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Vahhab Qelich
Ramin Mojab

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Monetary and Banking Research Institute
Central Bank of the Islamic Republic of Iran

No.10, Africa Ave., Argentina Sq.,

Tehran.Iran.P.O.box:16765-1654

www.mbri.ac.ir

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INTEREST SWAP: THE NATURE, FUNCTIONS, AND ANALYSIS FROM THE SHARIAH-COMPLIANCE PERSPECTIVE

Vahhab Qelich – Ramin Mojab

Interest rate swaps are one of the risk management and hedging tools in a conventional economy. Different expectations about the price changes of bonds (basic assets) are the main force in shaping supply and demand in this market. If bond interest rates are expected to rise, it can enter into a fixed-for-float swap contract and receive a variable rate that is formed over time in exchange for paying a fixed rate - which is determined at the time of the contract. Naturally, regardless of the interest rate risk motivation, profit motives and speculation are also effective in entering into such a contract.

Among the various types of assets, interest rate swaps can be considered as a **liquid asset**; This means that the transaction cost of converting it to cash is low in a short period. More precisely, an interest rate swap is a financial asset, and its value derives from a contractual right or claim of ownership. Unlike real assets, such assets do not necessarily have a definite physical form, and unlike **intangible assets** (which also do not have a physical form, such as a company's brand), their value perception is not easily described and goes back to market supply and risk.

Interest rate swaps in conventional economies are OTC in nature; This means that the terms of the contract between the two parties can be personalized. In this contract, the value of the underlying asset is solely responsible for calculating revenue streams; In other words, this value takes on a hypothetical nature. Of course, this feature does not limit the use of this tool in conventional economies.

The interest rate swap as a financial asset can be placed between real and intangible assets. Naturally, this asset's most important common denominator with intangible assets is the lack of a specific physical form. On the other hand, the sharing of these assets with real assets is where both can be classified as **tangible assets**, and the value of the transaction, unlike intangible assets, is reflected in the balance sheet. As mentioned, this value comes from their supply and demand in the market.

The interest rate swap is also a **financial instrument**; This means that it includes a contract and legal agreement based on a specific monetary value. More specifically, these are considered **securities** and are therefore **interchangeable** and **liquidity** assets. Interchangeability means that two things are similar to each other and thus can replace each other. Liquidity means that it can be converted into cash and can be transferred from one person to another; So that after the transfer, the holder has a full legal right to it.



The interest rate swap is a derivative instrument; This means that it has no independent value, but its value depends on or arises from another asset (**Underlying Asset**). From this perspective, this asset's price changes arise from expecting a price change in its underlying asset. Leaving aside the purposes of speculation, one of the functions of this type of asset is hedging. If there are different expectations for the change in the price of the underlying asset, the purchase and sale of derivatives allow the risk management of the expected changes. Of course, these types of assets also have other benefits. Predictability of revenues brings benefits. Fixed rates and, therefore, predictable returns reduce risk and increase the stock price of the company. Also, a stable income stream means that the company needs less contingent cash reserves and re-invests the resources released through it. On the other hand, from a portfolio management perspective, the correlation between the variable returns of this type of asset and other portfolio assets manages its risk.

Also, the interest rate swap is a **forward contract**; This means that the agreement and obligation relate to the purchase and sale of a particular asset on a specified date in the future, but does not have the standard nature and centralized clearinghouse to the **futures contract**. In these contracts, the **settlement** of funds is done at the end of the contract period. From this perspective, the risk of liquidation of funds in them is higher than the contracts that can be liquidated daily (as well as the risk of default). Also, like other assets that are OTC in nature, it is possible to personalize the terms of the contract. This means that the details of such contracts exist only between the parties to the contract and therefore, accurate statistics on their volume and characteristics are not published.

Also, the interest rate swap is an **interest rate derivative**, so the calculation of its payments is a function of one or more interest rate indicators, such as the **Libor rate**. From this perspective, the present value of the interest rate swap is almost one-to-one with its related index, and from this perspective, it differs from other types of interest rate derivatives, whose pricing is more complex and interest rate index changes do not lead to one-to-one changes in their present value.

Now the question that arises is whether it is possible to use interest rate swaps with a framework that is normally defined? The hypothetical and computational aspect of the value of the underlying asset is one of the first issues that can be problematic in Islamic economics. Apart from that, these contracts are inherently tied to interest rates, and given the considerations of Islamic banking in interest payments, there are also challenges from this perspective. The uncertainty of payment flows can also cause other problems with the terms of the transaction.

The Iranian financial system operates within the framework of Islamic financial standards. In this system, contracts related to instruments must meet all the basic and specific conditions of the transactions' validity. In the Iranian financial system, any transaction concluded between individuals is doomed to correctness and validity until a reason for its corruption and



invalidity is revealed. Apart from examining the specific conditions, examining the four basic conditions can help detect corruption or invalidity of contracts: 1- Intention and consent of the parties, 2- Eligibility of the parties, 3- Conditions of the transaction, and 4- Legitimacy for the transaction. Regarding the interest rate swap contract, the focus of the review is more on the third case.

If we can interpret the interest rate swap in the form of a debt-to-debt transaction, we can rule that the use of such instruments is invalid because, first of all, the necessary condition for the sale of debt to debt is that this instrument should be formed on real debt. However, in conventional interest rate swap contracts, to facilitate and enforce the contract, the obligation to pay future cash flows arises out of nothing. In principle, there is no previous and real debt. Second, even if a debt-based swap agreement is formed with a real origin, the main obstacle will be that the sale of debt to debt - also known as the sale of goods to goods - is void according to the text and consensus of the jurists.

The peace contract of debt to debt does not necessarily lead to this kind of instrument's invalidity because as long as this peace is not usurious, it can be considered correct. The necessary condition here is the reality of the debt. For this condition to be met, as in the case above, a situation arises in which debt refers to income flow from underlying assets. However, even with this assumption, we are faced with the suspicion of usury in peace (usury peace) because cash flows are not equal to each other.

Interest rate swaps can be considered to be similar to the buying and selling of a similar currency. In this case, debt is not exchanged, but two types of similar cash flows are exchanged. In this interpretation of the interest rate swap, we encounter the suspicion that the sale is Gharar (uncertain). Because, for example, in an exchange model, in exchange for receiving a fixed value, a variable and indefinite value are received. Also, in this interpretation, we are faced with the suspicion of usury; This means that two homogeneous goods with different quantities seem to be traded here.

The suspicion that the swap contract is void is relatively high. Therefore, designing similar contracts can be useful. One of the similar tools that is proposed is "interest rate swap." This contract is a kind of exchange between the two parties in which each party is committed to paying (exchange) cash flows based on a fixed or variable interest rate of other Islamic contracts.

Here, too, if a fixed-for-variable contract is introduced, the problem of Gharar (risk) that was raised earlier arises. However, due to the fact that the assets are real, the "conditional sale" can be used here to address this problem; In such a way that the two parties to the contract sell their profitable assets to the other party completely and definitely on the condition that if the seller returns its price, in a definite time, he will own the asset. In each case, they have seized it, despite obstacles we can scarcely imagine. Both of these transactions, in a sense, completely return the asset of the other party. And subsequently, the future return of each



asset will be owned by the new owner. Therefore, having indefinite variable returns does not create any problems in terms of being risky in performing this type of swap.

The interest rate swap contract with the conditional sale contract may not fully accompany the interest rate swap functions. Of course, due to the different nature of "risk management" in an Islamic financial system and a conventional financial system, the degree of need for interest rate swap functions in the Islamic financial system may not necessarily be the same. Apart from this consideration, the interest rate swap will have a relatively high transaction cost by implementing the above conditions and considerations; In such a way that it is justified only if there is a different level of access to financing contracts. Therefore, this report proposes two policy recommendations: First, to comply with the Sharia standards in the Islamic financial system of Iran, do not use the usual forms of interest rate swaps. Second, due to the limitations of interest rate swaps in the form of conditional sales, it is recommended to use for-profit securities as traded assets in this instrument. Also, the design of new tools that have some degree of interest rate swap functionality should be pursued more seriously.



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