



## **The impact of dealing with financial derivatives on financial risks in banking institutions**

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### **Abstract**

The subject of financial derivatives is one of the most controversial and diverse topics because it has negative and positive effects on economic activity, which appeared as an inevitable result of the most important economic and financial developments in the world, especially entering the era of financial globalization, lifting restrictions and liberalizing the movement of capital and the accompanying volatility of interest rates and foreign exchange rates, which led to a direct and significant impact on the increase in financial risks on financial and banking institutions and directly affecting their activity to the point of reaching the verge of bankruptcy. Hence, the collapse, based o

### **Keywords**

derivatives, Financial globalization, Financial risks, Banking hedging

### **1. Introduction**

Financial derivatives are one of the most used instruments as modern financial instruments because of their advantages that encourage dealing with them. One of their most essential functions is hedging against risks. It gives its customers more control over the dangers surrounding them. Financial derivatives are one of the most important developments that have emerged in the contemporary period and witnessed by the financial markets, as they have grown widely since the start of dealing in 1973 to be the value of the third of the world's

trade in various commodities and securities, according to what was proven by international statistics for the year 1994. these contracts encouraged dealers, significantly hedged who are During their encouragement, to enter into deals to protect their business from the risk of price volatility or the primary assets (Overhaus et al., 2011). It is done to buy derivative financial instruments, use them as hedging, and ensure positive value in companies that obtain the essential assets. However, dealing with these contracts is not without risks. It is due to the rapid and sudden development in derivative contract exchanges at a time when there is not enough experience and know-how among dealers. Another aspect is the dependence of dealing with them on expectations in future events and the extent to which the assumption of their occurrence has been achieved, in addition to the deviation of financial derivatives contracts from their principal and main goal and their use by some as a means of excessive speculation to achieve profits in short terms, which leads to violent fluctuations in market prices, which reflects negatively on the growing investment movement in general. We will look at the impact of dealing with financial derivatives Through two branches (Hudson, 2017). The first shows its role in banking hedging, while the second is its role as a cause of financial crises. The importance of this research comes from the need to study derivatives contracts as modern financial instruments and the extent to which it is necessary to take them and integrate them with other traditional instruments, and the suitability of the legislative reality of the stock market in Iraq to work out. Searching for the effects of dealing with these contracts in terms of

- 1- Its role in hedging against financial risks
- 2- What is the degree of risk in dealing with these contracts due to the rapid and sudden development in derivative contract exchanges and the lack of sufficient experience and justice for those dealing with them?

## **2. Research Methodology**

In this study, we presented viewpoints, what is taken on them, and what we may depend on by adopting an inductive and analytical approach to presenting the information. We will examine the impact of dealing with financial derivatives through two requirements. The first requirement will be about the role of financial derivatives in banking hedging, and the second requirement will be about the role of financial derivatives as causes of financial crises. Both of these requirements will focus on the impact of dealing with financial derivatives.

## **3. The role of financial derivatives in bank hedging**

Financial derivatives are one of the most used tools at present because of their advantages that encourage dealing with them, the most important of which is its function in covering against risks in addition to several other benefits, as coverage against risks is one of the most prominent and important tasks that characterize financial derivatives. The trader of financial derivatives contracts in

the financial markets allows dealers to control more of the risks surrounding their work and revenues. It improves their trade and habits and the macroeconomy in general. The property is a great desire for the worst money because it helps its dealers to raise their returns by enabling them to use many financial instruments that contribute to the growth of their profits and will allow them to implement their trading needs.

And the role of financial derivatives in hedging To illustrate this, we assume that there is an investor who worked to take a long position in the present market for a stock and who has worked to buy a share from the stock market at a value of (50) dollars and was the investor. Fearful of the decline in the value of the share in the event of its sale, and then believed the expectations of that investor if the price of that share fell to (30) dollars, and this led to the realization of a loss for that investor of (20) dollars. It is considered a heavy loss for that. The investor and another investor have chased a put option contract at tweening the share, giving an execution date that is the same as the share is scheduled to be sold for a reward of (3) dollars, here that investor owns a portfolio consisting of a share and a put option contract, each of which is liquidated in the future market. Therefore, if the selling price of the share has reached (30) dollars, the investor's losses will be limited by the reward's value (Tsai, Regan, & Saphores, 2009). Financial derivatives protect investments from market fluctuations, exchange rates, or interest risks. Then they help to manage financial risks in a way that contributes to reducing any future changes in the value of the associated assets by transferring the burden of price changes from a party exposed to it but does not want to bear it to another party that is not exposed to it but wishes to bear it, namely (the buyer of the contract and the seller of the contract) in exchange for a certain cost similar to the cost of the contract itself. Financial derivatives provide strong management to reduce the risks facing individuals and organizations in the conduct of their business and investments, but this requires a comprehensive understanding of the principles that govern trading in financial derivatives and without understanding the risks and the degree of evaluation between individuals, which leads to the growth of the derivatives market. In contrast, some see risk as a real risk that others do not see as well, so bargaining begins between the two parties on buying and selling. Those risks and whoever believes his predictions in the future will be the winner in the end (Bachiller, Boubaker, & Mefteh-Wali, 2021).

Financial derivatives represent the compass of insurance against unfavorable market differences. For example, we assume that a country needs a specific commodity, such as oil, and its need for this commodity is regular. Moreover, there are indications that its prices may rise so that that country can hedge against rising prices through a purchase option for the same quantity in the future and at the same current price (Awrey, 2020).

Investors have resorted to the use of different strategies to reduce the risk of taking a short-term position of the right option and a long-term position in relation to securities (stocks) or otherwise and hedging is a strategic method followed by the

investor to reduce his losses in a particular position by taking the opposite position using securities and often these hedging operations are not complete, meaning that the investor can not get rid of all his potential losses in all cases, the goal of the hedging process is limiting high losses without significantly reducing the expected returns. One of the motives of the buyer of the call option is to reserve fluctuations in the prices of securities, commodities or foreign currencies and avoid the risks of buying at market prices that may rise significantly in the future while the buyer reserves his right to benefit from the decline in prices in the event of its occurrence by not exercising his right to buy and buy what he needs from the market at the lower price in the case of the investor owns the stock that is the subject of the option as he sells Call option on that stock when its expectations indicate that prices will not change or that it will cause a slight change in stock prices and it is clear to us from this strategy that the sale of the call option has two goals in light of the lack of change or slight change in the prices of shares owned by the investor - the first goal is to add income or profit that is the result of owning shares and the review process and the natural income from owning shares is distributions resulting from these shares and additional income for the share itself and the result. About selling covered call options (Zamlynskyi, Zerkal, & Antonov, 2019).

It is worth noting that option contracts are particularly suitable as a hedging tool for cash flows, as is the case in tender operations. Call options are used if the risk is progressive in prices, while put options are used if the risk is downward (Ajupov, Artamonov, Kurilov, & Kurilova, 2014). The essence of hedging is a combination of two or more financial transactions with financial instruments that respond differently to interest rate and exchange rate changes (Rigatos, 2017).

According to Thiha, Shamseldin, and Melville (2022), the Hedging operations are carried out in steps, and these steps are :

**First:** BrotherYar, the contract for a specific commodity is strongly linked to the basic commodity subject to hedging, but in the absence of a future contract, the commodity will be similar to the commodity to be hedged. It must be the commodity on which the contract is concluded similar to the basic commodity, i.e., to be an alternative to it

**Second:** Choosing to implement a contract, as some commodities are in the execution of contracts concluded at certain times of the year.

**Third:** Choosing a long or short position in the contract and determining a long or temporary position depends on the ritual of futures contracts. Is it higher than the fair price, below it, or equal to it?

Fourth: Determining the number of contracts required for hedging, which is determined according to two methods: the simple hedging ratio and the low hedging ratio for risk, and hedging should look for a balance that reduces the risk of prices to the lowest possible extent.

#### **4. The role of financial derivatives as causes of financial crises**

Derivatives contracts are probabilistic. On the side of the probability of

profit, there is the possibility of loss, and sometimes this loss is very large and unexpected, which causes stifling financial crises. Although loss and profit are adjacent to investment and commercial work, the risk of the possibility of profit and loss when using and dealing in derivatives contracts is more complex.

And call opponents of dealing with financial derivatives contracts to be very careful and cross these contracts (spark dynamite) because of the financial crises caused by the financial crisis of 1994, where one of the German groups, which is (mellallgeslls shift) collapsed because of trading these contracts and the same thing happened with NIK BaringK in 1995, due to excessive dealing with unlicensed derivatives contracts, and thus opponents see that the Or the contemporary world, which is one of the components of financial derivatives contracts based on fictitious paper transactions formality not on the basis of actual exchanges of goods or services, and thus the system represents bets and gambles and accordingly is characterized by the lack of ethics of the economy and its reliance on the criterion of profit only as a goal to be achieved, whatever the ways and means to do so, which leads the financial economy to economic tremors and have serious consequences paid for by the economies of entire countries (Bae & Kwon, 2021).

According to Shaik (2014), The risks of dealing in derivatives contracts can be divided into three categories, as follows:

### **First: explicit risks**

It means those risks that arise from unexpected fluctuations in the prices of financial derivatives contracts due to fluctuations in the prices of the assets subject to the contract and may result from the lack of liquidity among dealers in financial derivatives contracts for one reason or another. This leads to a deterioration in asset prices and the consequent inability to conclude derivative contracts (Aysun & Guldi, 2011).

It is also an explicit risk of the so-called settlement risk, which is represented in the arrival of the prices of the contracted assets to their minimum on the day of settlement, which may witness sharp fluctuations affecting the value of the derivative contract, based on which the payment is made by paying the price differences between the day of the meeting and the day of settlement. These risks, as is known, increase whenever there is a monopoly policy by market makers and (the market maker is the person who is officially authorized to provide the forces of supply and demand in Markets regulated on a particular security or securities (Al-Abadla, 2021). When these people sell and buy on a large scale, which is known as (excessive speculation), in other words, selling futures contracts in large quantities and defaulting on their payment at the same time, because each speculator is financially obligated to implement each contract that is not liquidated before the end of the trading period and that the default on payment places the responsibility of the clearing and settlement center The implementation of these contracts at its expense, but perhaps this default may be very large, which leads to the failure of the clearing and settlement houses to implement these fuels,

which weakens confidence in them and in turn greatly affects the prices of securities that may suffer from volatility in a way. However, what happened in 1976 on the New York Stock Exchange in the case of the Maine potato, where the large-scale market manipulation involved two groups of traders, the first of which were the sellers, led by Simplot, which reduced the prices of potatoes in the present market by selling large quantities of these contracts. So that he can buy large quantities and monopolize them and then sell them at another time and at higher prices. Consequently, there were around two thousand unfulfilled contracts for selling potatoes. These open contracts included the ones this firm and another company had committed. These are other companies, and since TelK company was actually in control of all potato purlins available for delivery, the result was a lot of default in the payment of contracts by the rest of the traders who did not participate in this manipulation process, as nearly 1000 failed. A decade of on-time delivery led to the biggest default in the history of commodities traded on this exchange. Mr. Leist, in this case, was an unlucky trader as he expected a change and a boom. In the potato market, he fell into the game between the short group, the investor's group, and the long group, the AlbaAoun group. Of course, Mr. Leist and other people filed a lawsuit against the New York Stock Exchange and the brokers. And others who planned to manipulate based on the Commodity Futures Exchange Act CEA were awarded heavy damages (Pearce, 2007).

The interdependence of the securities markets exacerbates these risks to a large degree and the ease of transfer of risks that may be exposed to certain financial markets to other financial markets, and this is what happened in the Mexico crisis when the devaluation of the Mexican exchange rate was accompanied by December 1994. As a result, the prices of medium-term securities issued in Mexico in late 1994 have eased sharply. This decline extended to the prices of other assets. For example, it led to the decline in bond prices in other countries in Latin America and to bond prices in Asian markets in which bond issuance has declined significantly (Pearce, 2008).

### **Second: Structural or implicit risks**

These include risks Credit risks, operational risks, and legal risks, as credit risks are what is caused by the failure of one of the parties to financial derivatives contracts to fulfill his obligations contained in that derivative contract and what leads to a loss represented in the cost of concluding a new contract to remedy that default, as the defaulting party sells the contract at a loss to a new party (another buyer) These risks are one of the most common risks in the unregulated securities market compared to others that are regulated and in which the settlement centers are a guarantor party for the performance of the obligations of the parties to the contract (Power, 2005).

As for operational risks, they are the risks that arise during clearing and settlement operations, which are due to the inefficiency of information systems, human error, failure of control systems, failure to support the company's

management, weakness of internal supervision and control systems in companies and banks dealing with derivatives contracts, as well as risks resulting from poor management policies, resulting in a loss to market dealers as a result of Good in settlement or fraud and errors Derivatives contracts are of a complex nature that requires the availability of trained human elements and control systems capable of controlling, ensuring and ensuring the safety of their transactions and the positions of each of their parties (Abdullah, Shahimi, & Ghafar Ismail, 2011).

As for the legal risks:

They are the risks that arise from the non-performance of the contract, whether the non-performance was intentional on the part of one of the parties or was the result of the occurrence of a roof beyond their control or as a result of an error that occurred when concluding a financial derivatives contract, for example, the failure of one of the parties to the contract to have the necessary capacity to conclude the contract or may be due to the insolvency or bankruptcy of one of the parties to the contract, and may also be the reason for changes in the legislative environment for many risks such as Introducing some amendments to laws that are contrary to investors' expectations or issuing laws prohibiting investment in certain types of derivative contracts, as well as the legal risks that result from mis-documenting those contracts (Collier, 2009).

In terms of credit risk, dealers in derivatives contracts can carry out a set of procedures and policies to enable them to manage these risks, and these procedures are :

- 1- Finding internal control tools that ensure the assessment of expected risks before entering into deals with other parties.
- 2- Commitment to the need to document transactions, which reduces credit risks and enhances the legal commitment to implement derivative contracts.
- 3- To have creditworthiness and commitment to certain limits and seek to reduce the parties' obligations to the contracts as much as possible.
- 4- Supporting credit by providing the necessary guarantees that reduce exposure to the risk of default of one of the parties to those contracts.

In this context, a large number of central banks and their subsidiary banks are required to submit reports related to their financial activities in the financial markets of Al-Mushtaqat as this represents their supervisory role and is only a natural extension of it at a time when other banks save money to face the losses resulting from the non-payment of some customers to the loans granted to them to finance dealing with financial derivatives (Macchiavello, 2017).

And financial crises (the phenomenon that is known for its results and manifestations of the collapse of the stock exchange and the occurrence of large and convergent monetary speculation and permanent unemployment) or ( sudden collapse of stocks, real estate, currencies, or a group of financial institutions to then extend to the rest of the economy and occurs such a collapse in asset prices as a result of an explosion in price, for example, and the price bubble or financial or speculation bubble is the sale and purchase of huge quantities of a type more than

financial or physical assets such as stocks or real estate at prices Exceeds their natural prices or reality. Thus, the financial crisis is nothing but a comprehensive collapse in the financial and monetary system The advantages are characterized by derivatives contracts that contributed to the occurrence of financial crises as supporters of this trend believe that derivatives contracts are characterized by the following:

1- Fictitious financial instruments are contracts based on probability and do not result in actual exchanges, whether goods or services. Instead, they are based on luck and destiny, likened to gambling.

2- They are very complex tools compared to what was prevailing for the past thirty years, as the financial system reveals a more ambiguous contrast between the different types of active power and a greater degree of integration and many types of active forces, despite what these developments have caused to increase borrowing to achieve financial effectiveness to shift risks between the active forces in ambiguous ways, which led to an increase in the difficulty faced by markets and regulators in assessing risks at any level, while the lack of Diversity has increased the likelihood of coordinated actions that could destabilize the regime.

3- The lack of transparency, as the factors of fraud and lack of transparency that may stand behind this financial hurricane, in addition to overlooking mistakes, inflating achievements, providing fake figures on profits, the collusion of accounting and auditing companies with the officials of these banks and companies, and the expansion of the circle of corruption, all of this led to a loss of confidence by dealers and economists in the financial markets in these contracts (Masoud, 2013).

Despite these advantages, which some see as causes of economic crises, their role is large, as it is possible to reduce their risks through some measures to mitigate their effects by imposing taxes on these contracts. Still, there is violent resistance to the imposition of this type of tax in most parts of the world, despite its clear positive benefit, whether for markets, banks, or countries' public finances. Measures targeting the derivatives reform system, which imposes and encourages sellers and investors to resort to these contracts and deal in the official markets for these contracts (Salacuse, 2013).

We see one of the most important features of the development of global financial markets is the expansion of dealing in contracts Almshtaqtat financial because of the important role they play in covering financial risks such as exchange rate fluctuations or stock prices as well as its role as one of the sources of income for financial institutions despite being contracts not without risk, choosing the best contracts and the most appropriate prices and promptly remains one of the biggest challenges facing financial departments and remains economic diligence and enhance its role through the use of modern technology and administrative discipline The professional has a role in improving the handling of these contracts.

## **5. Conclusions**

In light of the information presented above and within the context of the



research conducted to conduct a review of the role that derivatives contracts play, the findings indicate that financial derivatives, also known as futures contracts, are negotiable as securities. The Iraqi legislator has made it possible to count some of these contracts as securities. A call has been made to join the global derivatives markets to overcome the current financial crisis. This would include the sale of financial derivatives contracts based on oil at financial prices and the organization of state budgets on the basis of these contracts.

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