

OPINION

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Tasks for Activating KOFR OIS Market

The Financial Services Commission and the Bank of Korea announced the principles for transitioning the domestic benchmark interest rate system to one centered on the risk-free reference rate, KOFR, and plan to gradually expand the use of KOFR in place of the CD rate, which has been widely used as a reference rate in financial transactions. In the interest rate swap market, where the CD rate is currently used as a reference rate, activating the KOFR OIS market is a key task—not only because of its scale, but also because it is linked to the broader use of KOFR in other sectors as a tool for interest rate hedging and investment.

The financial authorities are pursuing a phased approach to activating the KOFR OIS market in the interest rate swap sector, beginning with administrative guidance. Going forward, the focus should be on medium- to long-term(1–10 year maturity) KOFR OIS transactions, and as this market develops, it will be necessary to apply KOFR OIS to the discount rates of CD interest rate swaps at central counterparties(CCPs) at an appropriate time. Active participation by domestic financial institutions is also essential to vitalize the KOFR OIS market. First, they must establish systems for valuation and settlement processing for KOFR OIS transactions. In addition, the scope of KOFR OIS utilization should be expanded—for example, for funding cost hedging—and corresponding risk management frameworks should be put in place.

The Financial Services Commission and the Bank of Korea have announced the principles for transitioning the domestic benchmark interest rate system to one centered on the risk-free reference rate, KOFR(Korea Overnight Financing Repo Rate), and are developing benchmark rate reform efforts. They plan to gradually expand the use of KOFR in place of CD(Certificate of Deposit) rates, which have been widely used as reference rates for financial transactions such

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as derivatives, bonds, and loans.¹⁾ The benchmark rate reform is being implemented in phases in areas including interest rate swaps and floating rate notes(FRNs).²⁾

The notional outstanding amount of interest rate swaps referencing the CD rate is estimated to exceed KRW 7,000 trillion, which is significantly larger than the FRN balance of KRW 48 trillion(as of end-July 2024) and the loan balance of KRW 383 trillion(as of end-June 2024).³⁾ Furthermore, the trading volume of CD rate swaps in 2024 reached approximately KRW 4,500 trillion.⁴⁾ The interest rate swap market is not only significant in terms of scale but also serves as a key sector for expanding KOFR usage and replacing the CD rate, as it is closely linked to KOFR's use in other areas as a hedging or investment tool. Therefore, activating the KOFR OIS(Overnight Index Swap) market is a crucial task.⁵⁾ Financial authorities have begun implementing phased measures, starting with administrative guidance. This paper discusses both the policies of the financial authorities to activate the KOFR OIS market in the interest rate swap sector and the preparations and responses of financial institutions.

Overview of Interest Rate Swaps and the KOFR OIS

An Interest Rate Swap(IRS) is a derivative contract in which two parties exchange different types of interest payments on a notional amount of a specified currency. Typically, this involves exchanging fixed interest payments(the swap rate) for floating interest payments(<Figure 1>).⁶⁾ In the Korean won(KRW) interest rate swap market, the CD rate is most commonly used as

1) References on benchmark interest rate reforms in major countries, the need to develop the use of KOFR, and the corresponding roadmap include: Bank of Korea(August 28, 2024, joint press release with the Financial Services Commission on the transition toward a KOFR-centered benchmark rate system), Financial Services Commission(December 10, 2024, 2025 Benchmark Rate Reform Implementation Plan, press release), and In-seok Baik, Geun-hyeok Jang, and Jong-eun Lee(2025, The Global Benchmark Rate System in the Post-LIBOR Era and Its Implications for Korea, KCMI, Research Report 25-02). This paper discusses ways to enhance KOFR OIS trading in the interest rate swap market.

2) Financial Services Commission, May 30, 2025, Interim Review of Benchmark Interest Rate Reform and Future Plans, Press Release.

3) There are limitations in accurately estimating the overall scale of financial transactions that use the CD rate. For reference, see In-seok Baik, Geun-hyeok Jang, and Jong-eun Lee(2025, The Global Benchmark Rate System in the Post-LIBOR Era and Its Implications for Korea, KCMI, Research Report 25-02). In addition, the outstanding balance of KRW interest rate swaps cleared through the offshore LCH(London Clearing House) is about KRW 4,000 trillion(as of August 2025), most of which are estimated to be CD rate swaps.

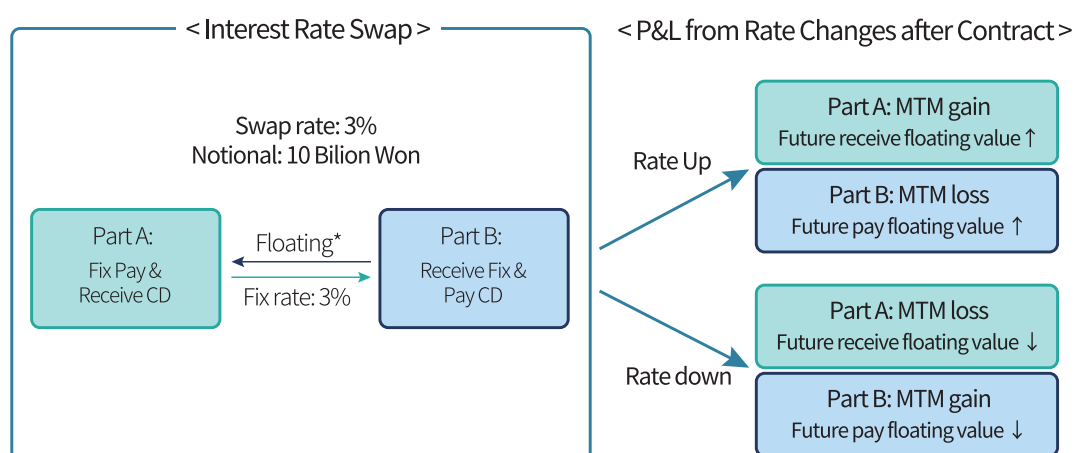
4) Financial Services Commission, May 30, 2025, Interim Review and Future Plans for Benchmark Rate Reform, press release.

5) KOFR is the overnight repo rate, and swaps that use an overnight index such as KOFR as the reference rate are called OIS.

6) An interest rate swap that exchanges one floating rate for another is called a basis swap. For example, a basis swap might involve exchanging CD yields for KOFR.

the reference rate for the floating leg. Once an IRS contract is executed, profits or losses arise between the counterparties depending on changes in the swap rate. For example, Party A, who receives the floating rate, benefits when interest rates rise because the expected value of future floating-rate payments increases, resulting in a valuation gain. Conversely, when interest rates fall, Party A incurs a valuation loss(<Figure 1>). Accordingly, CD-based interest rate swaps can be used to hedge CD-linked floating-rate notes(FRNs) or loans by converting them into fixed rates,⁷⁾ but in practice, the market has expanded primarily as a tool for investment and interest rate risk management in response to fluctuations in interest rates.

Figure 1. Interest Rate Swap Transactions and Profit/Loss Changes



Note: * Use of Various Reference Rates, including CD and KOFR(calculated on a daily compound), as Floating Rates

In the case of KOFR OIS, the key difference from CD-based IRS is that the floating interest is calculated using the daily compounded KOFR⁸⁾ as shown in Figure 1. However, the fundamental structure of exchanging floating interest for fixed interest(the OIS rate) remains the same. Similarly, gains or losses occur between counterparties depending on changes in the OIS rate after the contract is executed. Therefore, market participants can effectively use KOFR OIS transactions as a tool to manage fluctuations in KOFR and other interest rates.

7) Reduce funding costs by comparing fixed rates achieved through interest rate swaps with those from simple fixed-rate financing.

8) During the interest calculation period, the floating interest is determined by applying the rate $[(1 + r_1 n_1 / 365)(1 + r_2 n_2 / 365) \dots (1 + r_k n_k / 365) - 1] \times 365 / d$ calculated using the daily compounding method. Here, r represents KOFR, n represents the number of days for the overnight rate(e.g., 3 days including weekends), and d represents the number of days in the interest period of the interest rate swap.

LIBOR Interest Rate Swap and SOFR OIS

The transition of benchmark rates for derivatives, including interest rate swaps, was the most critical element of the global benchmark rate reform. Let us briefly review how the U.S. benchmark rate reform progressed from LIBOR interest rate swaps to the SOFR OIS⁹⁾ market. While the LIBOR interest rate swap market initially developed to hedge LIBOR-based loans or FRNs, it rapidly expanded as it came to be widely used for investment and for hedging against various interest rate fluctuations. As a result, the scale of derivatives such as interest rate swaps grew far larger than that of LIBOR-linked loans and FRNs. Consequently, the transition from LIBOR interest rate swaps to SOFR OIS required significant effort and a lengthy adjustment period.

Following the 2017 announcement of the plan to discontinue LIBOR, SOFR OIS trading began to be standardized and centrally cleared through CCPs in the second half of 2018. However, trading volumes did not increase meaningfully for the next two years, with most activity concentrated in the short term(maturities of one year or less). From the third quarter of 2020, medium- to long-term transactions(maturities over one year) gradually increased(<Figure 2>, left). This can be interpreted as the result of CCPs applying SOFR OIS and SOFR, respectively, to discount rates and price alignment interest¹⁰⁾ for LIBOR interest rate swaps starting in October 2020, which created demand for medium- to long-term SOFR OIS trades to hedge LIBOR interest rate swaps.

Since the implementation of the SOFR First policy¹¹⁾ in July 2021, notable changes have emerged in the market. <Figure 2> illustrates the share of SOFR OIS trading volume relative to the combined trading volume of LIBOR interest rate swaps and SOFR OIS, comparing the periods before and after the SOFR First policy. The share of SOFR OIS rose sharply from 3.7%

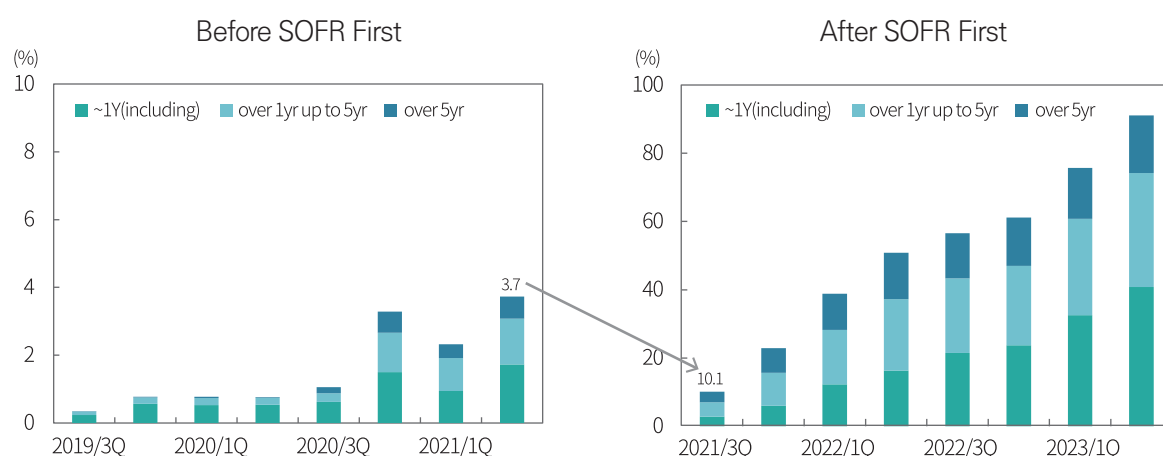
9) SOFR(Secured Overnight Financing Rate) is the risk-free benchmark rate that replaces USD LIBOR. SOFR OIS uses SOFR, an overnight rate, as its reference rate.

10) The “discount rate” refers to the interest rate used to discount expected future cash flows to present value when valuing an interest rate swap. The “price alignment interest” refers to the interest applied to collateral(cash) posted according to mark-to-market gains or losses prior to maturity(the party receiving the collateral pays the price alignment interest). Accordingly, SOFR OIS rates have been incorporated into the valuation and collateral management of LIBOR interest rate swaps. For further explanation of “discount rate” and “price alignment interest,” see the appendix of In-seok Baek ,Geun-hyuk Jang, and Jong-eun Lee(2025, The Global Benchmark Rate System in the Post-LIBOR Era and Its Implications for Korea, KCMI, Research Report 25-02).

11) The CFTC recommended that major market participants prioritize the use of SOFR over LIBOR in interest rate swaps(CFTC, 2021, SOFR First – MRAC Subcommittee Recommendation). Similar “RFR First” initiatives were also implemented in other major countries(In-seok Baek ,Geun-hyuk Jang, and Jong-eun Lee, 2025, The Global Benchmark Rate System in the Post-LIBOR Era and Its Implications for Korea, KCMI, Research Report 25-02).

in the second quarter of 2021 to 10.1% in the third quarter of 2021, and has continued to increase steadily thereafter. In summary, as hedging demand for SOFR OIS grew and the authorities promoted the SOFR First policy, SOFR OIS maturities became more diversified and trading volumes expanded.

Figure 2. Trends in SOFR OIS Trading Volume Share



Note: Proportion of sum of LIBOR interest rate swaps and SOFR OIS, Trading participants under U.S. regulatory jurisdictions, SOFR OIS Includes basis swaps

Source: ISDA Transition to RFRs Reviews

KOFR OIS Activation Plans

Currently, financial authorities in Korea are carrying out a phased plan to revitalize the KOFR OIS market.¹²⁾ Starting in July 2025, the financial authorities will implement administrative guidance requiring major financial institutions to conduct at least 10% of their interest rate swap transactions as KOFR OIS trades¹³⁾ for one year. This policy is being implemented in the form of administrative guidance.¹⁴⁾ The authorities plan to gradually raise the target ratio each year. To support this, they have prepared the necessary conditions for domestic financial institutions by introducing CCP clearing for KOFR OIS(scheduled for October 2025) and issuing no-action letters¹⁵⁾ for contingency planning. While CCP clearing is expected to boost KOFR

12) Financial Services Commission, May 30, 2025, Interim Review of Benchmark Interest Rate Reform and Future Plans, Press Release.

13) This includes all interest rate swap transactions that use KOFR as the reference rate.

14) This guidance applies to 16 banks and 12 securities firms with large interest rate swap volumes.

15) In preparation for a potential discontinuation of KOFR, which is an important benchmark, contingency plans must be established for KOFR OIS transactions and reflected in contract terms(as required by the Financial Benchmarks Act). This document serves

OIS trading, current transactions remain limited and are concentrated mainly in the short term(maturities of three months or less).

After one year of administrative guidance, the financial authorities plan to adjust the scheme flexibly, with an initial focus on promoting medium- to long-term(maturities of 1–10 years) KOFR OIS transactions. Under the current framework, incentives based on maturity allow up to a 20% bonus(for trades exceeding 10 years), but given the significant risk(duration) differences between 1-year and 10-year maturities,¹⁶⁾ more practical incentives may be required. Once a medium- to long-term KOFR OIS market is established, it will be important to generate hedging demand by applying KOFR OIS and KOFR, respectively, to CCP discount rates and adjustment interest for CD interest rate swaps, similar to the U.S. SOFR case.

Medium- to long-term KOFR OIS trading is also closely tied to medium- to long-term KOFR FRN issuance. FRN issuers often hedge floating rates at the time of issuance, but without a functioning medium- to long-term KOFR OIS market, they will inevitably face difficulties in issuing and hedging medium- to long-term KOFR FRNs. Thanks to efforts by the financial authorities and participation from policy banks and commercial banks, KOFR FRNs worth KRW 3.31 trillion(20 issues) had been issued by August 2025. However, about 60% of these had maturities of three months or less, and only one issue worth KRW 50 billion had a maturity exceeding one year.

For the activation of the KOFR OIS market, active participation and preparation by domestic financial institutions are also essential. Market participants in the domestic interest rate swap market are not yet familiar with the KOFR OIS transaction structure. OIS uses daily compounding, which differs from the interest calculation method of conventional CD interest rate swaps. Banks that already conduct SOFR OIS trades in U.S. dollar interest rate swaps have the necessary systems in place and will find KOFR OIS processing relatively smooth. However, financial institutions that have only engaged in CD interest rate swaps will need to build systems for valuation, settlement, and other processes once they begin KOFR OIS trading.¹⁷⁾

as a no-action opinion regarding that requirement.

16) The interest rate risk(duration) of a 10-year instrument is approximately 7 to 8 times that of a 1-year instrument.

17) For major currencies, even before benchmark rate reforms, derivatives such as OIS and futures based on overnight rates(rates close to risk-free rates) were already being traded. However, in the domestic market, there were no derivatives based on overnight rates. This has been one of the reasons why the development of a KOFR OIS or KOFR futures market has been more difficult compared to the establishment of the SOFR derivatives market in the United States.

Next, financial institutions need to develop trading strategies utilizing KOFR OIS and enhance their risk management frameworks. KOFR serves as the actual short-term funding rate for financial institutions and functions as a risk-free rate, but they are not yet accustomed to using KOFR OIS to hedge funding costs and other exposures. Traditionally, domestic financial institutions have managed funding on an enterprise-wide basis and applied internal reference rates when charging interest to operating departments. As a result, operating departments had little need to hedge funding costs, and in the past, there were no financial instruments available to hedge short-term interest rates. For example, when a financial institution invests in bonds for one year through overnight RP funding and rollovers, unlike in the past, it can now hedge its funding costs at a fixed rate through KOFR OIS.¹⁸⁾ Furthermore, it is necessary to expand the use of KOFR OIS as a tool to manage various interest rate fluctuations, similar to CD interest rate swaps.

18) KOFR futures may also be used.