

Exploring the application of central bank digital currency (CBDC) in the trading and settlement of fixed-income products on the Taipei Exchange (TPEX)

In recent years, with the advent of digital financial innovation and the gradual entry of large technology companies into the payment market, there has been a concerted international effort to actively engage in the research and development of Central Bank Digital Currency (CBDC). The goal is to lay the groundwork for future digital payments through initiatives led by central banks.

Currently, Fixed-Income products in our country include Fixed-Income securities such as central government registered bonds, local government bonds, corporate bonds, financial bonds, debt-type beneficiary certificates, and asset-backed securities. Among these, central government registered bonds and treasury bills are managed by the Central Bank's registered bond system for registration and custodial operations, while the others are handled by TDCC, which also provides related book-entry transfer functions. For negotiated transactions at business premises, delivery can generally be conducted through Delivery Versus Payment (DVP), book-entry transfer (excluding funds, FOP), and conditional trading certificates.

From 2020 to 2022, in line with Central Bank policies, TDCC, in its role as a clearing institution for domestic bond and bill businesses, participated in the Central Bank's second phase of the general CBDC pilot project (PoC). This project will elucidate the basic objectives, benefits, and risks of issuing CBDC, as well as explain the current planning and progress of CBDC promotion in our country and TDCC's application scenarios in large-value DVP.

Additionally, this project collects international trends in CBDC development, including exploring the CBDC development situations of major countries such as France, Canada, Singapore, Sweden, Japan and South Korea, and the Eurozone, and examining current successful and failed cases of CBDC. It will also explore legal issues related to CBDC.

Through extending TDCC's PoC trial in the Central Bank's second phase, this research aims to expand CBDC application scenarios. This includes utilizing CBDC for DVP in bond and bill settlements and providing the feasibility of using CBDC for fund settlements in FOP services, thereby maximizing the benefits of CBDC development.