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The Role of Derivative Financial Instruments in Stimulating Economic Welfare Indicators in Iraq Joint Research

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ABSTRACT: Financial derivatives are instruments used in financial markets. These instruments were designed for hedging and developed to increase production and investment and build confidence in producers. Four important instruments are used in financial markets: forward contracts, futures contracts, options, and swaps. This study aims to introduce and define these instruments, assess their theoretical and practical acceptance by economists, and examine their use in the Iraqi economy. It explores whether these instruments have contributed to Iraq's growth and development. The research problem is: Financial crises are a result of the use and expansion of derivative financial instruments in Iraqi growth and development. The study aims to: Derivative financial instruments are considered financial tools used for risk management and hedging for investors, and a source of liquidity for financing credit in the financial market to increase growth and development and achieve prosperity in Iraq. This scientific endeavor also aims to achieve several objectives, the most important of which are: defining the concept and importance of derivative financial instruments, their key characteristics and functions, and determining the ability of financial instruments in Iraq to attract investment. The study examines the savings and strategies employed by banks and their role in enhancing the wellbeing of the Iraqi economy. The research hypothesis states that applying standards for derivative financial instruments in regulating the Iraqi financial market facilitates credit financing, thereby contributing to economic growth and increased prosperity. The study's significance lies in demonstrating the role of derivative financial instruments in the nature of banking operations and their ability to stimulate the Iraqi economy towards prosperity. This distinguishes derivative instruments from other instruments, which are considered efficient means to achieve a better life and greater economic well-being. Consequently, normative discussions are only necessary in extreme cases to rectify the excesses of the capitalist banking system and other conventional banking systems. Increasing the effectiveness of derivative financial instruments within the banking system is capable of generating new sources of savings and financing the capital necessary for investment. This, in turn, addresses imbalances in production sectors and improves the structure of the national product, ultimately stimulating and enhancing the well-being of the Iraqi economy. The study concludes that countries have no option but integration to maintain an active presence on the international stage and confront other blocs. Through the practical aspects explored by the researcher, it was found that derivative financial instruments have a significant impact on achieving economic prosperity. In Iraq, a positive correlation was found between the indicators of derivative financial instruments and the indicators of economic well-being in it, and there is a statistically significant effect between financial instruments and stimulating economic well-being capacity through the questionnaire that the researcher worked on in the country of study and the opinions of workers in the Iraqi economy, including employees, department managers and workers, and entering that data into the statistical system (SPSS) and extracting the results in the form of numbers and discussing them statistically and economically

KEYWORDS: Financial derivatives, economic welfare, banking system, Iraqi economy.

SECTION ONE: THEORETICAL FRAMEWORK OF THE STUDY

Axis One: Methodology of the Study

First: Introduction: Large and unexpected fluctuations have posed a significant risk to institutions, leading to the emergence of financial innovations for risk transfer, known as derivative financial instruments. These instruments have provided better hedging against risks compared to traditional methods, which may be impossible to use for hedging against price change risks, most notably insurance. Although dealing in derivatives aims to reduce the risks of fluctuations in interest rates, exchange rates, and commodity prices, the nature of these instruments and their connection to expectations have made them inherently risky. Derivative financial instruments can be defined as subcontracts built upon or derived from underlying investment instruments, resulting in derivative investment instruments (Tariq Allahkhan & Habib Ahmed, 2003, p. 58). The Bank for International Settlements (BIS) defines them as contracts whose value depends on the prices of the underlying financial assets but do not require or necessitate the investment of these underlying assets. As a contract between two parties for the exchange of payments based on prices or returns, any transfer of ownership of the underlying asset and the associated flows Cash becomes unnecessary (Samir Abdel Hamid, 2005, 60). Financial

derivatives are financial contracts, and as their name indicates, their market value is derived from or depends on the market value of another asset traded in the spot market. The value of an option contract to sell a bond depends on the market value of that bond in the stock market. Despite the great importance of financial derivatives in hedging risks, by their very nature they are linked to expectations, and they also include the possibilities of profit and loss, as they in themselves include risks that sometimes lead to huge and unpredictable losses, which causes a crisis. The main feature that unites the examples of companies and banks that have suffered huge financial losses as a result of dealing without caution in the markets of financial derivatives is the failure of those institutions to understand these new instruments and not to adopt an appropriate strategy to manage their risks. As for the aspect of economic wellbeing, it focuses on bringing benefit and averting harm, while the Islamic theory is based not on bringing benefit and averting harm, but on ethical standards and values by which the rights of those entitled and the means of delivering benefits to their people are determined. With the failure of Western theories to achieve the well-being of society, the researcher has written on this subject, taking into account in our study that it should be suitable for a good level in financial and banking sciences. We do not claim that this modest work speaks definitively on an important subject, but it is an attempt that we hope will be crowned with success in revealing some of what our noble Sharia contains in the economic field.

Second: The Problem of the Study: Derivative financial instruments are among the financial investment tools that companies and the stock market should focus on, as this type of investment involves numerous risks, most notably credit and legal risks. Furthermore, derivatives, in their current form, cannot be traded from a Sharia perspective because they do not meet Sharia requirements regarding interest and the bearing of risk by one party at the expense of the other. This necessitates the development of a Sharia-compliant accounting standard to address this issue, while simultaneously fulfilling the needs of companies and financial markets without deviating from the principles of Sharia. The problem of the study is: Financial crises resulting from the use and expansion of derivative financial instruments in Iraqi growth and development.

Third: The Importance of the Study

1 -The importance of the study lies in demonstrating the role of derivative financial instruments in the nature of banking operations and in stimulating the Iraqi economy to achieve prosperity. This distinguishes derivative instruments from other instruments that are considered efficient means to a better life, i.e., economic prosperity. Consequently, there was no need for standard discussions except in extreme cases to correct the excesses of the capitalist banking system and other conventional banking systems.

2 -Increasing the effectiveness of derivative financial instruments within the banking system will generate new sources of savings and finance the capital necessary for investment. This, in turn, will address imbalances in production sectors and improve the structure of the national product, ultimately contributing to stimulating and enhancing the well-being of the Iraqi economy .

Fourth: Study Objectives

1 -Derivative financial instruments are considered financial tools that aim to manage risks and provide hedging for investors. They also serve as a source of liquidity for financing credit in the financial market, thereby increasing growth and development to achieve prosperity in Iraq

2 -This study, as a scientific endeavor, aims to achieve several objectives, the most important of which are defining the concept and importance of derivative financial instruments, their key characteristics and functions, and identifying and understanding the ability of financial instruments in Iraq to attract savings, the strategies employed by banks, and their role in enhancing the well-being of the Iraqi economy. Fifth: Study Hypotheses: To address this issue, the following research hypothesis can be formulated: "Derivative financial instruments, including the four most important instruments mentioned, rely on a strategy of diversifying funding and investment sources, leading to an increase in their investment volume." This hypothesis also demonstrates the impact of ethical motives on economic well-being. Economics involves a balance between spiritual and material aspects, where values, ethical principles, and economics are not separated, thus fulfilling the objectives of Islamic law. The hypotheses include :

1 -Derivative financial instruments are important economic tools for boosting economic growth and enhancing the well-being of the economic environment.

2 -The success of economic well-being indicators in financing investment projects is due to the significant role played by selected derivative financial instruments in the economic development process and in stimulating well-being in the Iraqi economy.

3 -There is a direct relationship between derivative financial instruments and economic wellbeing indicators. Reforming the banking system is considered a fundamental step in economic reform, ensuring that the banking system occupies a vital position within the financial structure of the economy in mobilizing savings, financing development, and further stimulating the economic well-being index. 4- Practical analysis confirms the success of the selected financial instruments in achieving and enhancing the well-being of the Iraqi economy.

Sixth: Study Structure: To achieve the study's objective, it was divided into four sections according to the following structure: The first section covered the study's methodology, previous studies, the researcher's opinion, and the most important distinguishing features of this study compared to previous studies (the aspect of creativity and innovation). The second section examined the reality of the Iraqi economy and its derivative financial instruments. The third section (the practical aspect) examined the impact of derivative financial instruments on the well-being indicators of the Iraqi economy. The study concluded with the fourth section, which summarized the study, the results obtained, and the recommendations formulated by the researcher.

Second Axis: Previous Studies

1 -Ali Hatem Al-Quraishi's Study: 2020: This study considers financial crises to be a result of the use and expansion of financial derivatives in financial markets. It aims to clarify the role of financial derivatives as financial instruments in risk management and hedging for investors, and as a source of liquidity for credit financing. It seeks to apply banking standards and Basel Committee regulations in regulating the liquidity of financial derivatives, which facilitates credit financing and contributes to macroeconomic growth .

2 -Ibrahim Salem and Yahya Hajar's Study: 2010: This study highlights the importance of using financial derivatives as an effective investment tool in recent times. They have gained widespread acceptance and become one of the most important investment areas for all types of commodities, metals, and securities to which financial derivatives can be applied. Their use has spread to some Arab countries, and other Arab countries have given them significant attention in terms of study and evaluation for their introduction into the financial market .

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3 -Ahmed Shasho's Study, Mahmoud Ibrahim: 2016: This study was a response to the impact of financial derivatives on the 2008 global financial crisis, resulting from the expansion of their use and the accompanying lack of regulatory controls. It highlights the role of new accounting standards issued after the global financial crisis in accounting for financial derivatives. The study aims to demonstrate the relative importance for banks in disclosing financial derivatives for hedging purposes or for speculative purposes, in accordance with International Accounting Standard "Financial Instruments: Recognition and Measurement" (IAS 39) .

Study Features (Innovation and Development) :

Through a review of previous studies, the researcher observes that they agree on the importance of conventional banks in stimulating investment and economic growth, etc. These studies also concur in addressing economic methods as the cornerstone used when taking practical steps to build economic growth and development through banking sector investment. The researcher differs from these studies in the issue of compatibility with traditional economies and banks in strategies that direct banking investment from an Islamic perspective, based on the principles and ethics of Islam, which are mentioned in the study and applied. Banking standards regulate the liquidity of financial derivatives, facilitating credit financing and contributing to economic growth and prosperity. This is achieved through an inductive research methodology based on quantitative and qualitative analysis of the study's information and data .

Third Axis: Basic Concepts

First: Derivative Financial Instruments: Derivative financial instruments are financial instruments whose value is derived from a set of underlying financial instruments called assets, such as commodities, bonds, stocks, currencies, interest rates, and stock market indices. These financial instruments are typically a contract between two or more parties (VICTORIA COLLIN, 2012, p. 45). Derivatives are an integral part of the investment environment, with multinational corporations, investment banks, and commercial banks playing a significant role in their trading. Derivatives are complex financial instruments used for purposes such as hedging losses and accessing additional markets.

Types of Derivative Financial Instruments: There are several forms and types of derivative financial instruments, as follows (Derivatives, 2022). 66:)

1 -Futures Contracts: These are contracts often traded on stock exchanges. They obligate the buyer to purchase a commodity or asset at a pre-agreed price on a specific future date. Futures contracts are characterized by their flexibility, as the parties to the transaction can specify the underlying commodity, its quantity, and the transaction completion date.

2 -Options: Options guarantee the buyer's right without obligation. Two parties agree on a specific price for the underlying asset and an expiration date, but the buyer is not bound by that date and can purchase on or before the specified date .

3- Swaps: These are derivative contracts that allow the exchange of one type of cash flow for another. They usually involve exchanging a fixed cash flow for a variable one, such as swapping a loan with a fixed interest rate for another loan with a variable interest rate. The most common types of swaps are interest rate swaps, commodity swaps, and currency swaps. 4- Day Trading: Day trading is speculation in securities, specifically buying and selling financial instruments during the trading day. All deals are closed before the market closes on the trading day. Therefore, traders who trade these deals for profit are considered speculators. Day trading methods are in contrast to long-term trading based on buy-hold and value investment strategies. Day traders exit deals before the market closes to avoid uncontrollable risks and negative price gaps between the closing price on a given day and the opening price of the next day.

Second: Economic Welfare: Welfare economics (2018, p. 8) is a branch of economics concerned with incorporating ethical values and humanistic concepts into economic analysis and the evaluation of economic systems. In this field, economic aspects are intertwined with specific social aspects, and their data overlap. This is particularly true since research in this field relates to achieving economic goals with social implications for a welfare society or a social system in which the state is responsible for the well-being of its citizens, both individually and collectively. This system is based on the concept of economic and social solidarity among the citizens of a single state. While analyses in other economic fields generally proceed from purely objective foundations, with all their repercussions, including social ones, stemming from multiple outcomes, analysis in this field begins with specific concepts and subjective hypotheses based on pre-established and desired social goals. Subsequent economic results are then measured in light of their consistency with these preestablished social concepts and the degree to which they achieve the defined social goals. Social considerations in this field often revolve around general issues such as steadily improving the standard of living for all individuals and establishing a limit This includes ensuring fairness in income distribution, guaranteeing individual freedom to choose from available economic options, achieving equality in livelihood opportunities, expanding social benefits, and reducing exploitation in all its forms, particularly in labor practices, preventing waste, preserving the environment, and minimizing pollution. Therefore, optimal solutions to issues in this economic field are usually those aimed at achieving the greatest possible public benefit in all its forms and serving the interests of the broadest possible segment of the population, rather than solutions that achieve purely economic gain or the highest material profit for a limited group, whether that group is a collection of individuals, companies, or government institutions (Mohammed Bishara, 2011, p. 10).

Undoubtedly, welfare is a relative matter that depends on many variables, some of which are attributed to natural factors, others to economic, social, or political factors, and still others to the level of technology and its development. Moreover, these variables are affected by an endless series of factors and influences that change over time. Although the economic literature that has examined some aspects of welfare and economic solidarity rarely dates back to before the mid-18th century, during the Industrial Revolution in Europe, the developed theoretical research in this field of economics only began in a focused manner about half a century ago. However, the importance of some research from the old Scholastic school, the Christian philosophy that prevailed in the Middle Ages and the beginnings of the Renaissance, cannot be overlooked. It is also worth noting that the writings of the Italian Count Carafa (D. Carafa, 2013, 43) in the 15th century addressed aspects of socialism and called for attention to financial budgets and the necessity of including allocations for spending on social issues. He also addressed the principle of economic justice, the method of state administration, and the establishment of clear foundations. To establish a specific framework for the national economy.

Some writings that emerged in 18th-century Europe represent a major intellectual turning point for the concept of welfare and economic and social solidarity in the West. The works of Mill and Bentham concerning utilitarianism and the doctrine that the goal of human behavior is "to achieve

the greatest good for the greatest number" appeared. The economic aspect was later developed technically by Edgeworth, Pareto, Marshall, Pigou, and others at some European and American universities (Casamiglia, Xavier, and Alan Kirman, 1993, p. 61).

The concept of the welfare state: This refers to the state's formal and clear responsibility for achieving the basic well-being of its citizens and providing diverse social services to enhance the economic and social welfare of society. Such a state emerges when society, or those in charge of its affairs, are convinced that individual well-being, alongside maintaining order and national security, is of paramount importance. This cannot be left to traditions, informal organizations, or private projects; rather, it is the responsibility of the government. The welfare state's commitment to achieving the basic well-being of its members stems from the state's or the people's conviction in the crucial role of individual well-being in maintaining order and national security (Abdul-Razzaq Muhammad Saleh, 2012, p. 26).

The preceding definition describes the welfare state as one that provides services, insurance, and aid to members of society, either to raise their standard of living or to guarantee a minimum standard of living. The welfare state's commitment to providing these services, insurance, and aid stems from every person's right to a dignified life and from a social and humanitarian perspective based on the strong relationship between the well-being of individuals and society (Amin Samir, 1997, p. 43). All welfare states share a number of essential characteristics, including:

-1 They are industrialized, developed, and relatively wealthy countries (because they need resources to cover the costs of the welfare systems they implement and maintain).

-2 They are capitalist countries with developed economies.

-3 They are countries with a democratic system of government that recognizes the civil (fundamental) rights, and the political and social rights of the citizens, in addition to recognizing the individual's right to receive welfare services from the state as an integral part of their fundamental rights as citizens (Habib Matanios, 2005, p. 67).

Third: The Iraqi Economy: The Iraqi economy is a rentier economy, or what is called a onesided economy, meaning that it relies primarily on its oil wealth. The reality of the industrial sector after 2003 is deteriorating in all its aspects, and it suffers from a near-complete paralysis of all industrial projects, especially large industrial projects and small industrial projects, whether public or private. Our local industry was previously advanced, prosperous, and keeping pace with technological progress, despite the economic sanctions imposed on the country as a result of the practices of the former Iraqi political regime, which produced negative effects on the Iraqi economy. Despite this, the previous circumstances did not affect the progress of Iraqi industry, as public and private industrial projects continued the production process and within the specifications set by the Central Organization for Standardization and Quality Control. Here, the question arises: What happened to Iraqi industry? Why did it become one of the main problems that the Iraqi economy suffers from, especially in the general budget, and a source of disguised unemployment, after it was a source of revenues for the Iraqi budget and an important institution that contributed to eliminating unemployment and a source of employment for the workforce? The occupation of Iraq led to the collapse of the Iraqi state's infrastructure and both state-owned and privately owned economic structures. This created an opportunity to consider new approaches to economic development, primarily technological advancement and small-scale projects, which have become the preferred option for many countries. However, many still cling to a philosophy proven ineffective by numerous international experiences, attempting to squander economic resources by rebuilding state-owned economic projects and repeating the state's failure to achieve full and optimal resource utilization without learning from past lessons. This highlights a crucial economic option for the future of the Iraqi economy, one that aligns with national economic and social needs and circumstances. This option can lead to significant economic development, optimizing the use of available economic resources to achieve human well-being and prosperity (Hamza Hassanein Al-Hakim, 2017, p. 57).

The researcher observes that the Iraqi economy in the preceding period faced dual challenges, as is the case with most oil-dependent economies, due to the decline in global crude oil prices resulting from the negative repercussions of the COVID-19 pandemic, which cast a shadow of uncertainty over global economic growth. In addition to the ballooning size of government debt in most global economies, particularly emerging and developing economies, the dual challenge varies from one oil-exporting economy to another. This variation depends on several indicators, notably the degree of an economy's reliance on oil as a source of income, as well as its vulnerability to the repercussions of the COVID-19 pandemic. Two other indicators also play a role: the measures and plans adopted by the government to address the economic fallout of the pandemic, and the availability of necessary resources.

The Iraqi economy, after 2004, has suffered from a significant deterioration in the structure of output and the backwardness of the national economic sectors and their declining ability to contribute to supplying and diversifying the sources of output. This has made the Iraqi economy dependent on oil revenues to keep the wheels of the economy and the country's financial affairs turning. The continuation of the situation as it is making the structure of the Iraqi economy fragile and vulnerable to internal and external shocks, especially those affecting the global oil market, given its large and decisive role in the Iraqi economy, regulating the general budget and running the rest of the functions of the public sector. The latter's role has been increasing with the rise of terrorist acts and the deterioration of the security situation in the country, which has caused the flight of local and foreign capital, in addition to the shrinking role of the private sector, which has led to a decline in the activity and effectiveness of the services sector, especially the activity of the banking sector. Therefore, this study examines how to reform the banking sector in order to improve the reality of the service sector in Iraq to achieve economic prosperity, which would achieve an acceptable diversification in the gross domestic product, as well as address part of the structural imbalance that the national economy suffers from. The Iraqi economy faced challenges in light of the Corona crisis, as did the rest of the world's economies, which coincided with the decline in crude oil prices, which fell by (80%) compared to crude oil prices before the pandemic. This negatively affected the Iraqi economy, as crude oil is the main source of income. According to estimates of the International Monetary Fund, the economy contracted by up to (12%) in 2020 as a result of the Corona pandemic conditions, which was reflected in a sharp decline in oil revenues, which negatively affected the state's general budget, as the deficit in the general budget and the current account increased by (20%) and (16%) of the gross domestic product, respectively. As a result of the pressures that affected the Iraqi economy during the early years of the Corona pandemic, the gross domestic product decreased by (178) billion dollars, compared to (230) billion dollars before the pandemic, and the size of the government debt increased by about (66%) as a percentage of the gross domestic product, compared to (46%) before the pandemic.

SECTION TWO: A Study of the Reality of the Iraqi Economy and its Derivative Financial Instruments

After 2003, Iraq entered a war that led to the disintegration and collapse of the Iraqi state. A constitutional vacuum ensued, and infrastructure, including food storage facilities, oil refineries, water pumping stations, communications infrastructure, roads, and railways, was destroyed. The Iraqi economy suffered from distortions and imbalances that emerged after 2003. These imbalances constitute challenges and obstacles to development in Iraq. Among the most prominent of these imbalances are institutional deficiencies in the management of the national economy, imbalances in the economy's production structure and a high degree of dependence on foreign sources, and imbalances in the structure of the general budget, including financial deficits and external debt. Other imbalances and distortions that surfaced in Iraq after the 2003 invasion include the transition to a market economy, security challenges, administrative and financial corruption, unemployment, poverty, and reconstruction (Nour Abdul-Sattar Ibrahim, 2012, p. 115). There is also a lack of a clear economic development strategy. This does not mean that these imbalances did not exist before this date, but rather that they became more pronounced. Due to the complete collapse of the country's infrastructure as a result of previous policies and ongoing wars, economic indicators declined during this period. The Gross Domestic Product (at constant prices) in 2003 saw a sharp decrease compared to preceding years, reaching 26,990.4 million dinars. This was reflected in a decrease in the average per capita GDP, which reached 1,024.7 dinars in 2003. Subsequently, GDP (at constant prices) began to rise from 2004, reaching 41,607.8 million dinars, until it reached 75,658.8 million dinars in 2013. This led to an increase in per capita GDP from 1,533.1 dinars in 2004 to 2,109.4 dinars in 2013 (Ministry of Planning and Development Cooperation, 2004-2013). This increase in GDP is attributed to the rise in crude oil export revenues to record levels as a result of the unprecedented rise in global oil prices in the history of the oil trade, reaching levels that... (147) dollars per barrel (Fares Karim, 2011, 26). Subsequently, the Iraqi economy was affected by a double crisis represented by two challenges in 2014: the attacks of the terrorist organization (ISIS) and its occupation of three governorates, and the decline in global oil prices from (110) dollars per barrel to less than (40) dollars per barrel (Adnan Hussein et al., 2016, 89). In addition, the general budget for the same year was not approved. This year was described as the worst in the history of the Iraqi economy, as the gross domestic product (at constant prices) decreased from (72,736.2) million dinars to (70,990.3) million dinars in 2015. This was reflected in the decrease in the average per capita share from (2,050) dinars in 2014 to (1,995) dinars in 2015. In 2016, the gross domestic product (at constant prices) increased to (74,867.6) million dinars, which led to an increase in the per capita share of the product to (2,345). Dinar. As for the contribution of economic sectors to the Gross Domestic Product (at current prices), the oil sector experienced fluctuating contributions during the period from 2004 to 2016. After its contribution to GDP was 58% in 2004, it decreased to 35.5% in 2016 (Ministry of Planning and Development Cooperation, 2004-2013). The reason for this decrease in contribution is attributed to lower production levels and prices, which led to a decline in the oil sector's share of GDP. The other sectors (agriculture and industry) also witnessed a decrease in their contribution rates. In the agricultural sector, the scarcity of financial allocations for production inputs, water shortages resulting from low rainfall and high soil salinity, as well as the importation of agricultural products, all contributed to weak agricultural production and consequently a decrease in its contribution to GDP. Regarding industry, the decline in its contribution was a result of the near-complete cessation of operations in large production projects. Public revenues, however, increased during the period, rising from 32,982,739 million. Public revenues increased from 32,627,203 dinars in 2004 to their highest level in 2012 (119,817,224 million dinars) as a result of rising oil revenues from 32,627,203 million dinars in 2004 to 111,326,166 million dinars in 2012. Subsequently, public revenues declined, reaching their lowest point in 2016 at 53,413,446 million dinars, due to a decrease in oil revenues to 51,546,542 million dinars in 2016. This decline in oil revenues was attributed to the drop in oil prices at the end of 2015, when the price of a barrel of oil fell to \$30. Meanwhile, expenditures increased in tandem with the rise in revenues, rising from 32,117,491 million dinars in 2004 to their highest level in 2013 (119,127,556 million dinars), before beginning to decline to their lowest point in 2015 (70,397,515 million dinars). In 2015, current spending was greater than investment spending (Ministry of Planning – Central Statistical Organization, various years). As for the money supply, it became more disciplined, particularly after the Central Bank Law No. (56) of 2004, which granted the Central Bank independence. Article (26) of the law prohibited lending to the government, whether directly or indirectly, including lending to public bodies or any state-owned entity. However, the Central Bank was permitted to purchase government securities through secondary market operations (Mazhar Muhammad Salih, 2012, pp. 12-24). The money supply reached (10,148,626) million dinars in 2004, rising to (51,743,489) million dinars in 2010. During the period (2011-2016), which witnessed rapid developments in its later years, including a decline in oil prices, increased costs of the war on terror, and the inability of non-oil sectors to contribute effectively to revenue, the money supply was significantly impacted. The money supply peaked in 2013 (119,127,556 million dinars) before beginning to decline to its lowest level in 2015 (70,397,515 million dinars). In 2015, current spending exceeded investment spending (Ministry of Planning - Central Statistical Organization, data from various years). The money supply became more disciplined, particularly after the enactment of Central Bank Law No. (56) of 2004, which granted the Central Bank its independence. Article (26) of the law prohibited lending to the government, whether directly or indirectly, including lending to public bodies or any state-owned entity. However, the Central Bank was permitted to purchase government securities through secondary market operations (Mazhar Muhammad Salih, 2012, pp. 12-24). The money supply amounted to (10,148,626) dinars in 2004, and rose to (51,743,489) dinars in 2010. During the period (2011-2016), which witnessed rapid developments in its later years, including the decline in oil prices, the increase in the costs of the war on terror, and the inability of non-oil sectors to contribute effectively to revenues, the money supply was greatly affected.

First: Economic Resources and Capabilities: After understanding the reality of the Iraqi economy and the circumstances it has experienced, which have led to distortions and imbalances in its structure and a decline in most economic indicators, it is necessary to analyze some important economic resources and capabilities. There are some characteristics that distinguish the resources of the Iraqi economy, which can be mentioned as follows:

-1Availability and Diversity of Resources: Iraq is characterized by the presence of large quantities of oil, which has been the most important feature of the Iraqi economy since its discovery and the start of its export at the beginning of the twentieth century. Oil reserves were estimated at about (100) billion barrels at the beginning of 1987, and additional quasi-proven reserves were estimated at about 40 billion barrels (ESCWA, 1983, 38-39). Currently, some estimate that Iraq possesses reserves of about (115) billion barrels (Ministry of Planning and Development Cooperation, 2005, 4), representing 11% of global reserves (Majid Al-Hiti, 2003, 8-9). It possesses the second largest oil reserves in the Arab world after the Kingdom of Saudi Arabia (Haidar Al-Farji, 2005). 71), and (123) years is sufficient at the February 2006 production level of (2.48)

million barrels per day, and 88 years at the 1990 production level of (3.5) million barrels per day. There are also estimates of an additional (100) billion barrels undiscovered in the Western Desert region. Furthermore, Iraq possesses significant quantities of natural gas, estimated at (115) trillion cubic feet (Union of Arab Banks Journal, 2004, p. 20). It is worth noting that exploration activities in Iraq ceased in 1980 due to the war with the Islamic Republic of Iran, followed by the First Gulf War and then economic sanctions. Some believe that if Iraq had been able to explore for oil, it would have doubled its current reserves (Samir Sarem, 2003, p. 51). Overall, estimated reserves exceed 200 billion barrels (OPEC Annual Statistical Bulletin, 2006, p. 14).

-2Inefficient utilization of available production capacity led to a shortfall in production to meet local demand. This was due to a shortage of machinery and equipment caused by the widespread destruction of production sectors as a result of wars and embargoes, in addition to a shortage of production inputs due to heavy reliance on imports and poor machinery maintenance. Consequently, the added value of industrial production decreased from (759.8) million dinars in 1985 to (391) million dinars in 1991 at constant 1990 prices. The percentage of available capacity in the industrial sector was 44% in the public sector and 24% in the mixed sector in 1991 (Jibril Mahmoud Hassan, 1993, 4). The percentage then decreased in the public sector to 37% and increased slightly in the mixed sector to reach 27% in 1992 (Kamel Kazem Al-Kinani, 2000, 12). Some attribute the decline in the utilization of production capacity after 1980 to a shortage of operational inputs (Ahmed Barihi Al-Ali, 1991). 37), and its cause was the Iran-Iraq War and the embargo imposed on Iraq, which prevented the development and expansion of technology (Sami Atto, 2002, p. 155).

-3The deterioration of the value of the Iraqi currency against other currencies: After the dollar was equivalent to (0.334) Iraqi dinars, its price reached (2200) dinars in 2000 (Marion Sluglett & Peter, 2003, p. 11). This was due to the adoption of a policy of extensive monetary issuance, which led to a growth in the money supply during the 1990s, rising from (15,359.3) million dinars in 1991 to (55,193.7) million dinars in 1993 (Abdul-Munim Al-Sayed & Hail Ajami, 1994, p. 102), to (705,064) million dinars in 1995, and to (1,728,006) million dinars in 2000. When compared to the GDP growth rate, which grew by (16%) during the same years, we observe that the money supply increased (28) times (Kamil Alawi Kadhim, 2005/14). This was reflected in price levels and created inflationary pressures on the economy. The Iraqi dinar experienced a serious deterioration in its exchange rate. The growth in the money supply resulted from large-scale currency issuance driven by banking pressures and high demand for foreign currencies, particularly the dollar, for imports, hoarding, smuggling, and speculation. Additionally, the use of the Iraqi dinar itself for imports from neighboring countries (especially Jordan) increased its supply in those countries. The continued import policy further intensified the demand for foreign currencies while simultaneously increasing the supply of the Iraqi dinar. This was accompanied by a decline in the GDP and a decrease in the contribution of commodity sectors to the national income (Abdulaziz Huwaish Al-Jubouri, 2002, p. 14). The urgent need to rebuild what the war and the embargo had destroyed led to inflationary financing of oil facilities, industrial and agricultural infrastructure, roads, bridges, reservoirs, and other facilities. This, in turn, fueled a trend toward illegal methods to evade international oversight during the embargo period. The illicit influx of foreign currency contributed to the emergence of a black market and encouraged speculation in both foreign and local currencies. This, in turn, led to a devaluation of the national currency (Ismail Obeid Hammadi, 1998, pp. 20-22), which, in turn, resulted in a continuous and escalating rise in the prices of goods and services.

-4The Iraqi economy is one-sided and characterized by the high relative importance of the oil sector's contribution to the GDP over the past few decades. This sector contributes more than 60% of the total GDP and 95% of foreign currency resources (National Development Strategy, 2007, p. 5). Oil exports constituted more than 97.8% of total exports in 1980 (Kamil Alawi Kadhim, op. cit., p. 9). This means that the mining sector essentially dominates the overall GDP, and that state intervention during the 1970s and 1980s failed to eliminate or reduce this dominance (Salim Tawfiq Al-Najafi, 2002, p. 428). The average contribution of the mining sector to GDP was 59% during the period 1998-2007. Oil exports constituted 99% of total exports in 2005 and 2006, amounting to \$23,199.4 billion and \$29,708.1 billion, respectively, out of total exports of \$23,697.4 billion and \$30,529.1 billion (Iraqi Strategic Report, 2008, p. 293). This increase in export value between the two years is attributed to the rise in oil prices.

To achieve economic growth in any country, a clear vision of the desired objectives is essential. This vision is embodied in economic and social policies, which are then formulated into timebound plans with indicators related to the components of economic and social activities, their contribution to the gross domestic product (GDP), their impact on employment rates, and the improvement of citizens' living standards, among other indicators. All of this must be subject to monitoring, oversight, and evaluation. The primary purpose of economic policies is to achieve a balance in the utilization and deployment of all economic, financial, material, human, and productive resources.

Second: Fiscal Policy: Fiscal policy in Iraq has long suffered from numerous problems, both in terms of revenues and expenditures, leading to its ineffectiveness in both corrective and financing measures. In 2003, based on the new direction of the Iraqi economy, which was founded on reform and economic liberalization, fiscal policy attempted to give the private sector exceptional importance, diversify funding sources, manage public debt, and encourage private investment, both foreign and domestic (Abdul-Jabbar Mahmoud Al-Obaidi, 2015, p. 267). Fiscal policy derived its rules from the Iraqi Constitution, which stipulated in Article 110

(Third) that formulating fiscal policy was the prerogative of the federal authorities. Article 80 (Fourth) stipulated that the draft budget and development plans were to be prepared by the executive authority (Ministry of Planning and Development Cooperation, 2007-2010, p. 23). The Ministry of Finance resorted to alternative sources to finance the budget deficit due to new restrictions imposed on government borrowing by the Central Bank, which was characterized by the Central Bank's independence, thus rendering it no longer the primary instrument. The executive branch's role in implementing fiscal policy decisions regarding budget deficit financing was a key aspect of its independence. One of the most significant features of this independence was the bank's decision to cease printing money to finance the budget deficit. Instead, it resorted to debt financing, issuing bonds and treasury bills, and selling them to commercial banks and the stock market. This policy does not contribute to inflation because it does not increase the growth rate of the money supply; rather, it merely transfers purchasing power from the public to the government. However, increased borrowing through auctions led to higher real interest rates in the banking sector, particularly after these rates were freed from monetary control measures following the central bank's decision in 2004 to float deposit and lending rates and grant commercial banks the freedom to set their own rates. The government's increasing reliance on debt financing has put pressure on private investment, leading to higher interest

rates and increased borrowing costs. This will ultimately discourage the private sector from borrowing from commercial banks. The government's entry as a competitor to the private sector for available financial resources has increased aggregate demand for loans and driven up real interest rates. This will lead to a reduction in consumer purchases, particularly of durable goods and other items requiring bank loans, especially interest-rate-sensitive goods such as cars and real estate. The opportunity cost of investment projects will also increase, forcing businesses to postpone spending on these projects (Hamsa Qusay and Omar Adnan, 2017, pp. 237-238). Consequently, the budget deficit will drive up the real interest rate, thus displacing investment spending. Furthermore, inflationary expectations will likely lead banks to raise interest rates on medium- and long-term deposits.

The government's lack of transparency in announcing future fiscal policy indicators, such as government spending, public debt levels, and tax rates, will negatively impact the maturity structure of deposits. The ambiguity and lack of clarity surrounding these indicators will negatively affect the business sector's ability to borrow to finance its investments, thus reducing opportunities for the banking sector to utilize its financial resources (Emirates Center for Strategic Studies and Research, 2009, p. 55). Meanwhile, public finance in Iraq has adopted a modern model for fiscal policy development based on the ratio of actual revenues to GDP. This model reflects the breadth and optimum of the dynamic stabilizer (which is the reliance on a basket of relatively flexible domestic financial resources for the general budget in rentier economies, aimed at achieving financial stability, alongside the fluctuating external oil revenue due to external factors in energy markets). It also reflects the government's ability to influence GDP rates. In other words, the point between the government's expansion and breadth of influence in economic life and the strength and breadth of the dynamic stabilizer reflects the government's role in the national economy and the evaluation of the stability outcomes of fiscal policy based on the principle of automaticity. A decrease in GDP will lead to a reduction in revenues represented by direct and indirect taxes, pushing towards an increase in Transfer spending and the resulting budget deficit increase, and vice versa. In the Iraqi economy, since the budget relies on oil revenues for more than 90% of its revenue, a dynamic stabilizer is used, namely the estimated oil price, to determine the size of oil revenues as a percentage of GDP (Farid Jawad Al-Dulaimi, 2014, p. 312). This dependence on the oil sector has deprived fiscal policy of the stabilization technique. The self-regulatory aspect, as observed, is that the direction of fiscal policy is to give relative priority to expenditures related to consumer welfare at the expense of investment expenditures, sacrificing growth for economic stability. Economic stability has become a byproduct of budgetary processes, as long as surpluses are continuously generated from oil revenues. Furthermore, oil revenues are not optimally utilized during periods of high oil prices, but rather relied upon during periods of low oil prices. This is evident in the primary instrument of fiscal policy: the general budget.

Third: Monetary Policy: Monetary policy plays a crucial role in achieving economic stability and growth. It is a vital component of macroeconomic policy, effectively controlling liquidity by influencing the money supply and credit in a manner appropriate to economic conditions. The central bank is the highest monetary authority, guiding monetary and economic stability. Monetary authorities can achieve specific vital objectives based on priorities determined by the economic challenges facing the economy. Sometimes, monetary authorities utilize intermediate objectives, such as the money supply and interest rates, to achieve a final goal, such as price stability and inflation control. Inflation is a primary objective for all economies worldwide, as it has negative repercussions on the economy and economic growth if it exceeds reasonable limits. Therefore, monetary policy after 2003 has been characterized as a liberalized policy, independent of fiscal policies and political decisions that contradict economic logic and theory, particularly after the formation of the transitional government. Consequently, the central bank ceased to finance the budget deficit and instead enacted the necessary legislation to achieve independence and formulate a monetary policy free from any external influence. A political solution to confront runaway inflation (Thuraya Al-Khazraji, 2010, 3), which affects the economy in general and individual income in particular. Therefore, the independence of the Central Bank came under the Central Bank Law No. (56) of 2004, which granted the Central Bank the right to independence in making its decisions. Also, the Central Bank is not to lend to the government or any state-owned entity, whether directly or indirectly, except for the purchase of government securities within the framework of open market operations (Basim Abdul-Hadi Hassan, 2008, 4). The monetary policy of the Central Bank in Iraq under Law (56) was characterized by a monetary path that was completely different from the previous one in terms of the tools used in implementing monetary policy and maintaining a stable monetary and financial system in order to achieve economic prosperity and provide job opportunities, with particular emphasis on strengthening the value of the Iraqi dinar so that it becomes an attractive national currency (Thuraya Al-Khazraji, 2010, 8).

SECTION THREE: The Impact of Derivative Financial Instruments on Economic Welfare Indicators (Practical Aspect)

The researcher believes that, in line with the nature of the Iraqi economy, and for the purposes of this research, the following criteria can be identified to determine and measure the impact of derivative financial instruments, their indicators, and their adoption within the questionnaire developed in the country under study.

First: The practical study on the role of derivative financial instruments in stimulating economic welfare indicators: A hypothetical arithmetic mean of (3) points was adopted as a standard for measuring and evaluating the score obtained from the sample's responses, based on the three weights of the questionnaire, which assigns (3) points to the highest response and one point to the lowest response. The hypothetical mean (1.5) is the sum of the scale scores divided by the number of scores (3). After conducting the statistical analysis and processing the research variables data, Table (1) presents the arithmetic mean and standard deviation for the criteria related to the role of derivative financial instruments in economic welfare.

We observe that the items in the standard concerning the role of derivative financial instruments in economic well-being have made clear progress towards the adoption of these standards at the level of the Iraqi economy, as all items exceeded the hypothetical arithmetic mean of (1.5) points. Item (3) of the criteria for the role of derivative financial instruments in economic well-being achieved the highest weighted arithmetic mean of (3.04), focusing on the Iraqi economy's management of the role of derivative financial instruments in economic well-being. The lowest arithmetic mean was achieved for items (7) and (8) of the questionnaire, with a mean of (2.01). This indicates a weakness in the Iraqi banking sector's attention to documenting indicators of derivative financial instruments, as well as a weakness in utilizing the established principles within the Iraqi economy. The remaining items fell between the two main items. The first item had an arithmetic mean of (2.84), indicating that the Iraqi economy is seeking

to utilize distinguished indicators to serve its objectives. Item (4) achieved an arithmetic mean of (2.68), suggesting that the economy is conducting training courses for Iraqi bank employees on derivative financial instruments. Item (16), which relates to the existence of clear criteria that represent the skills of important indicators for derivative financial instruments as an entry point for solving internal problems facing the banking sector in Iraq, achieved a mean of The average score for the first item was 2.48, while items 8, 9, 10, and 15 achieved average scores of 2.55, 2.16, 2.25, and 2.08, respectively. This confirms that the banking institution's management prioritizes documenting observations drawn from past successes and failures, and relies on experienced teams and continuous training.

Items 5, 6, and 14 achieved average scores of 2.44, 2.4, and 2.33, respectively. This indicates that updates to the banking institution are accessible to all employees, and that management utilizes diverse teams specializing in derivative instruments. Furthermore, it demonstrates the adoption of appropriate scientific methods to assess the well-being of those working within the Iraqi economy.

Overall, we observe that the institution's management engages in simulations with established institutions to enhance economic well-being. It is committed to promoting indicators related to derivative financial instruments and leveraging supporting expertise. Additionally, it engages experts to train support staff and other employees within the economy.

Table No. (1) Arithmetic Mean and Standard Deviation of the Criteria for the Role of Derivative Financial Instruments in Economic Welfare

Statistical indicators		Questionnaire items	sequence
standard deviation	arithmetic mean		
0.22	2.84	Financial derivatives play a role in determining the methods of action to stimulate economic well-being.	1
0.26	2.28	Derivative instruments play an important role in the development of economic procedures and systems.	2
0.31	3.04	Financial derivatives contribute to the development of economic thinking that promotes well-being.	3
0.23	2.68	Training courses were held for employees to understand the role of financial derivatives in stimulating economic prosperity in Iraq.	4
1.23	2.44	Economic prosperity lies in creating something new that has no prior equivalent.	5
0.11	2.4	Attention is paid to the requirements of economic wellbeing.	6
0.09	2.1	Financial incentives are provided to employees with economic capabilities.	7
0.19	2.55	Moral incentives are offered to employees with the financial capabilities to deal in derivatives.	8
0.24	2.16	The Iraqi economy relies on a range of financial indicators such as derivative instruments.	9
0.09	2.25	The tools derived from Iraqi economic welfare are acquired from the experiences of other countries.	10
0.13	2.56	Iraqi economic well-being depends on a database of derivative instruments.	11
0.17	2.32	The Iraqi economic administration is very concerned with indicators of economic well-being.	12
0.19	2.02	Welfare economic indicators help overcome crises faced by the banking sector.	13
0.16	2.33	Financial derivatives indices provide impetus for economic wellbeing.	14
0.15	2.08	Financial tools skills help in effectively addressing the weakness of the banking sector's resources in Iraq.	15
0.13	2.48	Financial derivatives skills represent an important input in solving the internal problems facing the banking sector in Iraq.	16

Source: Prepared by the researcher based on the results of the electronic calculator

Second: A practical study on measuring the relationship between derivative financial instruments and economic welfare indicators.

A- Testing the first sub-hypothesis: Table (2) shows a strong correlation between the polarization and generation of derivative financial instrument indicators and economic welfare indicators. This relationship is statistically significant at a significance level of (3%) and a confidence level of (97%), as the simple correlation coefficient between them reached (0.77) and the calculated t-value reached (2.020), which is greater than the critical t-value of (1.353) at a significance level of (3%). Based on this, the first sub-hypothesis can be accepted. Based on the above, the positive correlation can be interpreted as the role of derivative financial instruments in economic welfare helping to determine working methods with economic sectors, as well as developing work procedures and systems and stimulating incentives in the Iraqi economy.

Table No. (2) Results of the correlation analysis between the polarization and generation of derivative financial instrument indices and the stimulation of economic welfare

Tabulated T value, significance level 5%	Attracting and generating derivative financial instruments	Dependent variable
		Independent variable
1.353	0.77	Achieving economic prosperity
	2.020	Calculated T value

Source: Prepared by the researcher based on the results of the electronic calculator

B- Testing the second sub-hypothesis: The results of Table No. (3) indicate the existence of a positive, strong, and statistically significant correlation at a significance level of (3%) and a confidence level of (97%), between the element of derivative financial instruments and the achievement of economic well-being, as the value of the simple correlation coefficient between them reached (0.871) and the value of (the calculated T) reached (7.43), which is greater than the value of the tabulated T of (1.353) at the significance level of (3%) and the confidence level of (97%). Based on this, the second sub-hypothesis can be accepted. Based on what has been presented in this positive correlation relationship, it is explained that the role of derivative financial indicators is effective in realizing the concept of economic well-being by creating something new that has no previous equivalent through attention to its indicators and providing positive requirements for it and its interest in the developments of the efficient economy.

Table No. (3) Results of the correlation analysis between the knowledge economy and the development of creativity and innovation capacity

Tabulated T-value, significance level 5%	Derivative financial instrument indices	Dependent variable
		Independent variable
1.353	0.871	Achieving economic prosperity
	7.431	Calculated T value

Source: Prepared by the researcher based on the results of the electronic calculator.

Third: A practical study on measuring the impact of derivative financial instruments on stimulating economic welfare indicators: To determine the impact of derivative financial instruments on stimulating economic welfare indicators, a simple linear regression model was used to identify the effect. The coefficient of interpretation (R^2) was used, along with the standard regression coefficient, to determine the percentage increase in economic welfare resulting from the increase in each of the derivative financial instrument variables.

A- Measuring the impact of derivative instrument attraction and generation on stimulating economic welfare: Table (4), which represents the results of the simple linear regression model estimating the impact of derivative instruments and their generation on stimulating economic welfare, shows that the calculated F-value was (21.954), which is greater than the tabulated Fvalue of (9.1) at a significance level of (3%). Therefore, the first sub-hypothesis was accepted, indicating a statistically significant impact of derivative instrument attraction and generation on improving economic welfare.

Table No. (4) Results of simple linear regression estimation to measure the effect of polarization of derived instruments and their generation on stimulating economic well-being

Coefficient of determination Beta	Interpretation factor R^2	tabulated F value	Calculated F value	Attracting and generating derived tools	constant	Dependent variable /independent variable
				b-1	b-0	
0.604	0.396	9.1	21.954	0.720	4.482	Stimulating economic prosperity

Source: Prepared by the researcher based on the results of the electronic calculator.

As evidenced by the coefficient of interpretation (R^2) of (0.396), the element of derivative instrument polarization and generation can explain (33.5%) of the changes in the stimulus for economic well-being.

*The value of determination (0.604) indicates that increasing the element of derivative instrument polarization and generation by one unit leads to an increase in the stimulus for economic well-being by (60.6) units of one standard deviation.

B- Measuring the impact of derivative financial instrument indicators on achieving economic well-being: Table (5), which represents the results of estimating the simple linear deviation model to estimate the impact of derivative financial instrument indicators and generation on achieving economic well-being, shows that the calculated (F) value reached (53.077), which is greater than the tabulated (F) value of (9.1) at a significance level of (3%). Therefore, the second sub-hypothesis was accepted, which means that there is a statistically significant impact of the indicator element on achieving economic well-being in Iraq.

Table No. (5) Results of simple linear regression estimation to measure the impact of derivative financial instrument indices on achieving economic well-being

Coefficient of determination Beta	Interpretation factor R2	tabulated value	F	Calculated F	Indicators	constant	Dependent variable /independent variable
					b-1	b-0	
0.877	0.855	9.1		53.077	1.280	6.993	Achieving economic prosperity

Source: Prepared by the researcher based on the results of the electronic calculator.

As evidenced by the coefficient of explanation (R^2) of 0.855, the indices of derivative financial instruments are capable of explaining 85.4% of the changes in economic well-being.

The determination value of 0.877 indicates that a one-unit increase in the indices of derivative financial instruments leads to a 70.4-unit increase in the capacity to achieve economic wellbeing, equivalent to one standard deviation.

Fourth: The impact of applying financial derivatives on the welfare economy: The global financial crisis led to a reassessment of the benefits and risks associated with finance and financial services, particularly with regard to securitization and complex financial derivatives. These had grown to an excessive degree in terms of size and complexity and had not generated added value to the overall economy except in a limited way. Thus, they had a limited impact and high risks. Global banking witnessed a clear decline after banking financial flows and debtcreating flows in a wide range of countries between 2002-2007 recorded a sharp decline from about 8% to 25% of GDP in advanced economies and from about 2% to 12% of GDP in emerging markets. They fell sharply to 3% of GDP in 2009, leaving a significant impact on advanced and emerging economies. They recovered in 2010, but declined again with the intensification of the European sovereign debt crisis, reaching 6% of GDP in 2009 (Stein Clynssens and One Marketney). (2013, 15-16) 2012. Regarding financial stability, research findings indicate differences in countries' vulnerability to shocks based on the relative size of the bank, the distance between affiliated banks and their parent banks, and the volume of funds raised by foreign banks domestically rather than from foreign sources, as follows:

-1Domestic credit provided by local companies is more stable than cross-border borrowing. Foreign banks reduced lending more than local banks in Eastern European countries, but this difference was not observed in Latin American countries, where branches were fewer and the number of affiliated companies was greater than in Eastern Europe, partly due to regulatory preferences in Latin America.

-2Global banks are exposed to shocks that often force them to rebalance their portfolios by moving away from global markets. These shocks have spread from developed economies to emerging markets (along with the redistribution of liquidity within the institution). Foreign banks operating in crisis-affected developed economies have also reduced their domestic lending and repatriated funds to help absorb the shocks within their home countries (Global Liquidity, 2011, pp. 5-6).

The current volume of international liquidity, unprecedented since the 2008 subprime mortgage crisis, is flowing freely from two sources: official and private. The former can be described as "financing," which is provided without restrictions to settle claims and withdrawals. This is managed by monetary authorities through various instruments, such as foreign exchange reserves and swap arrangements between central banks. Central banks have a unique ability to create official liquidity. IMF programs and Special Drawing Rights (SDRs) are tools for mobilizing official liquidity, not for creating it. The other concept is private liquidity (private sector liquidity), which is largely generated by cross-border activities undertaken by banks and other non-bank financial institutions. Both concepts share the common element of ease of financing. Quantitatively, private liquidity dominates official liquidity in terms of size and financial stability perspective. This dominance stems from the deep financial integration between countries and the widespread innovation in financial instruments. Furthermore, the speed and intensity of global private liquidity circulation are driven by factors such as differences in growth rates and monetary policies, and are primarily fueled by risk appetite. However, there is some interaction between official and private liquidity under normal circumstances, particularly during periods of economic boom. The supply of global liquidity is largely determined by international banks (either directly or through financial markets). In times of stress, the supply of global liquidity depends critically on the availability of private sector liquidity to official liquidity (Ali Abdullah Shaheen, 2010, p. 74).

The excessive lending in the United States from 2001 to 2006 contributed to the creation of widespread liquidity, supported by the government and offered at interest rates close to 1% on favorable terms to mortgage companies. This extended to lending criteria even for those who did not qualify, resulting in high-risk loans reaching approximately \$3.1 trillion by March 2007. Under securitization practices, mortgage companies began selling homes and properties to individuals at favorable interest rates and terms, with the assets held as collateral until the sale installments were paid. The ownership documents remained with the lenders. By mid2008, personal debt had reached \$2.9 trillion, with real estate debt accounting for \$6.6 trillion.

Corporate debt reached \$18.4 trillion, and government debt reached \$12 trillion, bringing the total debt in the United States to \$39 trillion, equivalent to three times its GDP. The creation of financial derivatives based on a single asset, with multiple loans granted, posed significant risks to the financial system. The crisis was triggered by borrowers defaulting on their loans for various reasons. At the beginning of 2008, a large number of borrowers defaulted on their loans, and by October 2008, the number of defaulters had reached millions. This led to the insolvency of major companies and the bankruptcy of some, due to the inability to prove certain obligations such as futures and options because they did not meet the proof requirements (World Bank, 2009, p. 17).

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Fifth: The impact of financial derivatives as a means of hedging against risk: The development of financial derivatives has had a significant impact on the need for risk management. Organizations, regardless of their activities, face many risks that affect the volatility of their cash flows. Financial derivatives replace one risk with another, reduce risk to a lower level, and sometimes eliminate risk altogether. Risk is defined as the uncertainty or potential variation in financial results (profit or loss). Protection here may be against fluctuations in commodity prices, securities prices, etc.

(Instruments, stocks, bonds) Interest rates, exchange rates, and the most important risks covered by financial derivatives are:

-1Commodity price risk: Prices of commodities such as oil, natural gas, gold, iron, barley, and cotton fluctuate, adding significant risk and volatility to the revenues of the producing company.

-2Foreign exchange risk: Changes in foreign exchange rates affect all entities dealing in currencies beyond the local (national) borders. This risk impacts companies that conduct purchases or sales in foreign currencies.

-3Interest rate risk: If the debt obligation has a variable interest rate, changes in interest rates will affect the cash paid as interest. Conversely, for the lender, the risk arises with fixed-interest debt, as changes in interest rates affect the market value of the debt due or the investment in the debt.

-4Market value or fair value risk: Changes in market value can arise from changes in commodity price risk, foreign exchange risk, or interest rate risk. Precisely identifying the expected causes of market value changes is crucial for determining the appropriate means or instruments to effectively hedge against the risk of market value fluctuations. Examples of such risks and their corresponding financial derivatives include:

-1A decline in the market value of stocks = a put option.

-2The risk of an increase in asset values = a call option.

-3The risk of exchange rate changes = foreign exchange forward contracts.

-4The risk of a decline in commodity prices = commodity futures contracts.

-5The risk of market changes in fixed-interest debt = a floating-rate swap contract. While financial derivatives are crucial for hedging risks, their inherently speculative nature also entails the potential for both profit and loss. They inherently carry risks that can sometimes lead to enormous and unforeseen losses, potentially creating a financial crisis. Islamic banks have faced numerous challenges in investment and treasury in general, and in the derivatives market in particular, as a result of the development of Islamic banking in the world of finance and business, its competition with conventional banking in financial markets, and the desire of bankers to adapt these financial instruments to comply with Sharia principles. This study examines Islamic derivative contracts in contemporary financial markets, exploring their nature, functions, importance, the extent of their application, and the contemporary challenges they face. The application of Islamic derivative contracts by Islamic banks in financial markets has been moderate, largely due to a lack of conviction in these instruments given the issues and challenges they face, most notably Sharia compliance, the absence of underlying assets, and the lack of financial markets for their implementation. Achieving economic prosperity in any country requires a clear vision of the desired objectives. This is embodied in economic and social policies, which are then formulated into time-bound plans with indicators related to the components of economic and social activities, their contribution to the gross domestic product (GDP), their impact on employment rates, and the improvement of citizens' living standards, among other indicators. All of this must be subject to monitoring, oversight, and evaluation. The primary purpose of economic policies is to achieve a balance in the utilization of all economic, financial, material, human, and productive resources. Islamic banks have witnessed remarkable growth in both Arab and Western countries due to their financing and investment methods based on the principles of Islamic Sharia. Consequently, the number of banks worldwide has increased. Iraq, being part of this global community, has implemented a series of reforms to its legislative and legal systems to facilitate a new yet old form of banking. While ancient in origin, its application within the Iraqi banking system is relatively recent. Despite this, the activities of these banks are evolving year after year, particularly through their use of derivative financial instruments. It has been found that derivative financial instruments have a significant impact on achieving economic prosperity in Iraq, and a correlation has been established between these instruments and the overall economic situation. A positive correlation exists between the indicators of derivative financial instruments and the indicators of economic well-being in them, and there is a statistically significant effect between financial instruments and stimulating the ability to achieve economic well-being. This was achieved through the questionnaire that the researcher used in the country of study and the opinions of workers in the Iraqi economy, including employees, department managers, and workers. This data was entered into the statistical system (SPSS), and the results were extracted in numerical form and discussed statistically and economically. This is what was mentioned in the chapter above, which helps to build and increase well-being in the Iraqi economy.

SECTION FOUR: Conclusion

First: Requirements for Building a Welfare State in Iraq: A democratic state that prioritizes the well-being of its citizens and works to achieve their socioeconomic rights is a welfare state. The welfare state embodies the idea that society has taken upon itself the responsibility of ensuring the social and economic security of all its citizens. To achieve this, the welfare state collects taxes from its citizens and uses them to meet the needs of all residents, ensuring that every citizen enjoys a decent standard of living. It accomplishes this in several ways, the main ones being: The welfare state provides all or a portion of the population with a wide range of goods and services at a decent standard and reasonable prices in various sectors (Kunhibave & Sherin, 2010, p. 3):

1. Health: The state establishes and operates institutions such as clinics, hospitals, laboratories, testing institutes, shelters, and centers for those unable to care for themselves.
2. Education: The state establishes and operates institutions such as daycare centers, schools, colleges, universities, and public libraries.
3. Housing: The state provides relatively inexpensive housing to various population groups (the poor, university students, and young couples).
4. Food: The state provides hot meals to certain segments of the population.
5. Personal Welfare Services: The state supports individuals and families facing difficulties in coping with their hardships and integrating into society: the elderly, single-parent families, at-risk youth, abused women, people with physical and mental disabilities, and others. Most personal welfare services are provided by the welfare departments of local authorities.

4 Employment: To enable various segments of the population to enter the workforce, the state offers vocational training courses, creates diverse job opportunities, and assists individuals in finding employment (through employment offices).

Second: Conclusions: The researcher reached a number of vital conclusions in the study, as follows:

1. Financial engineering has provided innovative tools, and derivative financial instruments are a form of these financial tools for managing risks and providing solutions to financing problems.
2. Financial derivatives are off-balance sheet instruments because their realization is deferred to the future and they represent potential liabilities, debts, and outstanding receivables.
3. The importance of financial derivatives is evident in trading trends, such as selling and positioning in financial markets, and in managing the risks banks face due to fluctuations in exchange rates and currency prices. They are traded in both regulated and unregulated markets, but are riskier due to their use in speculation.
4. Financial derivatives and securitization techniques facilitate the raising of cash for the growth of companies and economic institutions of all types through the issuance of shares and securities to finance their expansion activities.
5. The financial crisis resulted from the excessive use of financial derivatives outside regulatory constraints and securitization to raise liquidity. Financial derivatives represent the fastestgrowing form of financial transactions and continued to grow even during the crisis.
6. Applied econometric studies of a sample of financial markets in several developing countries have demonstrated no significant impact on securities liquidity indicators and economic growth. 7. The suitability of financial derivatives for developing economies in general, and the Iraqi economy in particular, depends on the integration of the financial system and the conditions and efficiency of the stock market in terms of its depth and the sufficient number of listed companies.
7. Living standards have been significantly affected by the financial crisis, revealing real shortcomings, whether in the rise of poverty and hunger or in the increase of unemployment rates at the local, regional, and international levels. The guarantees of the capitalist system have failed to mitigate these problems. In fact, continuing to promote the crisis and submitting to its policies will further erode what remains of social welfare
8. Arab economies face giant economic blocs, and these fragmented economies are unable to confront the negative effects of the financial crisis and its accompanying rapid and diverse developments. In their current state, they are weak in economic and political negotiations with these giant blocs.
9. Economic blocs have become an inevitable necessity and a defining characteristic of our time. The world has moved towards large economic blocs instead of individual states or fragmented, isolated economies.
10. Social welfare standards, such as education and health levels, have declined, environmental pollution has increased, social structures have disintegrated, and standards of social security, democracy, and human rights have deteriorated.
11. The researcher concluded, through the empirical research of the study, that there is a strong correlation between the attraction and generation of derivative financial instruments and economic welfare indicators, as per the empirical study.
12. The researcher also concluded, through the empirical research of the study, that the attraction and generation of derivative instruments has a statistically significant impact on the development of economic welfare.

Third: Recommendations: The researcher proposes a set of vital recommendations based on the study, as follows:

- 1 Derivative financial instruments, a product of financial innovation, are essential for any market, and no market can be complete without them. This accelerates market depth and the development of financial system institutions.
- 2 The use of derivative financial instruments is facilitated by the availability of regulatory frameworks, through which banking standards and Basel Committee regulations are implemented.
- 3 Adhering to the principles of disclosure and transparency in banking and financial institutions regarding financing and credit to prevent financial crises and avoid their devastating effects.
- 4 Raising financial awareness about the importance of financial derivatives and training financial market participants, including investors and intermediaries, in stock valuation and determining fair prices, such as the price-to-earnings ratio, which is one of the most important metrics in derivatives trading.
- 5 Avoiding the Expanding securitization and excessive use of financial derivatives while maintaining financial solvency and capital adequacy limits, along with the availability of collateral in lending.
- 6 The importance of using liquidity to generate added value within the real sector, which would dispel the illusion of credit financing and prevent excessive liquidity.
- 7 Using derivative financial instruments for their intended purpose of hedging and managing risks, not for speculation, excessive credit, or excessive liquidity.
- 8 Dealing consciously with financial crises and striving to build a resilient and informed foundation by raising awareness of their effects, and promoting the universality of Islam with its global goals, objectives, and means based on mutual understanding and openness without exclusion, marginalization, or coercion.
- 9 Working to diversify the production structure in countries through the optimal utilization of available resources, capabilities, and wealth, as productive diversification is fundamental to any regional integration and a prosperous economy.
- 10 Coordinating positions and policies, and indeed all bodies and organizations that are sensitive to the risks of the crisis to economic well-being, by activating the role of derivative financial instruments and banks, and removing all inter-agency sensitivities that hinder the move towards establishing a serious economic bloc, built on logical and effective foundations, as a means to achieve economic unity and economic prosperity.
- 11 These recommendations may seem ambitious and far-reaching, but they stem from this study's belief in the great hope in the moderate nation, a witness to the rest of the nations, and capable of shouldering the responsibilities entrusted to it by the Almighty, Exalted is He.

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