

The Effect of Economic Crises on Portfolio for a Sample of Iraqi Banks

اثر الازمات الاقتصادية على المحفظة الاستثمارية المثلى لعينة من المصارف العراقية

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Abstract:

The purpose of the research: Most importantly, addressing this issue is useful in enabling economic policymakers to determine the success or failure of policy initiatives adopted by banks. The theoretical framework was the impact of the rentier nature of the Iraqi economy on the effectiveness of the Iraqi private banking sector and the decline in competition in the developmental environment of the economy as a whole, and this made the contribution of the banking sector marginalized in the overall economic activities, and this leads to its impact on economic and financial crises and the inability to develop a clear vision of stable investment portfolios. The findings of the study were that the Iraqi banking sector was greatly affected by the economic crises due to the existence of a correlation between the exchange rate indicators of the study sample banks (which are all of the market value, gross domestic product, international oil prices and economic crises) with the crises that Iraq witnessed during the study period 2010-2020, and here The Iraqi economy is affected by the economic crises along with the performance of the investment portfolios of the Iraqi banks. The study aimed to measure the indicators of the closing price of the Iraqi bank sector during the period (2010-2020). Research practical and social implications come from studying all efficient banks or other financial intermediaries is how to motivate banks to introduce modern and advanced systems within their business systems, by financing businessmen who are seen as having the best opportunities to

successfully develop new products and implement innovative production processes ‘Originality/value of this study comes from identifying that banks become more and better than the past, Here, this is reflected in the soundness of the financial system and then the soundness of the economic system in general ‘and ultimately leads to an increase in economic growth rates.

Keywords: economic crises, securities, closing price of banks

First: Introduction:

Background: Economic history presented scientific evidence that proved that financial development contributes fundamentally to economic growth. Financial development helped boost industrialization in developed countries by making it easier to finance large investments. The goal of all efficient banks or other financial intermediaries such as investment funds is to stimulate technical progress by financing those entrepreneurs who are seen as having the best chances of successfully developing new products and carrying out innovative production processes. Banks are becoming better-functioning entities than in the past. This could be reflected in the soundness of the financial system and thus the soundness of the economic system in general. Ultimately, it leads to an increase in economic growth rates. More importantly, addressing this topic is useful in enabling economic policymakers to determine the success or failure of policy initiatives adopted by banks and to highlight the various conclusions taken by banks that contribute to their success. Justification, addressing practical and theoretical contribution is to study the effect of removal of restrictions on the movement of global capital leads to an acceleration of the occurrence of economic and financial crises, the risks of which have come to surround all aspects of life. The banking sector takes the main artery that feeds the rest of the sectors. There is no doubt that it, too, is exposed to many risks that greatly affect his work and lead to undesirable results that may lead to bankruptcy. At a time when there were many modern methods of investment and diversified means to achieve goals. The countries of the world have become interested in the stock market, especially in the issue of listing companies and banks in the stock market, due to their importance in the progress of economic development and their impact on attracting capital and domestic and foreign investments, and they are supported by the market and financial indicators used in the financial markets. All these investments help to finance efficient companies and banks in the stock market. There is a clear interest from Iraq to study the economic crises that faced the Iraqi markets in light of the crisis of the fall of some Iraqi provinces in 2014 when terrorist gangs entered Iraq

and also took over all the banks, markets, and government departments in the provinces that these terrorist gangs seized. Which led to the looting of money from banks, equipment, and supplies from the departments in those provinces that fell into their hands. This led to very large economic losses for the Iraqi economy. And after it recovered from this economic and financial crisis that faced Iraq, another crisis emerged that faced the countries of the world, which is the Corona crisis (COVID-19). As that crisis led to the cessation of a large number of economic activities and the bodies in charge of them from the impact of the crisis on the markets in general. Study problem: The Iraqi private banking sector suffers from a low degree of competition in it and a low percentage of positive participation in the developmental environment and society due to the rentier nature of the Iraqi economy. This made the banking sector a marginal importance in the overall economic activities and is affected to a large extent by the external economic and financial crises. This is what makes it difficult for investment decision-makers to diagnose the investment that achieves the highest return with the least risk by building investment portfolios that achieve the desired goals that lead to reducing the severity of economic crises and the success of investment decisions for economic units. There:

1. The extent to which the closing indicators in the Iraq Stock Exchange were affected by the various crises?
2. Determining the nature of the relationship between the various crises with these indicators and diagnosing which one has the most impact?
3. The combination of investment portfolios formed in the various crises that Iraq witnessed?

The importance of the study: The importance of the study lies in trying to adopt the best methods for building the optimal investment portfolio in the study sample banks in financial crises. This is because it represents a container for collecting investments and meeting the requirements of various categories of investors who have sufficient experience in the methods of dealing in securities, despite the economic crises that they may face. **Study Objective:** The study aims to know the relationship between the economic crises that Iraq has witnessed, and to build investment portfolios that help achieve the highest return with the least risk in light of the economic crises. **Study hypothesis:** The method of managing investment portfolios is greatly affected by economic crises as a result of the technological interdependence that exists today between different markets and financial transactions. Thus, the study assumes that there is a correlation between the indicators of the study sample banks with the crises that Iraq witnessed during the specified period during the years 2010-2020. The hypothesis of the study states the following: There is an impact of the financial and economic crises on the development of the performance of investment portfolios in Iraqi banks. **Study**

methodology: The study adopted the descriptive approach and the inferential experimental approach to test its hypotheses and achieve its objectives. Statistical models were used to measure the dynamic productivity in the Iraqi private banking sector of the banking indicators of the Iraqi private banking sector.

Second: LITERATURE REVIEW

1- Study (2017: Cole E. Short Jonathan)

Titled (Crises and crisis management: integration, interpretation, and research development). Organizational research has always been concerned with crises and crisis management. Here we identify two major perspectives in the literature, one focusing on the internal dynamics of crisis and the other focusing on managing external stakeholders. We also review the basic concepts of each perspective and clarify what they have in common. Finally, we use our integrative framework to suggest future research directions for researchers interested in crisis and crisis management. The study concluded that despite the repercussions of crises and crisis management on organizations and stakeholders, the research on them is still fragmented and incomplete. We, therefore, combined research from multiple perspectives to achieve consistency in this literature. We have developed a comprehensive framework to better understand the crisis process. We also presented several future research directions and a comprehensive research agenda for researchers interested in crisis and crisis management.

2- Study (Michael T. Kiley: 2018)

Entitled (What Macroeconomic Conditions Lead Financial Crises). Research indicates that the rapid pace of non-financial borrowing directly precedes financial crises. This places the pace of debt growth at the heart of macroprudential policy deployment frameworks. An increase in stock and home prices and a widening of the current account deficit have larger (and statistically more significant) effects than debt growth on the probability of a financial crisis in standard crisis prediction models. The analysis highlighted the importance of graphs of the probabilities of expected crises in forecasting. The problem that the research is trying to explain is the reasons that lead to the occurrence of financial crises. The most important conclusions of the study: Our analysis indicates that house prices, stock prices, and the current account deficit are basic and essential information in econometric models to predict the occurrence of a financial crisis. In contrast, the credit was relatively unhelpful. This result differs from the traditional argument that focuses on the accumulation of debt.

Third: Concepts of economic crises

3.1 Definition of crisis: There are a set of definitions that try to define the concept of crisis, as a sudden situation or unexpected event that threatens the ability of

individuals or organizations to survive. The crisis can also be defined as a phenomenon that is characterized by the collapse of most economic indicators, the most prominent of which is the collapse of the stock market and the occurrence of speculation (Salima, 2009: 3). Through the definitions mentioned, the researcher believes that he can define the crisis as (the sudden interruption in the course of the economic system, which It threatens the integrity of the usual performance that takes the crisis out of the contradictions that exist between social classes and exchange values).

3.2 The concept of economic crisis: Fred Eric Engels described the economic crisis as a breakdown: Trade stops, markets crowd, goods accumulate in huge quantities, and there is no way to sell them, and liquid cash (cash and liquidity) disappears. Credit disappears, and then factories stop and lose workers and their means of subsistence, simply because they had produced a lot of these means. After this, bankruptcies follow, and how many forced sales follow? And this harsh blockage continues for many years. The productive forces and products as a whole are destroyed. Until the time when the surplus of accumulated goods is absorbed by the market, that is, until the time when production and exchange gradually recover (Maimouna, 2013-2014: 22).

3.3 The economic cycle: The business cycle, according to A.F.Bumess and W.C. Michell, is represented in an expansionary phase that coincides with the various sectors of activity. It is a period followed by a similar contraction phase. Hence the boom results in an expansive phase of the affiliate cycle. This section is repetitive and non-periodic. Although there is a difference between the terms economic cycle and crisis, the concept of the economic cycle is sometimes used to denote crisis (Bukrouh, 2010-2011: 6).

Fourth: Types of economic crises:

1. **The cyclical crisis:** It is the fluctuations that the economy is exposed to, such as (the crisis of surplus production), which is called at other times (a general crisis). So repetition occurs in the production process, and it includes every repetition in production, or its main aspects (whether production and circulation or consumption and accumulation). This would mean that the disturbances resulting from the periodic crises are more profound when compared to other crises (Salah Al-Din, 2009: 5).
2. **Intermediate crisis:** This is less comprehensive, although it includes various aspects of the local economy. These crises cause partial imbalances in the capitalist production replication processes (because the intermediate crises are not at a global level in a way that makes global cyclical crises distinct from those of

overproduction) (Fares, 2017: 110).

3. **Structural crisis:** usually in specific sectors or large segments of the structural economy, the external or internal demand for commodities and its shift from certain sectors to others. Such as the energy crisis, the raw materials crisis, the food chain crisis, and other crises. These do not disappear except through the occurrence of structural change in the various sectors of the economy. Crises in the small branches, even if they last for a long time, cannot become periodic crises. Because it does not affect all other aspects of the economy and its sectors (Salman, 2010: 143) (Al-Ghurairy, 2022: 41).

Fifth: The conceptual framework of the stock market

1. **The concept of the market:** Financial markets are considered one of the basic pillars of advanced economic systems. As it contributed to the economies of the major countries from the primitive and agricultural stage to the industrial stage. This transition took place mainly through large companies and huge establishments with diverse and wide activities that extended beyond the regional borders of those countries. These institutions were not destined to be established or established through individual capabilities. Rather, their existence required huge financial resources from many sources. And the mobilization of these resources took place through the financial markets as a mediator between the savers and the investors (Al-Jubouri, 1999: 117). The financial market is defined as the place where it facilitates the flow of money from the possession of savers and its flow to the possession of investors in exchange for the first party obtaining security (stocks, bonds, derivatives) and the second party obtaining cash flows and securities (financial investments) or vice versa. In other words, the financial market is the link between savers and borrowers of securities or the framework that brings together sellers and buyers of securities (Al-Jubouri, 2011: 18). When talking about financial markets, there are several terms whose meanings overlap and one is used instead of the other. There is the Financial Market, Capital Market, and Money Market. Stock Exchange The first two terms can be used one instead of the other to denote a single concept related to the market in which long-term funds are bought and sold in the form of stocks and bonds. As for the money market, it is the center of dealing in monetary assets, which are often of a short-term nature (Khalil, 1989: 109). Financial markets represent a broad and comprehensive concept for a large number of financial markets, including cash, securities, foreign currency exchange, and others (Al-Jamil, 2019: 12). In general, there is no dividing line between long-term funds and short-term funds in terms of reality, due to the overlapping of the tools used between the money market and the capital market. And also because the development of dealing methods and mechanisms makes it possible to convert any type of them into other types (Al-Hindi, 1995: 70).

The researcher believes that the financial market is the place where it facilitates the flow of money from the possession of savers and its flow into the possession of investors in exchange for the first party obtaining security (stocks, bonds, derivatives) and the second party obtaining cash flows on securities (financial investments) or vice versa. The financial market is the link between savers and borrowers of securities or the framework that brings together sellers and buyers of securities.

2. **The functions of the financial market:** The financial markets are efficient means of mobilizing and distributing financial resources among economic activities. It is an important indicator of the development of the economy it serves. Effective and developed markets are exclusively in developed countries. Studies have proven the existence of a direct correlation between the rate of economic growth and the development of financial markets and their institutions (Al-Jubouri, 1999: 119). Financial markets are considered one of the most important channels of international and local financing. And those markets performed and are preparing the functions of explaining their existence and their economic importance. Through its functions, the financial system can mobilize and develop its savings and achieve the best investment for them. The financial markets played one of the most important and effective roles in the economies that provided the important conditions for their success. The functions and importance of the financial market lie in several matters, including (Al-Suraifi, 2007: 81-87) (Maarouf, 2003: 84):
 - a. Mobilizing resources and motivating savers on the financial market, which leads to expanding the base of options for owners of savings and wealth. The more appropriate the economic, social, and political conditions surrounding the market, the leads to stimulating its role in obtaining a larger number of savers.
 - b. Providing liquidity to institutions and individuals easily and smoothly through various and flexible financial instruments that have low costs.
 - c. The recovery of financial markets and their good organization and efficiency work to improve the investment climate of the country and creates an attractive environment for foreign investments.
 - d. financing economic growth. Where the financial market contributes to supporting the economic sectors, especially the industrial and commercial sectors, through the provision of working capital. This is one of the discounting operations carried out by the market for many commercial papers such as remittances, bills of exchange, bonds, acceptances, and letters of credit. This supports economic growth and provides solutions to some problems such as inflation, unemployment, and others.
 - e. Contemporary developments that led to the emergence of an international financial market have contributed to facilitating the movement and flow of capital at the global level. This provided valuable opportunities for countries seeking to advance in obtaining the necessary financing without having to request loans and aid from

rich countries.

- f. The transfer of property rights, buying, and selling, easily and without prejudice to the original wealth represented by the assets of the projects.

3.2.2 The Concept of financial market efficiency

1. The concept of market efficiency: The establishment of stock markets is considered necessary, especially when the circle of economic activity expands in terms of investors who do everything in their power to maximize their profits through their current trading in the financial market. This requires providing accurate information about the securities being traded, for this market to be characterized as efficient (fahad, Alanzi, 2023).

According to the concept of market efficiency, stock prices are expected to respond to each new piece of information received by dealers in the stock market. As stock prices will change, up or down, depending on the type of news, whether it is good or bad. Thus, the view of market dealers will change the direction of the company issuing the share.

And when the share price of the establishment in the efficient market reflects all the information available to it, whether that information is information that was published in the media, in the historical record of the share price, or financial statements as well as reports on the general economic condition of the establishment's performance. In addition, the share price will reflect investors' expectations about future gains. As well as the risks to which those gains are exposed because their future estimates and the risks surrounding them do not completely match, despite obtaining information for all dealers in the capital market (Hussein, 2008: 31-32).

The stock market, which includes different types of investors, is considered diversified to the extent of their knowledge and experience in dealings in the market, including (Abdul Rahman, 2011-2012: 54):

- Some are inexperienced among investors, and their actions put negative pressure on prices in directions that are far from the pivotal values of securities.
- The presence of some experienced investors and some highly qualified professionals; Their actions put positive pressure on prices in the direction of pivotal values of securities.

According to what was mentioned, there is a difference in the levels of experience and accuracy of the investors in the analysis between them. There is a deviation between the market value of the paper and its pivotal values. All this leads to extraordinary profits for some investors.

2. Types of market efficiency

- a. **Perfectly Efficient Market:**

Perfect efficiency is defined as the efficiency in which there is no time interval between receiving new information and the price response of the traded assets. The market economists agreed that it is complete from their point of view in buying and selling, knowing the prices. Who believe in what sellers offer and what buyers demand and who have one price all over the world without incurring any costs to the dealers in between. There is a great similarity between the stock market and the commodity market, although they are not the same in all respects. Some scholars of finance and investment believe that the stock market is a complete market through which purchases and sales can be completed, but others believe that several conditions must be met for this characteristic to be given to the complete market (Radwan, 2009: 76). Full efficiency is achieved if the following conditions are met (Al-Shabib, Al-Jubouri: 2005: 9) (Al-Dagher, 2005: 281-282):

- Availability and ease of obtaining accurate information without costs, and buyers or sellers not charging any costs for property rights represented in securities. Thus, investors' expectations become homogeneous according to the homogeneity of their information.
 - Lack of information on future profits. The same applies to the risks of the securities in question, which are available to all dealers in the market and free of charge. As well as freedom of entry and exit for investors.
 - The presence of a large number of sellers or buyers of securities prices prevents investors from dominating the market; Investors become closer to the equilibrium point in price.
 - Investors are characterized by prudence, concerning investment decisions that aim to maximize the benefit behind the investment.
- b. **Economy Efficiency:** Economic efficiency, with its expectation, determines a time when information reaches the market so that its effects on stock prices appear. This means that the market value of the stock is likely to remain lower or higher than its real value over some time. And when there is the cost of the information that he obtains in addition to taxes and other investment costs, in a way that the difference between the two values is not so great that the investor can achieve extraordinary profits from it in the long term (Al-Dulaimi, 2010: 39).

3. Efficient Markets: These are efficient markets that achieve efficient specialization of the available resources, ensuring that these resources are directed to the most profitable areas. There are two criteria for measuring this competence (Muhammad Ali, 1997: 200-502):

a. **Pricing efficiency (external efficiency):**

Pricing efficiency, or what is called external efficiency, is called the rapid arrival of new and accurate information to all dealers in the stock market quickly. And not to incur exorbitant costs for its sake, making stock prices a mirror that reflects all

available information. Thus, dealing in the market becomes accurate. This means that everyone has the opportunity to obtain that information and they have the same opportunity to make a profit.

b. Operational efficiency (internal efficiency):

Operational efficiency or internal efficiency means the ability of the market or its dealers to create a balance between supply and demand. So that no one can influence the prices in the market. This is evidence of the interaction of supply and demand forces in the competitive market. It achieves the best buying and selling opportunities. The costs incurred by the investor to complete the transaction should be minimal, which encourages them to make efforts to obtain and analyze information, regardless of the impact of that information on the price at which the paper is sold (Radwan, 2009: 77).

Sixth: The impact of crises on profitability:

Perhaps the most important and most widely used financial indicators in assessing the profitability of commercial establishments, including banks, are the financial ratios that are usually derived from the published financial statements of those establishments, i.e. the income statement (Al-Qadi, 2016: 29-31). This ratio shows the extent to which banks can achieve returns as a result of using shareholders' funds to maximize their wealth. That is, this percentage measures what the owners get from the investment of their money from the activities of the banks. To achieve this increase, the bank must invest its funds obtained from various sources in projects and investments, while at the same time working to reduce expenses. Because the reality of profit is the difference between revenues and expenses. Part of these profits goes to the shareholders, and the remaining part is kept in the form of compulsory or optional reserves and various non-distributable provisions, to meet the daily needs and obligations that come in the form of requests from depositors to withdraw their money. As well as gaining the trust of depositors and the public (Al-Anbaki, 2020: 17). Profitability management is a primary goal for all financial institutions and is essential for their survival and continuity. It is one of the main sources of capital generation. The profitability increases the confidence of deposit holders in the bank and prospective investors and encourages owners of capital to subscribe to the bank. In addition, it is used as a measure of the performance of the bank's management, as it gives good indications to the supervisory authorities that the bank is moving in the right direction. It gives a general idea of the adequacy of this bank in managing its projects, in addition to being a measure of the effectiveness of the investment, operational, and financing policies adopted (Sufyan, Abdel Qader, 2020-2021: 13).

First: The financial indicators used in evaluating profitability: It is considered one of the indicators of importance that banks rely on in determining the ability of monetary units invested in assets to create profits (Ibrahim, Al-Ani, 2020: 304). Perhaps the most important and frequently used financial indicators in evaluating the profitability of commercial establishments, including banks, are the financial ratios that are usually derived from the published financial statements of those establishments, i.e. the income statement and the financial position statement. Sometimes a cash flow statement. Among the well-known financial ratios in this field are the following (Al-Qadi, 2016: 29-31):

Gross profit margin:

It measures the facility management's ability to control operating expenses to generate profits. It shows the value of the profit achieved from each dinar of sales, after deducting the cost of the sold goods, which is equal to:

$$\text{Gross profit margin} = \frac{\text{gross profit}}{\text{sales}} \dots\dots\dots (15)$$

Operating profit margin:

It shows the value of the profit achieved from each dinar of sales, after deducting the cost of goods sold and operating expenses, which is equal to:

$$\text{Operating Profit Margin} = \frac{\text{EBIT Operating Profit}}{\text{Sales}} \dots\dots\dots (16)$$

Net profit margin:

It shows the value of the profit achieved from each dinar of sales after deducting all expenses, including income tax expense, which is equal to:

$$\text{net profit margin} = \frac{\text{tax after net profit}}{\text{sales}} \dots\dots\dots (17)\dots\dots\dots$$

Profitability ratio:

Profitability revenue indicators: Maximizing the wealth of owners is the main goal of securities. This concept is linked to many performance indicators, the most important of which are profitability indicators in light of economic crises. Because it is based on measuring the level of the overall performance of the economy. Profitability measures are (Sufyan, Abdel Qader, 2020-2021: 16-19). Returns are the actual return on investment. The returns are directly proportional to the risk to which the shares are exposed. The establishments seek to make a combination of

securities in the form of a portfolio that achieves the highest returns with the lowest level of risk. The establishments analyze the returns of stocks in addition to analyzing the financial position of the stock-issuing firms to determine the sobriety of their position in terms of liquidity and in terms of their ability to fulfill their obligations (Miftah, 2006-2007: 27). The process of estimating the expected returns of securities is no different from other investments. It requires an identification of the cash outflows and inflows resulting from any investment in any security. The cash outflows result in calculating the costs of purchasing securities, including brokers' commissions and other administrative costs. The inflows are the value of the expected gains generated from this investment. The nature of these gains varies from one security to another (Saber, 1993: 72).

Profits (returns): Return These profits clearly and significantly affect the risks to which the bank is exposed. When profits increased, the bank was in good shape when there were plans, goals, and a clear financing structure. This is on the one hand, and on the other hand, the profits indicate that the bank was exposed to many risks. As the return on risk is associated with a positive relationship (Al-Enezi, 2022: 50). The return on assets index is a relationship between the profit of operations and the assets that contribute to achieving profit and measures the ability of commercial banks to generate profits. It is directly related to the degree of banking security. The higher the return and profitability, the greater the ability of property rights to confront the risks of assets (Ali, 2021: 125).

Financing Structure: It is a combination of the sources that finance the bank represented by long-term and short-term debts and property rights that are located on the left side of the balance sheet. And that the size of the bank is a factor affecting its financing. Small banks do not need large funding sources, unlike those banks that have many branches. The aim of forming a financing structure is to reduce costs and maximize profits in line with the bank's work. Thus, maximizing its value and financial suitability, in addition to the role it plays in reducing financial vulnerability and curtailing it if it is proportionate and consistent with well-studied plans (Al-Anzi, 2022: 50).

The return on investment is defined as the expected increase in income or wealth during a future time, and as long as this return is related to the future, it is uncertain. That is, it carries some risk. This risk is quantified by the variance or standard deviation of potential returns (Matar, et al., 2005: 22).

4. Analysis of the closing price indicators for some Iraqi banks

4.1 Closing price index analysis for the period (2010-2020)

The data in Table (1) indicates that the closing price of the Commercial Bank of Iraq for the period (2010-2020) indicates that in 2011 it reached (1.33). It is its

highest value to reflect the impact of the appropriate economic activity in that year and the rise in most economic variables due to the improvement in crude oil revenues. Then its impact on the economic activity of all sectors. After that, there was a gradual and simple decline in the closing price in 2012 by (-0.0472) to reach 1.27 and maintain its value in 2013. Then, it declined again sharply, starting in 2014, to reach 0.42 in 2017. This came as a translation of the situation economic situation that Iraq went through due to what was called the "double crisis", which consists of Iraq's entry into armed confrontations with the terrorist "ISIS" gangs and the significant decline in global oil prices.

Table (1) Closing price for first group of banks (Iraqi Commercial Bank, Baghdad Bank, Iraqi Islamic Bank, Middle East Bank)

years	Iraqi Commercial Bank	Change %	Baghdad Bank	Change %	Iraqi Islamic Bank	Change %	Middle East Bank	Change %
2010	1.32	-	1.91	-	0.01	-	1.7	
2011	1.33	0.00752	2.95	0.3525	0.92	0.9891	1.57	-0.0828
2012	1.27	-0.04724	2.6	-0.1346	1.15	0.2	1.88	0.164894
2013	1.27	0	1.82	-0.4286	1.3	0.1154	1.48	-0.27027
2014	0.72	-0.7639	1.92	0.0521	1.07	-0.2149	1.6	0.075
2015	0.64	-0.125	1.27	-0.5118	0.74	-0.4459	0.47	-2.40426
2016	0.44	-0.4546	0.81	-0.5679	0.45	-0.6444	0.33	-0.42424
2017	0.42	-0.0476	0.95	-0.1474	0.72	-0.375	0.56	-0.410714
2018	0.44	0.04	0.62	-	0.46	-	0.2	-

		546		0.53		0.56	7	1.0740
				24		52		7
2019	0.48	0.08		-		-		-
		33	0.24	1.58		0.24	0.1	1.4545
				33	0.37	32	1	5
2020	0.46	-		0.54		0.07		
		0.04		72	0.4	5	0.1	-0.1
		35	0.53					

Source: Iraq Stock Exchange (2010-2020)

Then it continued to fluctuate around this rate throughout the study period until the closing price reached (0.48) in 2019, to decline in 2020 due to the closure witnessed by global economies in the wake of the Corona pandemic. As for the Bank of Baghdad, the highest closing price value for this bank was in 2011, which amounted to 2.95. This expresses the movement of economic activity in that period and the recovery of securities prices, which would affect the movement of financial transactions in general securities prices. Then, it gradually decreased in 2012 and 2013. Then it started to rise slightly in 2014 and reached (1.92). Despite the double crisis that Iraq witnessed in that year, the closing prices of this bank witnessed a major collapse, reaching 1.27 in 2015, i.e. a decline rate of (-0.5118) compared to what it was in 2014. This indicates that the bank suffers from a delay in responding to economic indicators. Then the decline continued to reach the lowest value of the closing price in 2019, which was (0.24). It is the same year that indicates the largest annual decline in the closing price by (-1.5833) (Ali, Al-Rawi, 2023). This reflects the impact of the repercussions of the Corona pandemic crisis, which stopped financial and investment transactions, and negatively affected securities prices in general and closing prices in particular. The closing price data of the Islamic Bank of Iraq for the period (2010-2020) indicates a state of fluctuation and instability in the changes in that price. As there were fluctuations, up at times and down at other times. This reflects the changes taking place as a result of the bank's business and fluctuations in profitability rates. Consequently, it was reflected in the closing price of the share issued by that bank. The closing price witnessed its largest increase during the study period in 2011, reaching (0.9891%) to maintain this increase in the years 2012 and 2013. The highest value of the closing price was (1.3) in 2013. Then the closing price of this bank witnessed a decline Significant in it to the double crisis that the Iraqi economy witnessed in 2014. It began to decline continuously until 2016 when the closing price reached (0.45). Then this partial volatility and instability continues until 2020 when the closing price reached (0.4). While the lowest value of the bank's closing price was (0.01) in 2010. The closing price data of the Middle East Bank in Table (4) shows that the highest value the closing price reached was in 2012

when it recorded 1.88 dinars. Which expresses a high average of the closing price that reflects the movement of financial transactions and the market forces of supply and demand for securities. Then the closing price witnessed a significant decline in 2015 to reach (0.47) dinars. Affected by the double crisis that the Iraqi economy witnessed in 2014. The decline continues in 2016. The closing price reached (0.33), with an annual decline rate of (-0.4242%). Then the closing price witnessed an improvement in 2017, reaching (0.56) dinars. In line with the improvement in the Iraqi economic situation, then it declines in the next three years to be the lowest closing price in 2020, as it reached (0.1) with the spread of the Corona pandemic. This reflects the low demand for these securities. Therefore, the administration of the institution is required to search for special reasons for that decline.

4.2 Closing price index analysis for the period (2010-2020)

The data in Table (2) indicates that the closing price of the investment bank for the duration of the study period did not reach the correct one. And the highest value it reached was in 2011, when it recorded the equivalent of (0.91) dinars, with the improvement in international oil prices. The closing price witnessed a significant decline in the years 2015 and 2016, reaching (0.85) and (0.42) dinars, respectively, with an annual decline rate of (-0.0588%) and (-1.0238%), respectively. While the lowest value of the closing price was (0.31) in 2019. This reflects the low value of this price compared to the rest of the financial companies traded in the market. This is due to the psychological factors possessed by investors and their pessimistic expectations regarding the reality of financial transactions in the market and the emergence of signs of the Covid-19 crisis and its repercussions on global oil prices, the overall economic activity, and stock market transactions. And thus reflected on the reality of investment, both real and financial (Mamdoh, Al-Jobory, 2023). The stock closing price data for this bank indicated that there were fluctuations in the price movement, up and down. Closing prices started at (0.79) dinars in 2010. Then it increased by (0.1318%) to reach (0.91) dinars in 2011, which is the highest value recorded during the study period. Then the closing price witnessed a decline, bringing the closing price to (0.77) in 2012. Then it witnessed a partial improvement in 2013, bringing the closing price to (0.81). They are low values compared to the closing prices of the rest of the financial companies traded in the Iraq Stock Exchange. Thus, it expresses the low trading movement in the prices of the shares of the National Bank to return and recover until 2014, with an increase of (0.81) and (0.9) for the closing price of 4.9% and 10% for the years 2013 and 2014, respectively. Then the bank's indices witnessed a significant decline in 2015 and 2016, with the closing price being (0.85) and (0.42), with a rate that ranged from (-5.8%) and (-102.3%), respectively. In 2019, it was the lowest value for the closing price of the National Bank of Iraq, which is (0.31), in

the wake of the dual crisis in the Iraqi economy.

Table (2) The closing price of banks for second group of banks (investment bank, National Bank of Iraq, Summer Bank, Babylon Bank)

years	invest bank	chan ge%	Natio nal Bank of Iraq	chan ge%	Sum mer Bank	chan ge%	Baby lon Bank	cha nge %
2010	0.79		0.79		0.9		1	
2011	0.91	0.1319	0.91	0.1319	0.85	0.0588	0.98	0.0204
2012	0.77	0.1818	0.77	0.1818	0.75	0.1333	0.87	0.1264
2013	0.81	0.0494	0.81	0.0494	1.02	0.2647	0.72	0.2083
2014	0.9	0.1	0.9	0.1	0.9	0.1333	0.61	0.1803
2015	0.85	0.0588	0.85	0.0588	0.95	0.0526	0.32	0.9063
2016	0.42	1.0238	0.42	1.0238	0.9	0.0556	0.23	0.3913
2017	0.54	0.2222	0.54	0.2222	0.9	0	0.39	0.4103
2018	0.58	0.0689	0.58	0.0689	0.9	0	0.25	0.56
2019	0.31	0.8709	0.31	0.8709	0.7	0.2857	1	
2020	0.52	0.4038	0.52	0.4038	0.51	0.3726	0.98	0.0204

Source: Iraqi Stock Exchange

The results of the closing prices of Sumer Bank showed that the bank started with

a closing price of (0.9) dinars in 2010. Then it declined by (-5%) to reach (0.85) dinars in 2011. Then it rose to reach its highest value during the studied time series. In 2013, it reached (102%). Then it decreased in 2014 to reach (0.9). Then it started to increase slightly to reach (0.95) in 2015. Then it took a downward trend to reach (0.9, 0.7, 0.51) for the years (2018, 2019, 2020), respectively. This reflects the modest performance of the financial statements of Sumer Bank. Thus, it was reflected in the prices of the issued securities.

4.3 Closing price index analysis for the period (2010-2020)

Through Table No. (3), the closing price of Bank of Babel shares recorded a value of (1) dinars in 2010. It is the highest value witnessed during the study period. Then it took a downward trend after that, reaching (0.61) dinars in 2014, with a decline of (-180%) from the previous year. After that, it was affected by the security conditions that Iraq went through during the crisis of its battles with the terrorist gang "ISIS" and the war on terrorism. The value of the closing price decreased by (0.32) and (0.23) by (-90.6%) and (-39%) in 2015 and 2016, respectively. It is a very low value compared to the average closing prices of financial companies traded in the same two years. After the recovery of the Iraqi economy from the dual crisis (low oil prices and loss of control over some oil fields), the closing price of the Bank of Babel witnessed a slight improvement, rising by (41%) to reach (0.39) in 2017. However, it soon declined again, affected by the pandemic. Corona, so the closing price of the bank's shares in trading on the Iraq Stock Exchange reached a value of (0.1) in 2020. The closing price data of the Iraqi Gulf Bank indicates that this price began in 2010 at (1.03). Then it increased after that to reach (1.1) dinars in 2011, with an increased rate of (6%). Then it loses part of the value of the closing price to reach (0.91) at a rate of (-208%). Then it rose again to reach (1.28) in 2013, which is the highest rate reached by the closing price during the study period. After that, it declined due to the crisis of the war on ISIS and the turbulent security situation, whose negative effects were reflected in the reality of the investment environment, to decrease for the years (2014-2016) to reach (0.41) in 2016. After the end of the war on ISIS and the re-establishment of the security situation and the remarkable improvement in the reality of economic indicators, it increased. The closing price of the stock reached (0.45), as it increased by (8%). However, it soon returned to decline in the years 2018-2020, to reach the closing price (0.31), (0.16), and (0.14), with an annual decline rate of (-45%), (-93.7%), and (-142.8%) for the years (2018, 2019, 2020) respectively.

Table (3) The closing price of banks for third sample (Babylon Bank, Iraqi Gulf, Bank, Mosul Investment Bank, Kurdistan Bank)

years	Babyl	chan	Iraqi	cha	Mosul	cha	Kurdi	cha
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	on Bank	ge%	Gulf Bank	nge %	Invest ment Bank	nge %	stan Bank	nge %
2010	1	-	1.03	-	1.02		1.68	
2011	0.98	0.0204	1.1	0.0636	1.48	0.3108	1.65	-0.0182
2012	0.87	0.1264	0.91	0.2088	0.9	0.6444	2.09	0.2105
2013	0.72	0.2083	1.28	0.2891	0.81	0.1111	2.25	0.0711
2014	0.61	0.1803	1.09	0.1743	0.74	0.0946	2.95	0.2373
2015	0.32	0.9063	0.87	0.2529	0.35	1.1143	1.73	-0.7052
2016	0.23	0.3913	0.41	1.1219	0.18	0.9444	1.08	0.6019
2017	0.39	0.4103	0.45	0.0889	0.42	0.5714	1.26	0.1429
2018	0.25	-0.56	0.31	0.4516	0.25	0.68	1.3	0.0308
2019	0.12	1.0833	0.16	0.9375	0.16	0.5625	1.04	-0.25
2020	0.1	-0.2	0.14	0.1429	0.14	0.1429	1.06	0.0189

Source: Annual Bulletin of the Iraqi Stock Exchange (2010-2020)

The table also shows that the closing price data started with a high price of (1.02) in 2010. Then it increased by (0.31%) in 2011 to reach (1.48). Which reflects the remarkable improvement in the financial results of the Mosul Investment Bank. But soon the closing prices fell by (-0.64) to reach a value of (0.9). After that, it continued to decline continuously, reaching (0.18) in 2016, after the deterioration of the security situation in Iraq and the cessation of most of the financial and

banking activity in Iraq. Then, it improved to reach (0.42) in 2017, which indicates the recovery of the financial data and the annual data of the bank's activity. However, it soon returned to a decline at the end of the period, to reach in 2020 its value (0.14). It is clear from the previous table that the closing price for the year 2010 was (1.68). Thus, it increased in 2012 and 2013 by (1.65) and (2.09). As well as an annual increase rate of (21%) and (7.1%) for the two years, respectively. This indicates the effectiveness of the bank and its management in improving the performance of the institution. Thus, it reflected positively on the bank's profits, which led to an increase in the closing price to (2.95) dinars in 2014. Then, it declined continuously as a result of the turbulent security and economic conditions in Iraq, reaching (1.73) and (1.08), with an annual growth rate of (70.5-70.5) and (-60.1) in 2015 and 2016, respectively. Then it increased to reach (1.23) and (1.3) for the years 2017 and 2018, respectively, to reflect the improvement in crude oil prices and the rest of the economic variables. Then it decreased again to reach (1.04, 1.06) for the years (2019, 2020), respectively.

4.4. Closing price index analysis for the period (2010-2020)

It is clear from Table (4) that the closing price of the Ashur International Bank recorded its highest level in 2010, which reached (1.08). Then it decreased to reach (0.8) dinars for the year 2013. Then it decreased again by (0.21-%) to reach (0.71) in 2014. This decline continued in most years until 2019 when it reached (0.19) dinars. This decline indicates a downward trend in the closing price of the stock. Thus, it is an indication of the wrong banking policy followed by the bank, which led to a decline in the profits of shareholders. Consequently, the closing price of its shares declined during the study period. It is clear from Table (4) that the closing price of the share reached (1.37) in 2010. Then it increased by (21.7%) to reach a value of (1.75) dinars. It is the highest value recorded by the closing price during the study period. After that, it decreased continuously to reach (1.7) in 2014, with a partial annual recovery rate of (35%). Then it decreased again by (-1.15) to reach a value of (0.79) in 2015, affected by the security, economic and security conditions that the Iraqi economy experienced during that period. Then it decreased again, reaching its lowest level in 2019 when it amounted to (0.6) dinars. It is a small percentage compared to the average closing prices for the years of the study, which indicates a decline in profitability rates for shareholders. Consequently, the demand for trading the shares of this bank decreased, which led to a decline in its closing price.

Table (4) The closing price of banks for the Fourth sample of banks (Ashur International Bank, Mansour Investment Bank, United Bank for Investment)

years	Ashur Intern	change %	Mansour	change	United Bank	change %
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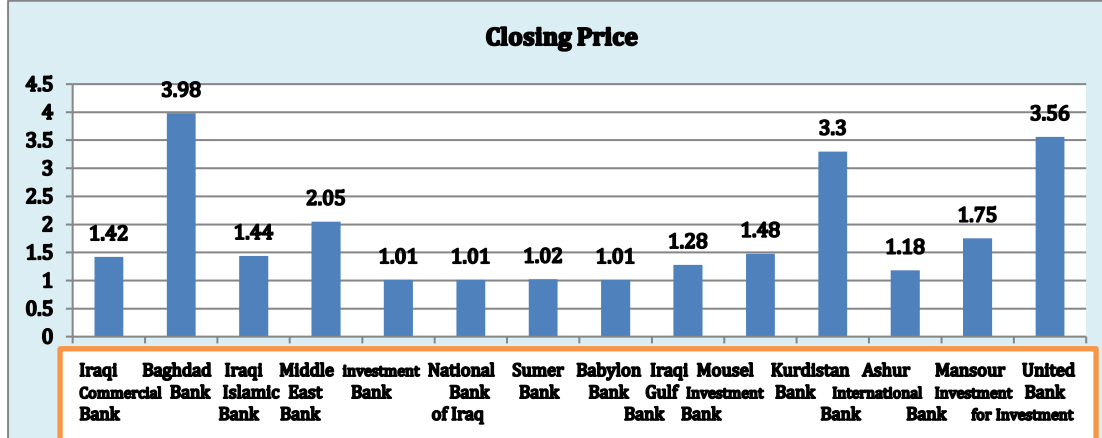
	ational Bank		Invest ment Bank	%	for Investm ent	
2010	1.08		1.37		1.9	
2011	1	-0.08	1.75	0.21 714 3	2.68	0.29104
2012	0.91	-0.0989	1.3	- 0.34 615	2.14	-0.2523
2013	0.8	-0.1375	1.1	- 0.18 182	1.61	-0.3292
2014	0.71	-0.1268	1.7	0.35 294 1	1.11	-0.4505
2015	0.58	-0.2241	0.79	- 1.15 19	0.58	-0.9138
2016	0.33	-0.7576	0.82	0.03 658 5	0.27	-1.1482
2017	0.42	0.2143	0.94	0.12 766	0.35	0.2286
2018	0.27	-0.5556	0.89	- 0.05 618	0.2	-0.75
2019	0.19	-0.4211	0.6	- 0.48 333	0.08	-1.5
2020	0.23	0.1739	0.62	0.03 225 8	0.07	-0.1429

Source: Annual Bulletin of the Iraqi Stock Exchange (2010-2020)

As shown in Table (4), the closing price in 2010 amounted to (1.9) dinars. After that, it increased by (29.1%) to reach (2.68) in 2011. Then it took a declining trend throughout the period between 2012 and 2016 to reach (0.27) in 2016 as a result of the economic and security conditions that the Iraqi economy went through, which negatively affected the Financial transactions in the financial market and then on the closing prices of the bank's shares. Then it increased slightly to reach (0.35) in

2017, with an annual increase rate of (22.8%). However, it quickly decreased again, reaching its lowest level in 2020, when it reached (0.07). This reflects the declining performance of the United Bank for Investment, which led to low levels of profitability and thus reflected negatively on the closing price after 2013 (Kormakova, et al, 2023).

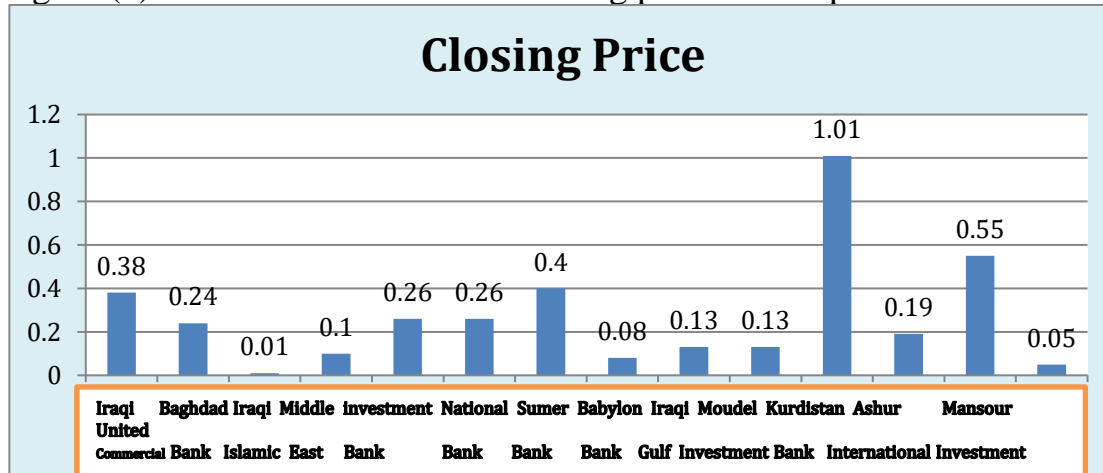
Figure (1) The largest value of the closing price for the period 2010-2020



Source: From the researcher’s work based on the data in Tables (1,2,3,4)

It is evident from the chart (1) that the highest closing price was for the Bank of Baghdad, which amounted to (3.98) dinars in 2013. Then comes the second closing price, which reached (3.56) in 2012, which belongs to the United Bank for Investment. Then the Bank of Kurdistan comes in third place, as its closing price reached (3.3) in 2012. Then the closing prices of the rest of the banks vary, which ranged between (1.75-1.01). This reflects the large gap between the performance of the first three banks (Bank of Baghdad, United Bank for Investment, and Bank of Kurdistan) and the rest of the other banks.

Figure (2) The lowest value of the closing price for the period 2010-2020



Source:

From the researcher's work based on the data in Tables (1,2,3,4) Chart (2) shows the lowest levels of stock closing prices during the study period. This shows that the lowest closing price was for the Islamic Bank of Iraq, which reached (0.01) in 2010. Then it comes in second place in terms of the lowest closing price of the share for The United Bank in 2019, as the closing price reached (0.05). Then comes the third place, Bank of Babel, as the closing price of its name reached (0.08) in 2020.

5. Conclusions:

- a. The economic crises in Iraq were linked to two factors, one of which is political, embodied in mismanagement and the wars that the country was exposed to, such as the war against gangs of terrorist organizations in 2014. The other is a result of Iraq's dependence on crude oil exports, which are subject to severe fluctuations in light of the crises, which led to severe fluctuations in oil prices. Economic variables.
- b. The Iraqi economy was exposed to a set of adverse economic and financial crises during the period 2004-2020 as a result of the decrease or rise in the prices of the exported crude oil, which constitutes a large proportion of the total exports. Countries that export crude oil are more volatile and vulnerable to economic crises than countries that export basic materials (non-oil).
- c. There is a direct response between the economic crises on the one hand and the gross domestic product and market value on the other hand. Because favorable crises increase the gross domestic product and market value, while adverse crises do the opposite. Here, it is noted that the temporary adverse crises do not reduce the gross domestic product at constant prices in most cases as a result of relying on savings from favorable crises, as well as dependence on internal and external borrowing, or changing the exchange rates of the Iraqi dinar.
- d. The economic reform processes and measures that have been adopted to liberalize the Iraqi banking sector have led to strengthening competitive forces among Iraqi banks. The highest value of the closing price was at the Bank of Baghdad, which amounted to (3.98) dinars for the quarterly year of 2011. In the second place, the closing price was (3.56) dinars, which went to the United Bank for Investment. Then the Bank of Kurdistan took third place, as its closing price was (3.3) dinars, which varies in other banks.
- e. This expresses the large gap between the remaining banks with three banks as a result of the divergence in the speed of recovery from the effects of the mortgage crisis and the recovery in global oil prices by adding a re-evaluation of the capital of the private banks in Iraq, which was carried out by the Central Bank at the end of 2010.
- f. The results of the study proved that the lowest levels of closing prices during the study period were in the Islamic Bank of Iraq, which amounted to (0.01) in

2010. Then, the United Bank ranked second in terms of the lowest in 2019, as it reached (0.05). And in third place was the Bank of Babel, as it reached (0.08) in 2020. This is due to the drop in global oil prices in 2010 and as a result of the closure of the world as a result of the health protection that was adopted in the spread of the Corona pandemic Through the trading indicators of the study sample banks, it becomes clear that they are effectively linked to global crises, especially as a result of changes in global oil prices, which are reflected negatively or positively on the closing price in the market.

6. Recommendations:

- a. Interest in predicting local and global economic crises. The effects of which can be bypassed in the future on a larger scale to contain the economic effects reflected by these adverse crises. For decision-makers to reach solutions and remedies to mitigate their severity. Addressing the imbalance in the stock market to increase the contribution of other non-oil sectors to the GDP.
- b. Reduce the risks resulting from dependence on oil source revenue. Work on measuring the risks of financial crises by forming a mechanism to measure the financial risks in light of the economic crises to spare the financial markets from the fluctuations in the daily trading values to face the investment in them. Seriously consider establishing a sovereign fund to benefit from it to achieve economic stability.
- c. To overcome adverse economic crises to separate the relationship between economic crises and fluctuations in oil prices. Developing the financial market to serve the national economy through diversifying financial instruments. In addition to providing the appropriate environment that encourages the establishment of companies and their inclusion in the Iraqi Stock Exchange. This is done by achieving political, security, and economic stability.

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Conflicts of Interest

The author declares no conflict of interest.

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