

**THE IMPACT OF HERD BEHAVIOR AND MARKET FACTORS ON THE
BEHAVIOR OF INVESTORS IN THE BEAR AND BULL MARKET AN
EXPLORATORY STUDY IN "THE IRAQI STOCK EXCHANGE"**

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Abstract

The traditional theory assumes that investors behave rationally when they start making investment decisions, but on the contrary the modern theory of behavioral finance has proven the opposite, as it has proven that investors act irrationally in their decisions because the investment decision requires a rational decision based on a complete study, especially when prices rise and fall and their direction changes, and that investors' decisions are sometimes based on irrational behaviors due to their suffering and exposure to biases and many behavioral factors. Thus, the current study aimed to know the behavioral factors to which investors are exposed and to indicate the extent to which the market factor and herd behavior influence their behavior. So, the research is depended on the analytical exploratory method by targeting a sample of Investors in the Iraqi Stock Exchange amounting to (85), and statistical tests and a set of arithmetic averages have been used by using the SPSS program, and a set of conclusions have been reached, the most important of which is the existence of an influence relationship between the herd behavior and the market factor and behaviors of investors along with their trends in the bear and bull market. The current study is concluded with a set of the most important recommendations, most important of which are raising the cognitive and awareness aspects of investors, especially when making investment decisions, and paying attention to the fundamental and technical analysis of stock market to avoid being influenced by irrational behaviors or following others due to lack of experience and knowledge. The Iraq Stock Exchange Authority must also hold educational courses and seminars for investors and also monitor companies listed in the financial market and demanding disclosure and transparency

Keywords: (behavioral factors, herd behavior, market factor, bear market (low prices), bull market (high prices).

Introduction

Financial studies have proven the existence of markets called the bull market (rising prices). These studies came after Charles (Dow) predicted the capital market crisis that occurred on October 29, 1929, which resulted in the Great Depression. The movements of these markets are unusual movements and occurred as a result of Political, economic, and sometimes even health crises that could affect the country's economy, and often due to the severity of these crises, they spread to other countries, as happened in the 1929 crisis, which resulted in the collapse of many banks and an increase in unemployment rates, causing a state of panic among

investors. It turns out that investor behavior is considered one of the factors that cause the occurrence of a bear market or a bull market because of their effective role in the market movement and the investment decision-making process. Therefore, the current study explains the recent trends that investigate the behavior of investors, especially after studies that contradicted the traditional theory of the irrationality of investors when making investment decisions because their decisions are based on a set of behavioral factors, including the collective behavior of investors and the factors affecting and surrounding the market.

First: The research problem:

The behavior of investors varies from one market to another depending on the state of the market and its trends, and the variation and difference of these behaviors from one case to another greatly affects the financial markets that revolve around stock market prices and their trends, causing the market to rise (i.e. a market of rising prices) or a fall of the market (i.e. a market of falling prices). From this standpoint, the problem can be identified by asking the following questions:

1. How do herd behavior and market factors affect investor behavior in the bear market?
2. How do herd behavior and market factors affect investor behavior in the bull market?

Second: Objectives of Research:

The primary purpose of this research is to achieve the following objectives:

1. Knowing the impact of herd behavior and market factors on investor behavior in the bear and bull market.
2. Conceptual presentation of herd behavior, market factor, bear market and bull market
3. Providing a set of recommendations that serve investors to understand and know the behaviors they are exposed to when the bear and bull markets occur.

Third: The Importance of Research:

The research is concerned with studying the herd behavior and the market factor, which has an influential role in shaping the behavior of individuals, especially individual investors in the stock market. These factors are characterized by difficulty in identifying and discovering them when making an investment decision. It is necessary to know these factors and how to deal with them because of their significant impact on investors' behaviors and their investment trends, therefore understanding and realizing these factors can help us predict what prices will be in the future. The importance of the study can be summarized as follows:

1. The research topic is considered a recent and important topic due to its connection to behavioral finance, in addition to the study's interest in the theory of technical analysis (Dow Jones theory)
2. Knowing the relationship between the herd behavior, the market factor, and the behaviors of investors in the bear and bull market.

Fourth: Research Hypotheses:

Depending on the research problem and objectives, the following hypotheses can be formulated:

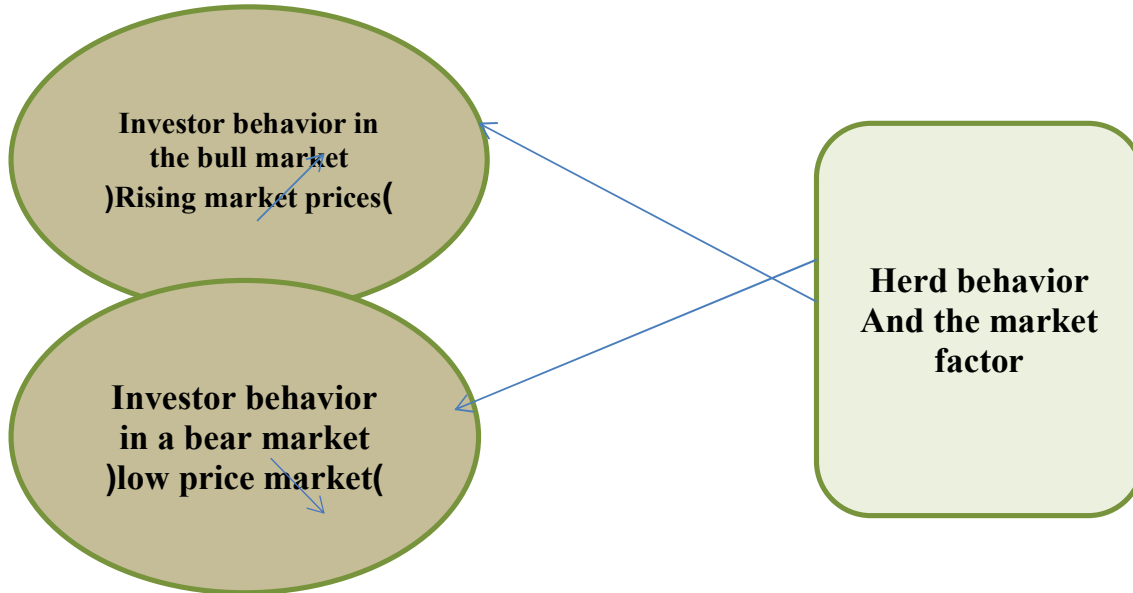
The first main hypothesis:

There is a significant, statistically significant effect of the herd behavior and the market factor on investor behavior in the case of a bear market.

The second main hypothesis:

There is a statistically significant effect of the herd behavior and market factors on investor behavior in the case of a bull market.

Fifth: Research Chart:



Source: Prepared by the researcher

(Dependent variable)
(It indicates the influence relationship)

Movement of the hypothesis chart: The direction of the arrow shows the nature of the relationship and influence between the research variables. The movement of the arrow represents the first and second main hypothesis that indicate the existence of an influence relationship between the behavior of the herd and the market factor and their behaviors in the bear and bull markets.

Sixth: Research methodology:

The researchers relied on the statistical approach through the use of a questionnaire list and SPSS analysis

Seventh: Society and research sample:

Because the research is related to studying the behavior of investors in the bear and bull market, the study was conducted in the Iraqi Stock Exchange, and therefore the investors in this market are the sample society , and a sample of 85 individual investors in the market was chosen.

Eighth: Methods of collecting data and information:

In collecting information and data that helped them write the theoretical and practical aspects and reach the results and conclusions of the research, the two researchers relied on the following methods:

1. Seeking help from some Arab and foreign sources that dealt with the variables of the study,

such as theses, books, and dissertations, as well as benefiting from the services of the information network (the Internet).

2. Questionnaire form: The researchers depended on the questionnaire form as a main tool in collecting data and information related to the practical aspect of the research using a five-point Likert model.

The First Topic:

First: Behavioral factors affecting investors' attitudes in the bear and bull market:

There are many factors that affect the investor's behavior when making his decision to invest, and among these factors are the psychological biases that make the investor adopt irrational behavior in his decisions, including the theory of inference represented by (representability, overconfidence, consolidation- fixation -), the theory of probability, and the theory of expectation represented by (Aversion to regret, aversion to loss) and the market factor is the herd factor, and the market factor and the herd factor will be discussed as they are the research variables:

1. Market Factor:

Market factors are considered among the external influences affecting the behavior of investors, although they are not among the behavioral factors, but they have a significant impact on the decisions of rational and irrational investors, which is why they are considered among the behavioral factors. The market factors influencing investors' decisions are represented by (market information, price changes, stock price trends for previous periods, the quality and nature of stocks and the exaggeration in reactions to price changes, customer preferences. Any change in the information received by the market and the prices and types of stocks causes an impact on investors' reactions and thus is reflected on their careful investment decisions (Al-Fatlawi, 51: 2021).

2. Herd Factor

It is a concept within the framework of the decision-making psychology. It appears when individuals imitate the decisions and actions of other individuals instead of their beliefs and knowledge, or when individuals are aware of their lack of information, or when information is asymmetric and hardly to be obtained. Individuals then believe that they make a better decision when following others, and many professional managers and investors engage in this behavior in markets where uncertainty prevails due to fear, panic, reputation, and social interaction. This behavior affects the efficiency of markets and the asset pricing process and causes instability. (Yasemin, 2021, 129) (Susay & Cihan, 2023: 42) .

It is considered a reliable and influential feature of individual behavior in many fields, especially in finance and economics. It has been defined as a condition that indicates convergent social behavior, as it results in having many investors make the same investment decisions for other investors. Investors who follow herd behavior have been described as an obedient herd, or it is defined as a behavior that occurs because investors imitate each other, or they make their investment decisions based on the opinions, information, ideas, and evaluations of other investors. There are two types of herd: the herd of buyers. They appear when investors' demand for stocks increases, and because of the increase in demand, each investor puts a higher price than another to win the shares he wants, so bidding begins and prices rise. When a state

of saturation is reached, investors begin selling their shares at a high price in order to obtain profits. Here supply increases and demand decreases and thus prices decrease until investors are guaranteed to sell their shares before others. This behavior is called herd of sellers, which is the second type of herd, and because of that prices begin to collapse, and investors adopt the behavior of the herd for reasons including lack of information and lack of sufficient knowledge in the financial markets, or financial market analysts agree with the opinions of others because they seek to avoid damage to their reputation, or some believe in the possibility of doubling Profits through this behavior and because of it result in deviations in stock markets prices from the real value, which causes market inefficiency, which is known as speculator bubbles.

Braga, 2016: 19) (Raafat, 2009: 421-420) (Filis, 2019: 3)

Second: Market Analysis Theories:

Dow Theory

This theory is considered one of the most famous and oldest technical analysis tools. It is the theory that is attributed to Charles Dow, and the Dow Jones Industrial Average Index is also attributed to him. It is this theory that predicted the capital market crisis that occurred on October 29, 1929, which resulted in The Great Depression, where the Wall Street Journal published an analysis in which it showed that the bull market had ended and the bear market had begun, and indeed it had been achieved and prices had begun to fall, and the theory was subjected to modifications and additions by analysts in the Wall Street Journal for which Charles Dow worked as an editor. And that the purpose of the theory is not to know the price trend lines before they happen, but rather to know the basic upward and downward markets and to know market movements (Murphy 1986: 29), where Dow assumes that the market operates in an organized and predictable manner and thus moves up or down during a certain period of time in the basic trend, and also that the volume of trading decreases in cases of stops and tends to increase in cases of rises, and the theory was classified as being more of an art than a science (Woodward, 1968: 37-43).

This theory shows that there are three price movements of market prices occurring at the same time:

A - Daily Fluctuations: These are price changes or fluctuations that occur from one day to the next.

B - Medium price trend , also called Secondary Price Movements, which range in occurrence from two weeks to a month or more, and these movements or changes continue for a few months until another change occurs.

C - Primary Trend, or called the Bull Market or Bear Market, meaning it is called according to the circumstances, that is, if the trend is in a state of decline or as if it is in a state of rise. They are the changes that occur as a result of a series of accumulated effects of secondary price changes which extended for four years or more (Hindi, 1993:427-428).

Figure (2) below shows us the main trends and secondary movements of the financial market according to Dow Jones theory. (detail drawing)

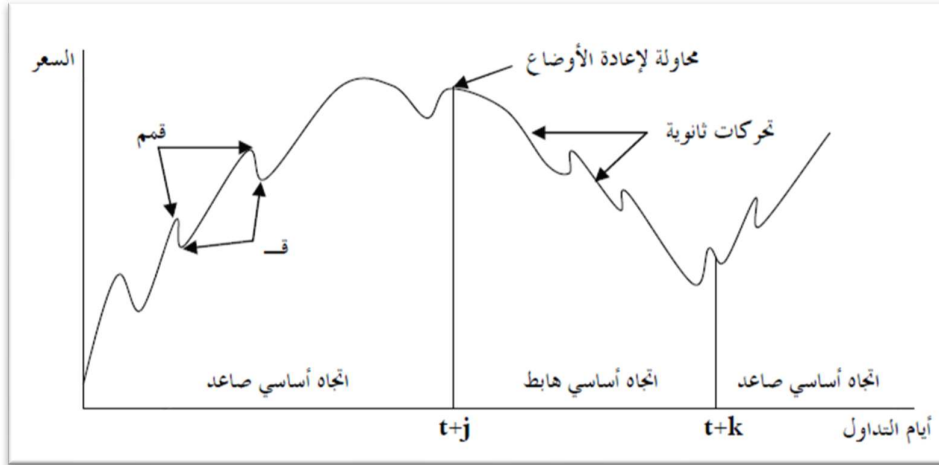


Figure (2) shows the main trends and secondary movements of Dow's theory

Source: Zaid, The Role of Technical Analysis in Making a Stock Investment Decision, 2015: 120

A- Bear Market

1. Bear Market Movements:

The term bear market is used when the price trend is down, and the name of bear market with this term came from the way the bear attacks, as it attacks with its paws (i.e., scratching the prey towards the bottom). The bear market has been known as the bear market or the down trend, which is the financial market in which it deals with (Currencies, commodities, metals), which is a market in which prices fall and is dominated by pessimism and fear among investors, due to the expectation that prices will continue to fall. Or it is known as continuous periods with returns lower than usual (Gonzalez.et.al, 2006, 82-83). It is also known as a market in which supply dominates demand, causing prices to fall (Financial Dictionary, 2010: 106). It was defined by the two researchers as periods that witness a continuous decline in prices, which makes investors rush to sell stocks.

2. Bear Market Times:

A - The bear market begins when the market index reaches the peak, that is, when prices reach their highest levels, a bubble occurs. The bear market begins, that is, with the end of the bull market (www:arageek.com) .

B- The bear market occurs during times of significant decline in prices

C - The full period from the bottom to the next bottom is assumed to be at least (15) months, and the time in the bear market (from the peak to the bottom) must be at least (6) months. (Nyberg, 2012: 6).

3. Bear Market Stages:

The bear market consists of three stages: (Al-Zubaidi, 2016: 110)

The First Stage: This stage occurs in the final stage of the bull market (uptrend), and it is the stage in which investors seek to get rid of stocks, due to the abnormal rise in prices, as investors begin to sell the stocks they own, and despite this, the volume of trading remains High and on the trend of contraction, putting the market and investors in a state of activity.

The Second Stage: This is the stage in which prices begin to fall, and it is called the panic stage

due to investors' willingness to sell their shares. At this stage, the trading volume is very high, and after this stage there is a long correction stage, that is, the recovery stage.

The Third Stage: This is the stage in which bad news is published, and a state of pessimism is widespread in the markets among investors. This stage occurs due to an increase in a selling by investors who invested in the panic stage, and prices are low compared to previous prices, and selling pressure continues on for investors who are interested in liquidating their investments to meet their cash needs, the bear market often continues until the market absorbs all the bad expectations and bad news.

B- Bull Market

1. Bull Market Movements

The term bull market is used when the price trend is upward, and the name bull market comes from the way in which the bull attacks, pushing its horns upwards. The bull market has been known as the bull market or the rising trend (UP Trend), which is the financial market in which (currencies, commodities, metals etc.) are traded. It is a market in which prices rise and is characterized by being dominated by optimism and confidence among investors, as the market expects a strong upward trend to continue (www.equiti.com), and it is also known as the periods between peaks and bottoms that contain continuous gains due to the continuous rise in prices. Or it is continuous periods with high returns that are higher than usual (Gonzalez.et, 2006: 82-83). It was defined by the researcher as periods that witness a continuous rise in prices, which makes investors rush to buy stocks.

2. Bull Market Times

A - The bull market begins with the end of the bear market when the market index reaches the bottom, that is, when prices reach their lowest levels. (www:arageek.com)(

B - The bull market occurs during times when prices witness a significant rise, with periods in which they decline before rising again.

C - The stock market spends 90% of its time in the bull market (Gonzales.at, 2014: p85).

D- The full period from peak to peak is assumed to be at least 15 months, where the bull market (from bottoms to peak) spends at least 6 months (Nyberg, 2012: 6)

3. Phases of a Bull Market:

The bull market is divided into three main successive stages: (Al-Zubaidi, 2016: 107).

A - The First Stage: This stage usually occurs near the end of the main downward trend, and it is the stage known as the stage of capturing and buying shares by investors in the market who have experience and knowledge, because despite the continuous decline in prices during that stage, investors However, are fully aware of its rise, so that investors seek to buy and pick up the stocks offered by sellers, whose feelings and behaviors are represented by panic and fear due to the continuous decline in prices, and the market condition is pessimistic at that stage.

B - The Second Stage: In this stage, there is a steady and increasing rise in prices, and corporate profits also begin to increase and begin to attract the attention of all investors in the market, and because of the presence of a large number of buyers, investors can achieve the best returns through selling.

C - The Third Stage: It is the third stage of the bull market, that is, the stage of the market boiling with activity, due to the increase in demand for stocks. In this stage, news spreads and optimism in the market increases, which causes an increase in investors' movements, and their ability to achieve capital gains increases. This stage ends with a continued rise, although there are bumps during this stage.

The third topic:

The practical aspect: Research hypotheses Testing

Testing hypotheses regarding the influence relationship:

To demonstrate the moderation of the data with the aim of diagnosing the statistical methods used in analyzing the practical aspect, the researchers use to test the research hypotheses represented by:

The first main hypothesis:

(There is a statistically significant effect of the herd behavior and the market factor on investor behavior in the event of a bear market)

The second main hypothesis:

(There is a statistically significant effect of the herd behavior and the market factor on investor behavior in the case of a bull market).

Both the Multiple Linear Regression Analysis method, the statistical test (F-TEST), and the influence relationship diagram mediated by the Amos statistical analysis program, twenty-ninth edition, to test the effect of herd behavior and the market factor together as independent variables in the first dependent variable, investor behavior in the event of a decline in Prices and the second dependent variable is investor behavior in the event of a rise in prices.

First: Hypothesis testing:

1. Testing the first main hypothesis: (There is a statistically significant effect of the herd behavior and the market factor on investor behavior in the event of a bear market)

The researcher uses multiple linear regression analysis based on the (F-TEST) test to prove the acceptance or rejection of the hypotheses of the influence of herd behavior and the market factor as independent variables in the first dependent variable, investor behavior in the event of a decline in prices, as the reliability of the influence hypothesis will be confirmed when the probability value corresponding to the value of F calculated is equal to or less than the level of significance (0.05). To show the percentage of explanation of herd behavior and the market factor combined for the changes that occur in investor behavior in the event of a decline in prices, the researcher relies on the coefficient of determination (interpretation) %R², and the results of the statistical analysis were to test the hypothesis of the effect of herd behavior and the market factor in the first dependent variable of the investor behavior in the event of a bear market as follows:

Table (1): Statistical analysis data to test the first main hypothesis

Independent variables	The first dependent variable	Determination Variable R2%	F Test		Result of Test
			calculated value of F	Probability Value	
Herd behavior and the market factor	The investor's behavior in case of falling prices	44%/	5.152	0.000	The first main hypothesis is accepted
Researcher's interpretation	There is a clear influence of herd behavior and market factors on investor behavior in the event of a bear market				

Source: Prepared by the researcher according to the hypothesis test and the results of the SPSS V29 program

It is inferred from Table (1) that the first main hypothesis was accepted, which states (there is a statistically significant effect of the herd behavior and the market factor on the investor's behavior in the event of a bear market) with an acceptance rate of (95%), as the calculated F value reached (5.152), which is significant, and that indicated the presence of a clear effect of the herd behavior and the market factor combined on investor behavior in the event of a bear market, while the value of the determination coefficient was %R2 (44%).

Testing the second main hypothesis: (There is a statistically significant effect of market behavior and factors on investor behavior in the event of a bull market). (

The researchers use multiple linear regression analysis based on the F-TEST test to prove the acceptance or rejection of the hypotheses of the influence of herd behavior and the market factor as independent variables in the second dependent variable of the investor behavior in the event of rising prices. The reliability of the influence hypothesis will be confirmed when the probability value corresponding to the value of F calculated is equal to or less than the level of significance (0.05). As for showing the percentage of explanation of the herd behavior and the market factor combined for the changes that occur in the investor's behavior in the event of a rise in prices, the researcher relies on the coefficient of determination (interpretation) %R2, and the results of the statistical analysis were to test the hypothesis of the influence of the herd behavior and the market factor in the second dependent variable of the investor behavior in the event of a bull market as follows:

Table (2) Statistical analysis data to test the second main hypothesis

Independent variables	The first dependent variable	Determination Variable R2%	F Test		Result of Test
			calculated value of F	Probability Value	
Herd behavior and the market factor	The investor's behavior in case of rising prices	42%	4.782	0.000	The second main hypothesis is accepted
Researcher's interpretation	There is a clear influence of herd behavior and market factors on investor behavior in the event of a Bull market				

Source: Prepared by the researcher according to the hypothesis test and the results of the SPSS V29 program

It is indicated from Table (2) that the second main hypothesis was accepted, which states (there is a statistically significant effect of the herd behavior and the market factor on the investor's behavior in the event of a bull market) with an acceptance rate of (95%), as the calculated F value reached (4.782), which is significant, and it is confirmed the presence of a clear effect of the herd behavior and the combined market factor on investor behavior in the event of a bull market, while the value of the determination R2% (42%)

The fourth section

Conclusions and recommendations

This research includes the following topics:

First: Conclusions

1. The financial market is exposed to many crises that result in an exaggerated rise and fall in prices, which causes investors' behavior to change depending on the market situation. It turns out that human behavior is complex behavior. It is affected by unlimited influences.
2. The investment decision varies depending on the investors' different orientations and the way they perceive the information and risks they are exposed to.
3. The behavioral factors represented by (inference theory, probability theory, expectation theory, market factor, and herd factor) help to understand the investor's investment behavior in the financial market and the reason for his trend toward this behavior, and to clarify the extent to which these factors influence their investment decisions and directions.
4. It has been shown in the Iraqi Stock Exchange that investors have a clear tendency toward collective behavior, i.e. what is called herd behavior, that is, they are influenced by the opinions of others without paying attention to analyzing and processing stock data. Investors follow this behavior to avoid regret, loss, and the feeling of anxiety that they are exposed to when exposed

to a state of pressure due to market conditions.

Second: Recommendations

1. The necessity of paying attention to studying human behavior and conducting more studies and research in order to know complex behaviors and how to deal with them, and also presenting these studies in the form of seminars to investors dealing in financial markets in order to explain the dimensions of human behavior and the extent of its impact on investment decisions.
2. Behavioral factors greatly affect the behaviors and thoughts of investors and thus keep them away from a rational investment decision. It is necessary to pay attention to the technical and fundamental analysis of the stocks and increase the investor's cognitive awareness through learning and gaining experience by looking at the financial reports published by the financial markets.
3. Increasing investors' awareness regarding the information and data that reaches the financial market and how to analyze it in a way that helps them make rational decisions without rumors and news affecting their decisions.
4. Investors avoid rumors and what companies promote about their shares and try to rely on their expertise and previous experiences because the financial market is full of distortions and rumors. For example, not every upward trend in a stock reflects a real increase.
5. The investor must be balanced in his behavior when there is a state of optimism or pessimism dominating the market, because exaggerated feelings such as overconfidence, aversion to loss, fear, or greed can lead to incorrect decisions that end with a feeling of remorse.
6. Demanding the market for administrative control and organization of work, and demanding companies to disclose and be transparent when announcing the financial statements, because of their major role in reducing the severity of the impact of other variables, whether determinants or behavioral factors.
7. The necessity of addressing the new generation in general and students of administrative and investment departments in particular to enter the financial markets and invest in them by providing them with information and requirements that encourage them to enter.
8. Conduct research and studies on the bear and bull market, considering that it is a recent topic and there are few studies on it.

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