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COGNITIVE BIASES IN FOREIGN EXCHANGE TRADING DECISIONS IN IRAQ

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Abstract
This research aims to analyze the pulses of cognitive biases in the decisions of traders in the currency market in Iraq to determine their impact on foreign exchange traders and their ability to avoid risks. Cognitive and perceptual biases are more likely among investors who have low education and little experience. Experience and knowledge grow and develop with the development of the country's economy and markets. Finance and Monetary As is known, the Iraqi economy has not witnessed development due to the historical stages that it has passed. Therefore, a large group of biases was chosen that represented the independent variables, while the traders' decisions represented the dependent variables. This research relied on the analytical research method, relying on a sample of bank managers. The business reached 220 financial and administrative managers, and the statistical program SPSS was relied upon in order to reach accurate results.
The research concluded with a set of conclusions, the most important of which is that all biases affect the decisions of foreign currency traders in Iraq. This confirms the lack of knowledge and scientific experience among the public of foreign currency traders and confirms the importance of keeping up with international studies and specialized courses that contribute to raising the scientific and technical level of advanced cadres. In the banking sector, the study concluded with a set of recommendations, the most important of which is that the state should have a role in spreading awareness in this field by encouraging researchers to conduct scientific research in this field and providing seminars and courses that increase the knowledge and ability of traders to avoid risks, hedge, and achieve profits.

Keywords: cognitive biases, foreign exchange, currency market, foreign exchange traders.

Introduction

The first section: methodology and theoretical aspect

Research problem

The foreign exchange market is characterized by large fluctuations, as it is affected by many factors. Therefore, managers trading in this market need great knowledge of these factors in addition to technical and experimental knowledge to be able to succeed and continue. The less knowledge and experience managers have in the market, the greater the influence of their cognitive biases, and vice versa. The research problem can be posed with the following question: What are the cognitive biases that affect the decisions of foreign currency traders in Iraq and what is the level of this influence?

Research hypothesis

The research has one main hypothesis:

There are no cognitive biases that significantly affect the decisions of department managers in commercial banks trading in the foreign exchange market in Iraq.

In cognitive and behavioral psychology, many aspects of bias affect our decisions and make them illogical or unhelpful without us realizing these biases, because they have become part of the nature of our thinking and perception, and understanding these biases and logical fallacies helps us reduce their risks to our decisions, behavior, and thinking, as This knowledge helps us to be more rational and logical in our investment and social decisions. The research focused on traders in the foreign exchange market in Iraq, knowing that the currency market is one global market. The exchange rate of the dollar against the euro is the same at any moment anywhere in the world, but Here we focus on Iraqi traders, especially commercial banks, which constitute the largest percentage of the market. The global foreign exchange market witnesses a lot of fluctuations throughout the day, and most often the fluctuations are large, as many economic and geopolitical factors affect currency prices. Hence, the research came to identify behavioral biases that have an impact on trading decisions in the foreign exchange market in Iraq.

Cognitive biases

This research addresses cognitive biases that have been confirmed by important research and studies. These biases are:

Mental Accounting Bias

The economist **Richard H THaler** was the first to write about behavioral finance and defined mental accounting bias as (a set of mental mathematical operations that individuals and families use to organize, evaluate, and track their financial activities). For example, people view the money that has been recovered from taxes as money that was found and therefore it is spent quickly and ill-considered, knowing that the reason for obtaining this money is the payment of additional money as a result of a specific mistake. Therefore, mental accounting can be considered as (setting a subjective value for money that conflicts with basic economic principles. The mental accounting bias makes individuals classify money in their minds on emotional and mental grounds and not on financial and economic grounds (Kahneman & Tversky, 1984:34). Here the money is spent. According to personal rules depending on the way we obtain money, money that is obtained easily and quickly is spent quickly and without planning, while money that is obtained with difficulty is invested in a thoughtful and planned manner. The individual here spends money based on its classification in his mind and not on reliance. Logical and financial foundations. An example of this is when Sarah wants to buy a travel ticket from the United States to China, and the price of the ticket is $1,000. When she bought the ticket, she got an offer for $400. Here, Sarah will feel that the $600 is like a gift, and therefore she will spend it on luxury things that she did not want. She was on her flight schedule (Thaler, 1999: 185).

Status Quo Bias

The first to point out this bias was (William Samuelson) and (Richard Zechauser) in 1988 in an article entitled (Status quo bias in decision making). The results of the research showed that when a person chooses between the status quo and the new option, he always adheres to the status quo, that is, he sticks to what he has experienced and knows because, in their view, change entails a great risk

This bias or irrational behavior means that people always tend to maintain or maintain their previous choices. They prefer to keep things as they are even with the availability of alternatives or information that makes their previous decisions incorrect (Boston & Ord, 2006: 655).

The reason for this bias may be that the person does not want to exert himself in searching for information or other options that lead to making new decisions with uncertain results, so he keeps the old option that he has experienced and tested (Kahneman & etal, 1991: 196).

Farming Bias

Framing bias is considered one of the first biases that has been studied. It means that a person is affected by the frame, form, or method in which information is presented. Making decisions depends on how the problem, information, or event is presented. Those who have this bias do not use scientific and logical methods to analyze information. Or the problem of making the correct decision, and on the contrary, they have a visual or auditory illusion and it has a significant impact on their decisions. An example of this bias is what we find in stores. The goods that are at eye level have an interest in them, unlike the goods that are in the lower classes. Or the top in the store (Harrington, 2011, 3)

According to this bias, individuals may react differently to two options that provide the same result or return, and the more inaccurate and clear the information is, the greater the possibility of falling into this type of framing bias. Framing bias can be defined as (people interacting with something depending on the method or method with which that thing was presented). For example, one company offers a meat product that says 80% fat-free, and another company says 20% fat, and here it seems to customers that the first option is better, knowing that the two offers are similar (Hllahan, 1999: 209).

Loss Aversion Bias

Loss avoidance bias is one of the most important behavioral biases introduced by psychology to economics and finance. It is linked to prospect theory and is defined as (the tendency of individuals to be affected by loss to a greater extent than to be affected by gain):) As a person, according to his nature and instinct, does not like loss and avoids it, whether it is moral. Or materially, the loss affects him psychologically in a greater negative way than the positive effect of the profit. The pain that a person feels as a result of the loss is much greater compared to the happiness that he feels while achieving profit (Vohs & Luse, 2010: 735).

An example of loss aversion bias is the study presented by the economist Daniel Kahneman, who won the Nobel Prize in Economics. He conducted a test on his students and told them (I will toss a coin and if the logo appears, you pay 15 dollars. What price do you ask if the

writing appears)... They asked for $20 and here shows us the real human behavior in avoiding loss (Amonlirdviman & Carvalho, 2010:2).

Ambiguity Bias

What this bias means is that a person avoids options whose results are ambiguous to him, so he tends toward options whose results are almost certain for him. An example of this bias is: If a person is offered a stable, good-paying job in a well-known and successful company and another job in another company. It is newly established but offers a higher income than the first, so he will choose the first option because the first company's historical record is known and not ambiguous. In this bias, the investor avoids decisions whose results are uncertain and whose risks cannot be calculated. Conversely, he makes decisions whose risks can be calculated or whose results are almost certain. (Shefrin, 2002:32)

Endowment Bias

Owning bias is one of the behavioral biases that exist in all people, and what is meant is that the individual gives a value greater than the true value of the things that he owns. This bias is an emotional bias, and the more the things that a person owns are emotionally connected to him, the more their value increases and the desire to sell that thing is weak, and the price increases. At a price greater than its actual price (Svedsater, 2003: 123).

The ownership bias results in what is called the ownership effect, as a gap occurs between the price that the buyer is willing to pay to obtain the commodity and the price requested by the person who owns that commodity or asset. The bias occurs when the commodity or asset is not evaluated according to market standards, but rather the evaluation is according to personal standards (Baner). &Schmidt, 2008: 270).

Regret avoidance bias

Regret, sadness, or pain resulting from a person committing a mistake or making a wrong decision. This sadness is related to the person's feeling that he made a mistake in a particular act or decision. Regret bias (is the investor avoiding decisions that are likely to be wrong decisions and lead to the person feeling... regretting it.) Two types of decisions lead to an investor feeling remorse. The first is making wrong decisions that lead to unacceptable results. The second: is missing an investment opportunity as a result of not making the right decision. Regret about wasting the investment opportunity is usually less than regret resulting from making wrong investment decisions. This is because the wrong investment decision leads to a real loss of capital, or wasting the opportunity does not affect the capital. (Baron & Ritov, 2004:75). This bias often leads to investors keeping their trades open, hoping that the loss will stop, and this often leads to more loss and wasted other opportunities (Solink, 2007:4).

Representativeness Bias

Representativeness bias is a cognitive bias that means that a person or investor sets probabilities or chooses the appropriate decision based on a similar event that happened to him previously, that is, he recalls his previous experiences to make appropriate decisions for

the events facing him. This bias in the world of investing in stock or currency markets leads to... Mistakes occur while making decisions because there are many mistakes and experiences that this person is not aware of. Secondly: Events are often not completely similar, and if they happen to be similar, their results and effects on the markets or economy will vary from one period to another (Barberis, 2002: 246).

An example of this bias is that around the year 216, there were political tensions between the United States and North Korea, and when Korea was testing an intercontinental ballistic missile, there was great fear of war breaking out between the two countries. Therefore, the financial markets were declining significantly with each test, but Over time, this effect began to diminish, and the event no longer affected the financial markets as it did before.

This bias makes investors not study and analyze information scientifically before making a decision, but rather the investor makes the decision based on his experience, previous observation, or previous results (Chandra, 2008: 17).

Overconfidence bias

Overconfidence bias is the tendency of people to be more confident in their capabilities and capabilities, which makes them make decisions quickly without taking enough time. This means that their assessment of their capabilities is incorrect or exaggerated, which leads to making mistakes, including mistakes in making financial and investment decisions. Excessive confidence leads to gambling and adventure in all aspects of life (Zakay & Sal, 1993: 53). Overconfident people always exaggerate their mental and physical abilities. They give a high probability of success and a very small probability of failure, even if they have little information about a subject. There are various reasons behind the existence of this bias among some people, including a lack of scientific or experimental knowledge, some due to the social environment and family upbringing, and some genetic or genetic (Fellner & Rugel, 2012: 143).

Availability Bias

In psychology, this bias means the tendency of people to rely on information that they obtain and understand easily when making decisions, as they believe that the information available about something is sufficient to clarify the truth of that thing to a large extent. Those who have this bias depend on making their investment decisions on the information, news, and events that they receive on an ongoing basis or that remain in their memory (Sachade & Koelling, 2007: 52).

According to this bias, investors rely on information related to events that can be easily retrieved, as this information is considered a reference in making decisions. This bias depends on personal experiences to judge matters and situations, and information related to the event or place is neglected, as this important information is not searched for and what results. This is caused by distortions in investment decision-making (Ashcraft, 2006:22).

Availability Bias

All investors have prior information and convictions about the functioning of financial markets and the economy. Some of them believe that investing in currencies is better than

investing in stocks, while others prefer investing in precious metals. Usually, these convictions are firmly established in the minds of investors, but when reality is different, problems and losses occur. When information What the market presents is conflicting or contradictory to the beliefs, this leads to anxiety and discomfort, and here it is difficult to make the appropriate decision due to mental discomfort, so you see them struggling to achieve compatibility between what they believe and reality and the available information (Aronson, 1997: 21).

Illusion of control Bias

It is a type of bias that causes people to exaggerate their cognitive or skill abilities while making decisions, and when they make financial investments, this bias makes them believe that they have complete control over the management of their investments because their analyses are not tainted by any error, and often those who have this bias tend to take risks.

Example: When investing in stocks, the person who has this bias believes that he has knowledge and experience in the field of investing in stocks, that is, he knows which stocks will rise in price and whose prices will fall, and therefore he can control the results, but in reality what will happen is the opposite. Experiments have shown that approximately 75% of stock investors fail and exit the market, and 25% succeed. (Ion & et al., 2014:3)

Confirmation Bias

People who have this bias resort to searching for information that confirms or supports their expectations, beliefs, theories, or the validity of their decisions, and at the same time, they exclude information that conflicts with or contradicts what they believe. Those who have this bias are not neutral during research and investigation about a particular topic, but rather They have an idea or belief initially and quickly, and then they search for something that confirms that idea or belief. This approach is not intended by this group of people, as they act as they normally do. Those who have this bias find it difficult to change their first impressions about a particular topic, and this first impression makes them make quick decisions, and then they find psychological difficulty in reversing those decisions (Wickens & Holland, 2000:3).

Example: Many investors in Iraq sold their assets in Iraq when ISIS entered in 2014, believing that the situation would not improve until after many years, despite the continuous receipt of information showing that the power of ISIS had begun to decline, this group of people was looking for information that would confirm The difficulty of eliminating ISIS.

Those who have this bias are often elderly people who find it difficult to make the change required by the latest information and news received.

Conservatism Bias

Conservatism bias is the investor's tendency to prefer available information and evidence over new information and evidence that would change a person's opinion, as psychological resistance occurs to protect the person from changing his opinion on a particular topic. This bias focuses on resistance to change.

Example: If a person has good previous information about a particular stock and wants to invest in that stock, he will avoid new information that conflicts with his convictions (Muhammed & Hilal, 2016: 3).

Herding Bias

Man is a child of his environment. He is constantly observing the people, relatives, friends, and co-workers around him, and during these observations, he lives within himself a competition with these people. He desires to excel over them and, at the very least, not to fall behind them. Usually, these competitors have the same ideas, obtain the same information, and compete in the same fields and businesses. According to this bias, the individual or investor tries to fit in with his society because the individual believes that this way of life is appropriate and makes him avoid many risks (Compenhout & Verhestraeten, 2010:2). The herd behavior of investors is often due to the similarity of the ideas of most investors. When new information comes to the market, many investors will make the same decisions that lead to an increase or decrease in prices as a result of the similarity of the opinions of the majority (Park & Sabouria, 2006: 4).

Anchoring Adjustment Bias

Usually, the investor builds his perceptions and ideas on an initial point of information that he obtained, then he makes adjustments to those ideas continuously, relying on the initial information, and this adjustment continues until an acceptable stage of ideas and beliefs is reached. This is what is called the anchoring and adjustment bias, as it is All the investor's choices depend on the information he obtained at the beginning, and here a problem occurs if the information is incomplete and does not give a complete vision. This initial information on which the investor relied may be random and obtained by chance, or it may be misleading and not true, but it forms the basis for the thinking of those who have this bias (Pompian, 2006: 75).

Foreign Exchange Market

The foreign exchange market, the Forex market, or the foreign exchange market, regardless of its different names, is an over-the-counter (OTC) market, that is, it is an informal and non-centralized market. In this market, the exchange rate of the currency is priced against other currencies. The development of international trade and financial and economic globalization represent the main reasons. The expansion of the foreign currency market is because the process of import and export and the movement of capital between countries requires the process of exchanging currencies (Hansen & Jagerson, 2011:4). The foreign exchange market is the process of exchanging one currency for another, and this relationship between currencies must be linear. If the relationship is not linear, it will allow obtaining profits through arbitrage during the period in which the linear relationship stops (Wilmott, 2007: 9). The currency market The foreign exchange market is called (Forex), which is an abbreviation for (foreign exchange). Trading in this market takes place 24 hours a day, five days a week, from Monday to Friday. Trading takes place through computers and tablets, that is, through various communications networks, and Large banks such as Citibank and Bank of America

represent the heart of this market, trading in this market takes place through market makers, as in this market the first party in the transaction does not know the second party (Schlossperg, 2006: 4-5).). The value of funds traded in this market is greater than the value of funds traded in global financial markets, and often the goal of trading in this market is speculation or trade. This market is affected by many economic, financial, political, social, environmental, and other factors (Smith, 2010: 2-3).

Traders in this market rely on two types of analysis to decide to buy or sell: The first is technical analysis: This means studying the shapes and charts of price movements. It focuses on studying the price movement in the past, as well as the trading volume, and through this study, future movements are inferred. For exchange rates, the second type: is the fundamental analysis. This analysis depends on the analysis of the internal and external economic, political, and social factors that affect currency exchange rates (Malkiel, 1999: 119). The foreign exchange market has several features, including:

1- It is considered the largest market and is traded 24 hours a day.

2- There are no restrictions on trading in this market, which leads to increased risks.

3- This market provides leverage of up to 400%.

4- The most active trading hours in this market are those that coincide with the peak trading in the stock markets.

5- This market is characterized by low transaction costs.

The second section: describes and diagnoses cognitive biases in foreign currency trading decisions and analyzes their results.

The second section aims to present the results of the analysis of the research sample's response on the relationship between foreign currency trading decisions and cognitive biases in commercial banks. The research sample, which numbered (220) managers, as this research includes presenting the values of the weighted arithmetic means and interpreting them according to the categories that fit the (Likert) scale, which are (Very low 1-1.80, low 1.81-2.60, moderate 2.61-3.40, high 3.41-4.20, very high 4.21-5) (Dewberry: 2004: 16), values of the standard deviation, the response level of individuals, the importance of the items as a percentage and the order of their priorities. According to the answers of the individuals in the research sample, the statistical program (SPSS) was relied upon. To extract the results as follows:

First: Verify the fairness of the data.

The normality of the data refers to the normal distribution that is used to make comparisons of the data of the research variables. The importance of analyzing the normal distribution appears as it directs the researcher towards the most appropriate statistical methods for the field and scope of testing his data and then achieving the most accurate targeted results. The Kolmogorov-Smirnov method was used to explore the normal distribution curve of the research sample's answers, in addition to adopting the standard value of the test. When compared to it, the test results must be higher than the standard value and within a significant level of 5% as a maximum. The following equation is used to calculate the standard value: (2014: Schindler & Cooper)

$$D = 1.36/\sqrt{n}$$

Where D represents the standard value and n refers to the research sample, whenever the statistical value of the test is higher than the standard value at the level (5%), this indicates that the data follows a normal distribution, and Table (1) shows that all test values for the variables and their dimensions are distributed normally, which It directs the researcher to choose parametric tools to conduct tests for the research.

Table (1) Test of normal distribution for cognitive biases variables

Significance of the test	Standard value D	Kolomgorov- Smirnov Test Statistic	variable	n
0.000	0.0917	0.157	Mental accounting bias	1
0.000	0.0917	0.213	Status quo bias	2
0.002	0.0917	0.151	Framing bias	3
0.000	0.0917	0.181	Loss aversion bias	4
0.000	0.0917	0.252	Ambiguity avoidance bias	5
0.000	0.0917	0.163	Possession bias	6
0.000	0.0917	0.163	Regret avoidance bias	7
0.000	0.0917	0.162	Representativeness bias	8
0.000	0.0917	0.157	Overconfidence bias	9
0.001	0.0917	0.164	Availability bias	10
0.012	0.0917	0.150	Cognitive dissonance bias	11
0.000	0.0917	0.181	Bias and the illusion of control	12
0.001	0.0917	0.252	Confirmation bias	13
0.000	0.0917	0.163	Conservatism bias	14
0.000	0.0917	0.163	Herd behavior bias	15
0.001	0.0917	0.164	Anchoring bias and modification	16

Source: Prepared by the researcher based on the Spss program.

Second: Adequacy of the sample and the presence of correlations between variables.

To ensure the adequacy of the research sample and the existence of correlations between cognitive biases, the Kaiser-Meyer-Olkin Measure was used to achieve this paragraph, as Table (2) shows that the value of the (KMO) measure is greater than (0.50), which reached (0.924). Which, according to the Kaiser classification, is a great value and confirms the adequacy of the research sample.

As for the existence of correlations between the cognitive bias variables, the Bartlett test was used. As in Table (2), the Bartlett test indicates the presence of a significant relationship between the cognitive biases items in the research.

Table (2) Results of the Sufficiency Condition Test (KMO)

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.924
Bartlett's Test of Sphericity	Approx. Chi-Square	893.784
	df	210
	Sig.	.000

Source: Results of statistical analysis

Third: Describe and diagnose the research sample's response to cognitive biases.

This paragraph relates to the statistical description of the research sample's answer about cognitive biases, as it becomes clear that the highest arithmetic average was achieved in the first paragraph, which includes the question (If you bought a currency and obtained unexpected profits as a result of an event, you will invest in the same way and will not look for a better investment) The weighted arithmetic mean was (4.33), and the standard deviation of the research sample's answers was (0.904), while the relative importance of this paragraph from the respondents' point of view was (87%). The results indicate that this paragraph, Mental Accounting Bias, had a high level according to the classification criterion. For statistical description.

The least significant arithmetic mean was for the third paragraph, framing bias, which includes the question (You do not trade in the currency of a country unless the data on that economy is presented in a way that you understand), as it reached (3.60), as was the standard deviation for the research sample's answers. It reached (1.048), while the relative importance of this paragraph from the point of view of the respondents was (72%), as these results indicate that this paragraph received a high level according to the classification standard for statistical description.

At the level of the dimension in general, the arithmetic mean was (3.94) and a standard deviation was achieved for the dimension in general amounting to (1.017). As for its relative importance according to the sample answers, it was (79%). This indicates that the sample realizes that the importance of cognitive biases in... Trading decisions in the foreign exchange market are at a high level, which indicates that department managers in commercial banks have a great interest in employees in the banking sector acquiring skill and analysis, as well as their awareness of the importance of cognitive biases in trading decisions in the foreign exchange market. Table (3) shows the descriptive results regarding the arithmetic mean and standard deviation level and the resulting relative and ordinal importance of the cognitive biases items.

Table (3) Arithmetic means, standard deviations, response score, and ordinal importance of the dimensions of cognitive biases (n=220)

Ordinal importance	Response level	Relative importance	standard deviation	Arithmetic mean	the question	Bias	n
the first	very high	0.87	.90445	4.33	If you buy a currency and get unexpected profits as a result of an event, you will invest in the same way and will not look for a better investment.	Mental accounting bias	1
twelve	high	0.76	1.021	3.82	You invest in the dollar against the euro and get acceptable profits, so you did not think about investing in other currencies.	Status quo bias	2
sixteen	high	0.72	1.048	3.60	You do not trade a country's currency unless the data for that economy is presented in a format that you understand.	Framing bias	3
the fourth	high	0.82	0.818	4.08	You avoid using leverage significantly for fear of huge losses, even with certain decisions	Loss aversion bias	4
Eleven	high	0.77	0.917	3.84	If you are offered a property at a good price and the economic and political conditions are uncertain, you will not buy that property	Ambiguity avoidance bias	5
Thirteenth	high	0.76	1.023	3.80	If you are one of those who love gold coins and you invested a million dollars in those currencies and there was a decline in prices, then you would prefer to wait instead of selling and seizing available opportunities.	Possession bias	6
Seventh	high	0.80	1.055	4.01	I Net constantly monitors currency movements and news for fear of missing an opportunity.	Regret avoidance bias	7
fourteenth	high	0.75	1.150	3.73	If you noticed that the value of the Iraqi currency decreases in January, would you continue to sell the Iraqi currency in this month?	Representativeness bias	8
Ninth	high	0.80	1.082	3.98	You have great confidence in your abilities that makes you not hesitate to make trading decisions in the currency market	Overconfidence bias	9
Fifth	high	0.81	1.087	4.03	When you trade in the currency market, you rely on the information you have without searching for new information.	Availability bias	10
The tenth	high	0.77	1.056	3.87	If market news contradicts your information and beliefs, you will stop trading.	Cognitive dissonance bias	11
the second	high	0.83	0.984	4.14	You have great knowledge of the currency market that	Bias and the illusion of control	12

					makes you aware of price movements		
Fifth	high	0.81	1.080	4.04	When you have expectations about the market, you look for news that confirms your expectations.	Confirmatio n bias	13
Fifteenth	high	0.74	1.152	3.69	You have foundations and rules that you rely on greatly in trading.	Conservatis m bias	14
VIII	high	0.80	0.970	3.99	If the majority of traders in the market expect the value of the Iraqi currency to decline, then you will act like them.	Herd behavior bias	15
the third	high	0.83	0.930	4.13	Your beliefs about the rules of trading in the market change over time, but only slightly.	Anchoring bias and modification	16
	high	0.79	1.017	3.94		Arithmetic average	

Source: Prepared by the researcher based on the statistical program (SPSS)

Fourth: Testing the main research hypothesis.

This paragraph is concerned with testing the correlation relationship between the variables of cognitive biases, as the results of the correlation relationships shown in Table (4) showed the existence of a significant correlation relationship between the variables of cognitive biases, with a level of correlation that reached, respectively, the following ratios (0.70, 0.58, 0.70, 0.68, 0.61, 0.71, 0.81, 0.80, 0.70, 0.68, 0.81, 0.79, 0.75,0.69,0.80), as these results show the strength of the correlation between the variables of cognitive biases and decisions to buy and sell foreign currencies and then the behavior of investors. These statistical results are acceptable practically and analogically because their level of significance was Within the accepted statistical standards, which was (0.01 (Sig=), meaning that the result of the reflection of cognitive biases in the behavior of decisions to buy and sell foreign currencies is acceptable at a level of confidence (99%), and through the above results it can be judged that the main hypothesis has been rejected. There are no cognitive biases that significantly affect the decisions of traders. In the foreign exchange market.

Based on the above, the correlation between cognitive biases and the decisions of traders in the foreign exchange market can be explained by accepting the alternative hypothesis that confirms the existence of a relationship between cognitive biases and the behavior of decisions to buy and sell foreign currencies, as the results presented in Table (4) showed the presence of a strong direct correlation between Cognitive biases and investor behavior in the currency market, the research sample, as in the table below.

Table (4) Matrix of correlation coefficients between the dimensions of cognitive biases.

		x1	x2	x3	x4	x5	x6	x7	x8	x9	x10	x11	x12	x13	x14	x15	x16
x1	R	1															
x2		0.7	1														
x3		220	0.59	1													
x4		0	220	0.7	1												
x5			0	220	0.68	1											
x6				0	220	0.61	1										
x7					0	220	0.77	1									
x8						0	220	0.81	1								
x9							0	220	0.8	1							
x10								0	220	0.7	1						
x11									0	220	0.68	1					
x12										0	220	0.81	1				
x13											0	220	0.79	1			
x14												0	220	0.75	1		
x15													0	220	0.69	1	
x16														0	220	0.8	1
															0	220	0

****Correlation is significant at the 0.01 level (2-tailed).**
Source: SPSS output

Conclusions

1- Cognitive and perceptual biases often affect the process of calculating risks among foreign currency traders. They either lead to calculating risks at a very low level or calculating risks at a very high level.
2- There is a high level of cognitive biases among workers in the foreign currency banking sector in Iraq, and this leads to an increase in the risks they are exposed to or the loss of many opportunities as a result of irrational risk avoidance.
3- Analysis of the results showed that some managers in foreign currency commercial banks in Iraq lack the basics of financial knowledge. They rely on their personal experiences and non-systematic information to develop their financial knowledge.
4- Commercial banks achieve large profits in the foreign exchange market in Iraq by relying on the unstable economic and political conditions, which provides them with profits by exploiting loopholes such as fluctuations in the monetary authority's decisions.

Recommendations

1- To avoid cognitive biases and their negative effects on traders' decisions in the currency market, this requires that traders possess financial and behavioral knowledge that prevents them from falling into the trap of these biases.
2- We recommend that traders in foreign currencies in Iraq avoid relying on rumors and inaccurate news to obtain information, that scientific methods be adopted in collecting data

from their correct sources, and that this data be subject to approved methods of analysis and appropriate decision-making.

3- We recommend that traders need to diversify investments by building investment portfolios, as this helps avoid the negative effects of cognitive biases.

4- We recommend to the government that financial and economic legislation and decisions be based on good long-term planning, which in turn helps achieve financial and economic stability and avoid fluctuations and shocks that confuse investors and traders.

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