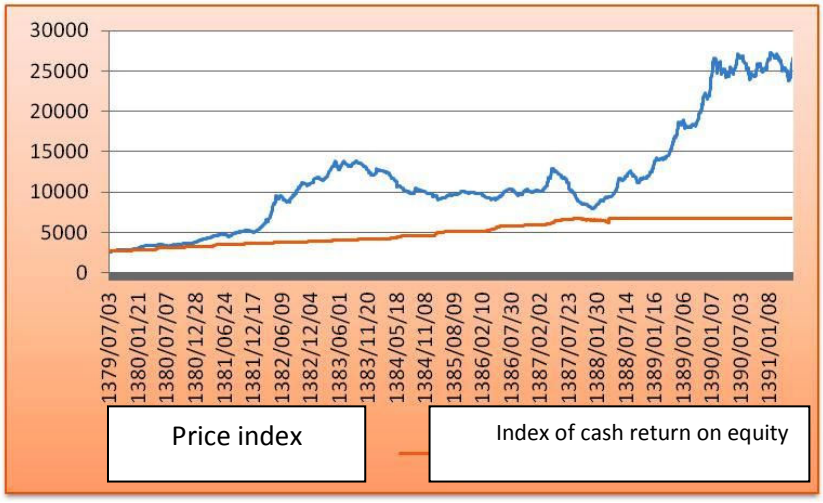


Figure 1: The historical price index and stock index yields

To this end, this study examines the correlation between cash dividends and stock price indices, GDP, import price index, real estate, housing production, world gold prices, exchange rate, liquidity, oil prices , inflation and political activities has been to obtain the relationship between stock price indices mentioned above, it is first necessary that the reliability of the variables used, are examined. If the variable is static level, the first difference of the estimated regression is used.

Reliability variables

Statistical regression models, it is assumed that the time series is stable, and if it does not exist, conventional statistical tests, which are based on t, F, Chi-square are being questioned. On the other hand, if the time series variables are unstable, it may be called regression problem spurious anomalies. Hence, the first step is to estimate the relationship between al-priced stocks, the factors affecting the time period studied, the reliability of variables. For this purpose, the Dickey Fuller test, were used to assess reliability.

To determine the optimal interval in R, for all variables Schwarz criterion - Bayesian use. Based on these criteria, the optimal interval is interrupted; this measure shows the highest value. Reliability and the first order difference of the above parameters in Table 1 are shown.

Table 1: Results of reliability test variables

Variable	The optimal lag	The critical statistic	Computational statistics	Results	The reliability difference variables			
					The optimal lag	The critical statistic	Computational statistics	Results
Stock Prices	0	-2.94	-3.69	Stable	-	-	-	-
GDP	3	-2.94	-4.67	Stable	-	-	-	-
Import	0	-2.94	-8.25	Stable	-	-	-	-
House prices	1	-2.94	-1.87	Unstable	0	-2.95	-11.60	Stable
Manufactured Housing	3	-2.94	-1.76	Unstable	1	-2.95	-18.07	Stable
Gold	0	-2.94	-4.76	Stable	-	-	-	-
Rate of exchange	0	-2.94	-5.84	Stable	-	-	-	-
Liquidity	3	-2.94	-2.08	Unstable	2	-2.95	-5.90	Stable
Oil Prices	0	-2.94	-7.63	Stable	-	-	-	-
Inflation	3	-2.94	-0.99	Unstable	2	-2.95	-7.02	Stable

The table above shows that all the variables that are unstable, with a difference be Paya, in other words, the type I (1) are. Then I realized that the variables I (1) are. We want to know that, in the long term, if there is a connection between the variables? In other words, the variables are stacked together or not?

Self assessment - vector regression with distributed lags

Because the purpose of this part of the study was to investigate the relationship between long-term between macroeconomic variables and stock indices yields, and also due to the different degree of collective variables, hence the use of soft Software Microfit4, and Schwartz criteria - Byzn, the best model, with appropriate intervals, by the way (ARDL), is estimated. Schwarz criterion - Byzn, the number of interruptions to saving. As a result, estimates of degrees of freedom will have better (boys and Shin, 1997). The results of estimating the model, as described in Table (2).

Table 2: The coefficients of the model specified model

Prob	T-statistics	Standard deviation	Coefficient	**Explanatory variable**
0.000	6.21	0.127	0.792	$Y(-1)$
0.336	0.983	0.1270	0.125	X_1
0.020	-2.50	0.1220	-0.306	$X_1(-1)$
0.494	-0.695	0.0640	-0.044	X_2
0.112	-1.65	0.3160	-0.52	DX_3
0.004	3.25	0.4070	1.32	$DX_3(-1)$
0.004	-3.25	0.0830	-0.271	DX_4
0.046	-2.11	0.0790	-0.168	$DX_4(-1)$
0.023	2.44	0.2010	0.492	X_5
0.002	-3.61	0.2060	-0.747	$X_5(-1)$
0.540	-0.622	0.0210	-0.013	X_6
0.438	-0.790	0.33	-0.260	DX_7
0.147	-1.50	0.084	-0.127	X_8
0.014	2.66	0.67	1.80	DX_9
0.099	1.72	0.020	0.035	Nuc
$\bar{R}^2=0.658$		PROB(F-STATE)=0.00		DW=1.91
A: Serial Correlation	CHSQ(4)=1.4659[0.833]			
B: Functional Form	CHSQ(1)=3.3474[0.067]			
C: Normality	CHSQ(2)=0.0153[0.992]			
D: Heteroscedasticity	CHSQ(1)=6.6295[0.010]			

Scalar quantity, the bottom, indicating its lack of correlation between the variables in the model, no explicit error model and the lack of heteroskedasticity in the model. The quantity of computational statistics, F, demonstrate the significant level of 5% for the entire regression equation is statistically not refuse - be. In addition, the explanatory power of the model is 0.65.

Before long run coefficients by method (ARDL), to ensure the long-term relationship between economic variables and indicators of cash dividends and stock prices, it is necessary, co-integration test done. To perform this test, the sum of the coefficients of the lag dependent variable ((1 -) Y), the number is a fraction, and the total is divided by the standard deviation as follows:

$$t = \frac{\sum_{i=1}^{p} \hat{\Phi}_i - 1}{\sum_{i=1}^{p} S_{\hat{\Phi}_i}} = \frac{0.792 - 1}{0.127} = -4.63$$

Given that, the absolute value of t, the absolute value of the critical values provided by Banerjee, Dola and MasterCard (9/3-), is larger, so the null hypothesis, that there was no long-term relationship with a 95 percent reject be. As a result, between macroeconomic variables and indicators of cash dividends and stock prices, there is a long-term relationship, . Accordingly, long-term model, using (ARDL), it was estimated that the results are summarized in Table (3), provided that:

Table 3: The long-run ARDL model

Prob	T-statistics	Standard deviation	Coefficient	Explanatory variable
0.464	-0.745	1.17	-0.875	X_1
0.547	-0.612	0.351	-0.215	X_2
0.407	0.845	4.56	3.86	DX_3
0.195	-1.33	1.58	-2.12	DX_4
0.376	-0.903	1.36	-0.23	X_5
0.600	-0.532	0.121	-0.064	X_6
0.487	-0.707	1.78	-1.25	DX_7
0.300	-1.06	0.578	-0.061	X_8
0.210	1.29	6.74	8.70	DX_9
0.088	1.78	0.097	0.173	Nuc

In the long-run relationship between the variables of exchange rates and oil revenues, the negative relationship between inflation and the growth rate of cash dividends and stock prices have a positive relationship. The interpretation of the numerical value of the coefficients is that, if in the long run, exchange rates and oil revenue variables, one hundred units, an increase of 6%, the growth rate of cash dividends and stock price declines. The passage of time and increasing inflation, positive impact on the growth rate of cash dividends and stock prices are rising. The reason can be explained as the positive impact on cash returns of listed stock, which is usually the dividend policies of listed companies, with the passage of time increases. The long-term model, with its associated error correction model, is presented. Summarize of the results of error correction model, described in Table (4).

Table 4: The dynamic structure of short-term

Prob	T-statistics	Standard deviation	Coefficient	Explanatory variable
0.335	0.983	127	0.125	dX1
0.493	-0.695	0.064	-0.044	dX2
0.109	-1.65	0.316	-0.525	dDX3
0.003	-3.25	0.083	-0.271	dDX4
0.022	2.44	0.201	0.492	dX5
0.539	-0.622	0.021	-0.013	dX6
0.436	-0.790	0.330	-0.260	dDX7
0.145	-1.50	0.084	-0.127	dX8
0.013	2.66	0.67	1.80	dDX9
0.097	1.72	0.020	0.035	dNuc
0.117	-1.62	0.127	-0.207	$ecm(-1)$

In the table, d represents the first-order difference variables. As you can see - it is, but the difference between the coefficients of the second order, real estate explanatory variable, and the first order

difference of the gold price and inflation rate, which has the t-statistics are right, the other coefficients of the model, given the possibility of significant quantities of t, ninety-five percent confidence level are significant.

What is short term in equation (ECM), and attention is essential, factor (1 -) ECM, which represents the speed of adjustment of process imbalance in the short term, the long-term equilibrium. As shown in Table (4) indicates that the estimated coefficient (1 -) ECM is about 0.2-suggests, the relatively high rate of short term imbalance, the long-run equilibrium, and show that , In each period, 0.2 imbalance index stock prices and dividends, are eliminated.

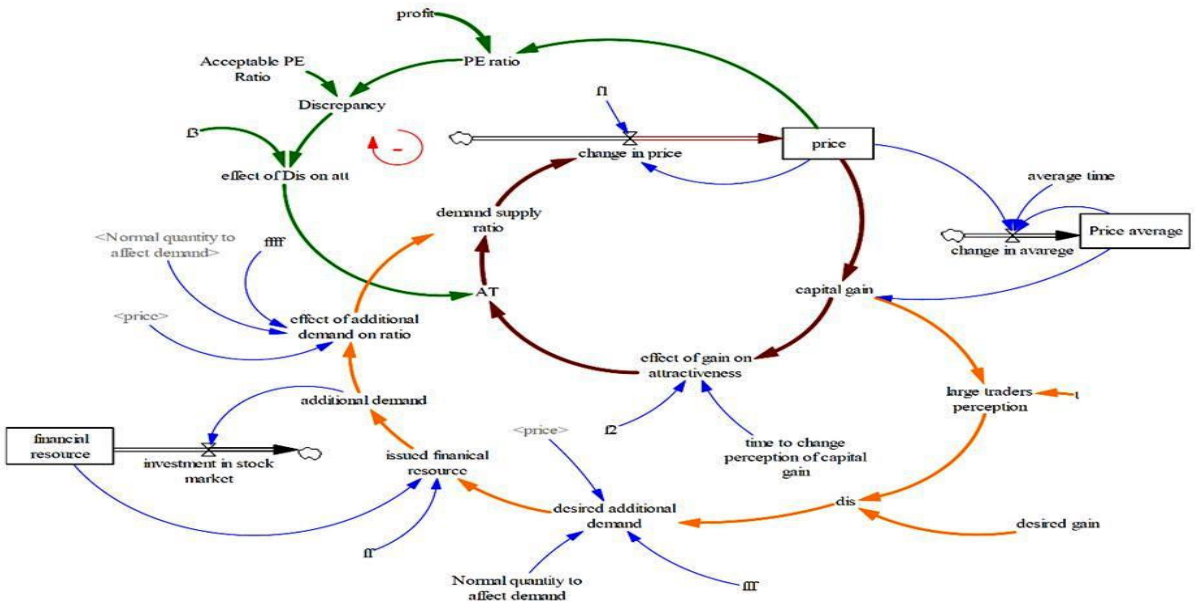
THE RESULTS

After determining the relationship between the variables of the model in the previous section, using the software VEnsim, and flow charts - accumulation was performed. In implementing the model, two factors "change in assumption relative to the price of a share" and "turnover", were controlled. One of the there are major factors affecting the length of time, that it takes to shareholders its conception, towards a contribution to change. The research results, this notion of the shareholder, rather than as a contribution or a contribution, how long must pass the price increases, the need for the buyer to make up the charm.

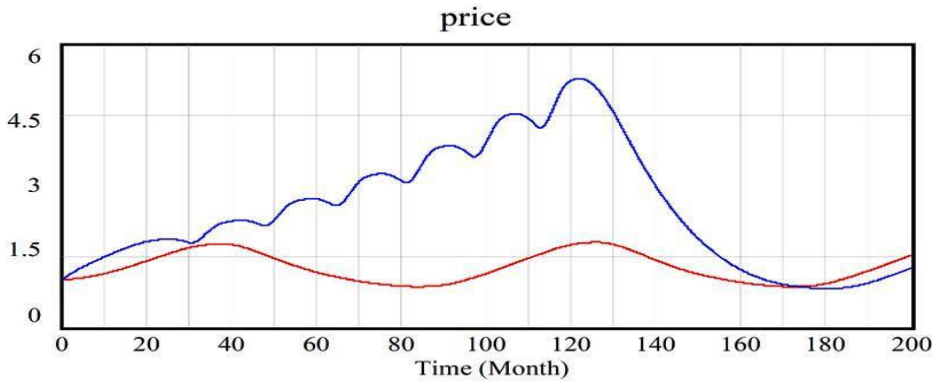
Assuming a change of shareholders, in a market is different. Also between different markets and at different times, the changing notion of stakeholders can be different. To understand the importance of this factor, assuming, for two days, promising news, compared to a share in the common market. Naturally, in these days, the demand for shares increases, and price increases. Now the question is, do these two days is enough to change the assumptions people to share? If it is, and people are seeing price increases, take action to buy the shares, then price growth fueled price rises again.

According to the diagrams Ali - ring, which was explained, however, to investigate the accumulation curves - flow is presented. The model simulated by software Vensim, is as follows. Because, econometric models estimated in logarithmic form, the parameters of the simulation, the dynamical system is turning into a logarithm. In the simulation model, all variables were used as the measurement model, has been used. In contrast, variables like building, which fits with reality, and this indicates a true estimate of the simulation Vensim, and the econometric analysis is . Finally, insert variables like building, along with the coefficients on speculative bubbles (stock prices), this variable, was found to be endogenous, the resulting statistics, it was close to reality.

Figure 4-5 Diagram of accumulation - the model



The output in this case is shown in the following diagram



CONCLUSION

Because of that, the financial assets portfolio, various combinations of cash, shares, bank deposits, bonds, gold, currencies, maintain, changes in monetary, exchange rate, inflation and interest rates, Ask people to hold each of the assets, including the demand for shares, will be affected and this, too, in turn, affects the stock indices. It is believed that stock prices by some fundamental macroeconomic variables such as inflation, exchange rate, interest rate and liquidity, are determined.

In this study, to estimate the econometric model and estimate the long-term relationship, ARDL method is used. The co-integration test results indicate the existence of long-run relationship between inflation, exchange rate, money supply growth and oil revenues, with a growth rate of cash dividends and stock prices. Hence, using the ARDL, long run relationship was estimated. As expected, in the long run, in terms of Inflation, average nominal corporate profits due to currency devaluation, increases. Thus, a higher inflation rate, dividends, and consequently yields stock index, has been followed. The results obtained from testing the first hypothesis, also suggest the existence of a negative relationship between house prices and the growth rate of cash dividends and stock prices, and confirm this hypothesis. However, the growth rate of cash, long-term patterns of ARDL, ninety-five percent confidence level, no significant, long-term relationship was observed. Test results of the second and third research hypothesis, that there is a negative relationship between exchange rates and real estate, with a growth rate of cash dividends and stock prices, ninety-five percent confidence level, was adopted.

Although the relationship between inflation index and dividends, and stock prices is positive, but because this increases to offset the decline in real income, so it is recommended that economic decision-makers and policy makers in During fiscal and monetary policy, at the macro level, the impact of these decisions on stock market indices, and other financial markets, to consider.

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