



## **Global Conference on Multidisciplinary Research and Innovation**

Hosted Online from Berlin, Germany

Date: 2nd August, 2026

Website: <https://econferencia.com>

---

### **CREDIT RISK HEDGING INSTRUMENTS AND PROSPECTS FOR THEIR INTRODUCTION INTO BANKING PRACTICE IN THE DIGITAL ECONOMY**

Maqsudov Bunyod Abdusamat o'g'li  
PhD, Senior Lecturer, Department of Banking,  
Tashkent State University of Economics

#### **Abstract**

Alongside the traditional methods of credit risk management — provisioning, requiring collateral, and setting credit limits — banking practice in developed countries widely employs mechanisms for hedging, that is, for transferring credit risk to third parties through market instruments. Such instruments allow a bank, rather than retaining the entire risk of its loan portfolio, to distribute part of that risk to the market.

The principal hedging instruments include the credit default swap (CDS), the index credit default swap, the credit spread forward, and the credit spread option [1]. Under a credit default swap, the swap buyer, in return for a one-off premium payment, obtains from the swap seller an obligation to redeem the loan upon the occurrence of a specified credit event — the borrower's bankruptcy, the suspension of loan payments, or the occurrence of an insured event [1]. An index swap, by contrast, trades not a single reference asset but a portfolio of assets: if a credit event occurs on one of the assets during the life of the contract, its consequences are shared among all the debtors, after which the defaulted debtor is removed from the index and the contract continues with its notional value reduced by the amount of the loss incurred [1].

A credit spread forward is a bilateral financial contract under which the buyer receives the difference between the actual credit spread at the time of execution



## Global Conference on Multidisciplinary Research and Innovation

Hosted Online from Berlin, Germany

Date: 2nd August, 2026

Website: <https://econferencia.com>

and the spread fixed in the contract (if the difference is negative, the buyer pays it); the payment amount is determined by the formula  $(S - F) \times D \times N$ , where  $S$  is the actual spread,  $F$  is the spread fixed in the contract,  $D$  is the modified duration of the underlying asset, and  $N$  is the notional amount of the contract [1]. The common advantage of these instruments is that they enable a bank to manage, through the market, the credit risk inherent in its loan portfolio without physically selling the portfolio itself, which helps to optimize the risk profile while preserving long-term relationships with customers.

In the practice of Uzbekistan's commercial banks, these hedging instruments have not yet been introduced [2], which limits the national banking system's ability to distribute credit risk through market instruments. This is attributable to objective factors, including the insufficient development of the derivatives market and the shortage of an appropriate legal and regulatory framework and of qualified personnel.

International experience shows that the successful development of a credit hedging market requires a number of institutional preconditions: first, the availability of reliable and transparent interest rate and credit spread benchmarks; second, the formation of a national body of legal documentation analogous to the standardized master agreements used in international practice, such as those of the ISDA (International Swaps and Derivatives Association); third, banks' internal methodological capacity to assess counterparty credit risk and manage margin requirements; and fourth, clearly established rules for the accounting treatment and taxation of derivative financial instruments. In our view, the gradual creation of these conditions is the necessary foundation for developing a credit hedging market.

Moreover, although the introduction of credit hedging instruments serves as a means of eliminating individual risks, it is advisable to develop them in close



## **Global Conference on Multidisciplinary Research and Innovation**

Hosted Online from Berlin, Germany

Date: 2nd August, 2026

Website: <https://econferencia.com>

connection with system-wide stress-testing practice: periodically assessing, through stress scenarios, the concentrated risks in the portfolios of large banks and credit institutions, and then designing hedging strategies to transfer part of those very risks to the market, together form a comprehensive and mutually complementary system of credit risk management.

At the same time, in introducing digital credit hedging mechanisms, operational and legal risks must also be taken into account: errors in the software code of smart contracts, cybersecurity threats, and legal uncertainty over recognizing the legal force of digital transactions may give rise to new types of risk. Therefore, the introduction of such instruments must necessarily be accompanied by the parallel development of an appropriate regulatory framework and cybersecurity standards. Alongside credit hedging instruments, another widespread method of transferring credit risk to a third party is credit insurance, under which an insurance company, in return for a certain premium, undertakes to compensate in part or in full for the loss arising from the borrower's insolvency. Unlike credit hedging instruments, credit insurance is most often used in export credits and foreign trade operations, and its development in national practice requires comparatively less institutional infrastructure. This allows it to be regarded, in the conditions of Uzbekistan, as an intermediate tool that can be introduced more quickly than hedging instruments.

Another mechanism for distributing credit risk through the market is asset securitization, under which a bank transfers a pool of homogeneous loans to a special-purpose entity, which then issues securities backed by the future cash flows of those loans. In essence, this allows the bank to remove credit risk from its balance sheet and to redirect the freed-up capital toward new lending. In Uzbekistan, the legal foundations and market infrastructure for this instrument are still at an early stage, and its development will require long-term institutional reforms.



## **Global Conference on Multidisciplinary Research and Innovation**

Hosted Online from Berlin, Germany

Date: 2nd August, 2026

Website: <https://econferencia.com>

In our opinion, in the digital economy — in particular on the basis of fintech platforms, smart contracts, and blockchain technologies — the phased introduction of digital credit hedging mechanisms, capable of automatically recording, verifying, and settling credit events, could become an important direction in shaping innovative tools for credit risk management in the national banking system. Such an approach makes it possible, in particular, to execute payments automatically and without intermediaries through smart contracts when a credit event occurs, while also reducing operating costs and errors attributable to the human factor.

Overall, implementing reforms in the area of credit risk management through market instruments in stages — beginning with credit insurance and simpler contract forms, and then moving on to more complex derivative instruments and digital solutions — constitutes, in our view, a strategic roadmap that is realistic and consistent with the institutional and human-resource capacity of the national banking system.

Reforms in this area should be carried out in close alignment with the tasks of digitalizing the financial sector and developing innovative financial instruments set out in the “Development Strategy of New Uzbekistan for 2022–2026,” approved by Decree of the President of the Republic of Uzbekistan No. PF-60 of January 28, 2022; they should first be tested through small-scale pilot projects and then expanded in stages [3].

### **References**

1. Saidov H.R. Improving the Practice of Managing Problem Loans in Commercial Banks: PhD Dissertation in Economics. – Tashkent: TSUE, 2024 (in Uzbek).
2. The author’s observations of the practice of Uzbekistan’s commercial banks in the derivative financial instruments market (in Uzbek).
3. Decree of the President of the Republic of Uzbekistan No. PF-60 of January 28, 2022 “On the Development Strategy of New Uzbekistan for 2022–2026” (in Uzbek).