### **CBDC** Experimentation

Sung Guan Yun Bank of Korea

July 14, 2021 Chief Economists' Workshop

### BOK's stance on the issuance of a retail CBDC

Thanks to Korea's well-functioning payment markets and high level of financial inclusion,

we do not see a significant need to issue a retail CBDC in the near future.

However, recognizing the growing need to be prepared for possible future changes in the payment environment,

the BOK has established its CBDC Research Team to carry out CBDC research.

### CBDC Design Principles

Possible future changes in the payments environment

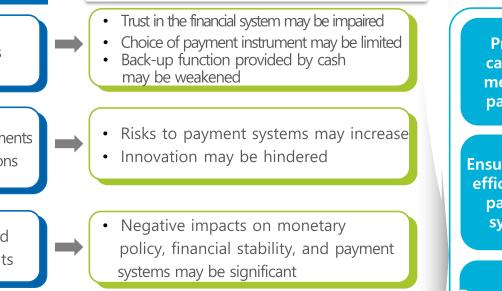
Decline in cash usage accelerates

Non-financial firms increasingly enter payments market and create monopolistic distortions

Private digital currencies prevail and replace fiat currencies/bank deposits

Demand for digital fiat currencies increases

Global discussions to improve cross-border payments accelerates



• Demand for digital fiat currency infrastructure may arise

• CBDCs may be used in cross-border payments

Provide cash-like means of payment Ensure safety, efficiency of

**CBDC** design

principles

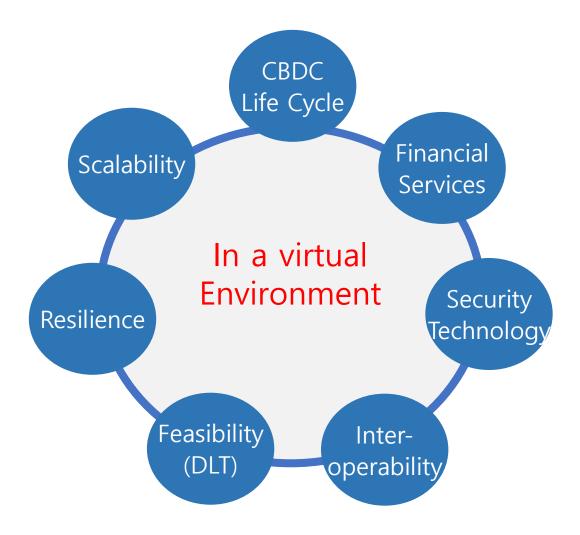
payment systems

Be competitive & promote innovation

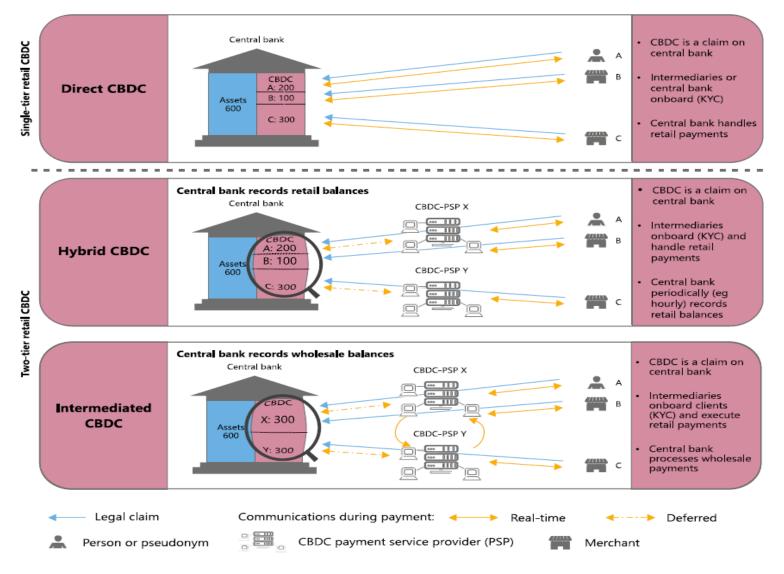
Minimize macroeconomic side effects

Domestic

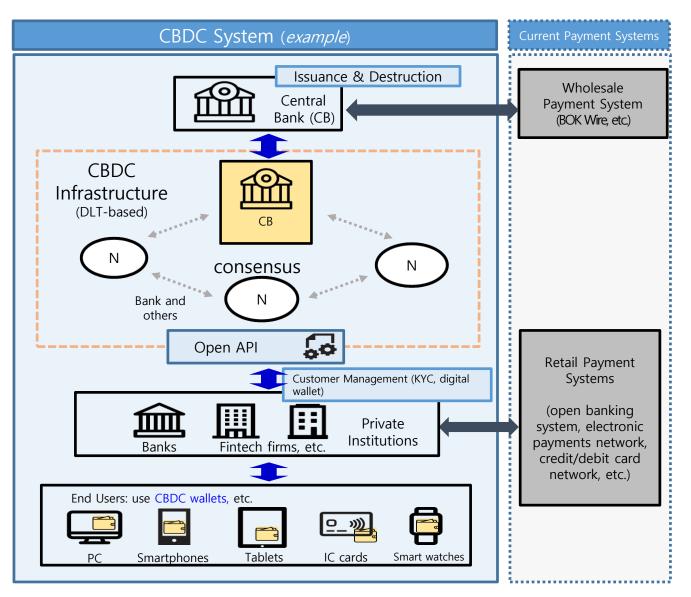
#### Main Objectives of the Experimentation



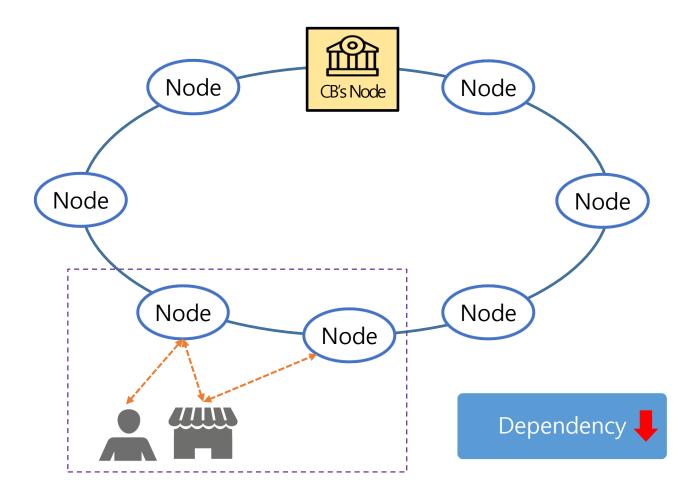
## CBDC Architecture

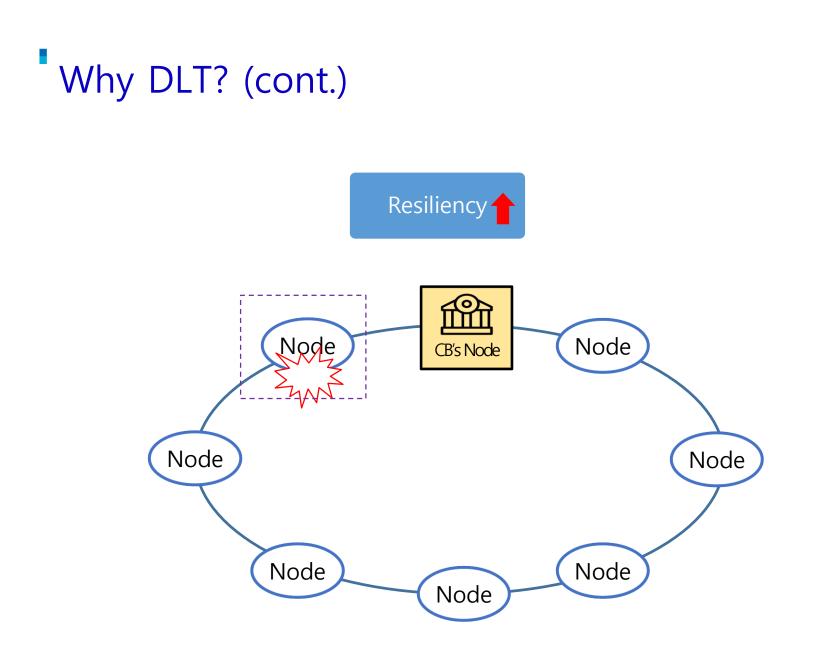


# CBDC Architecture (cont.)

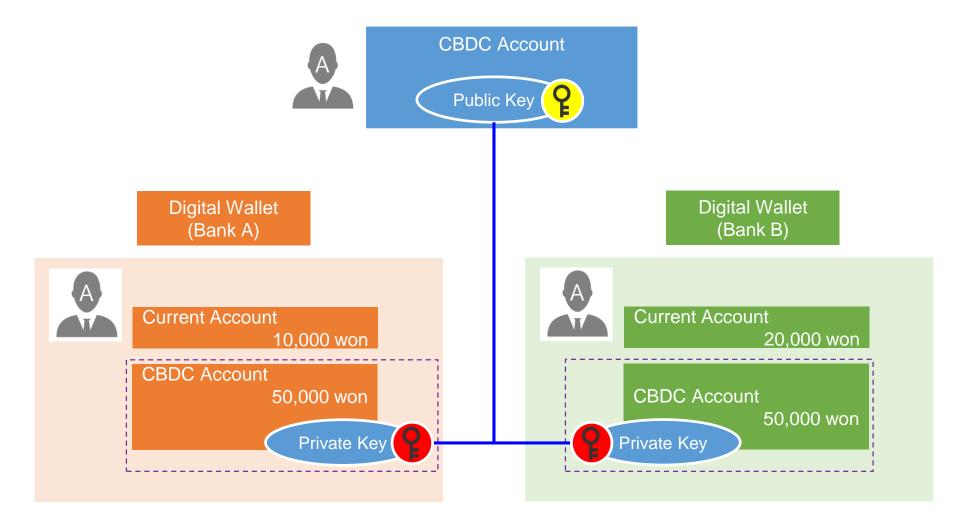




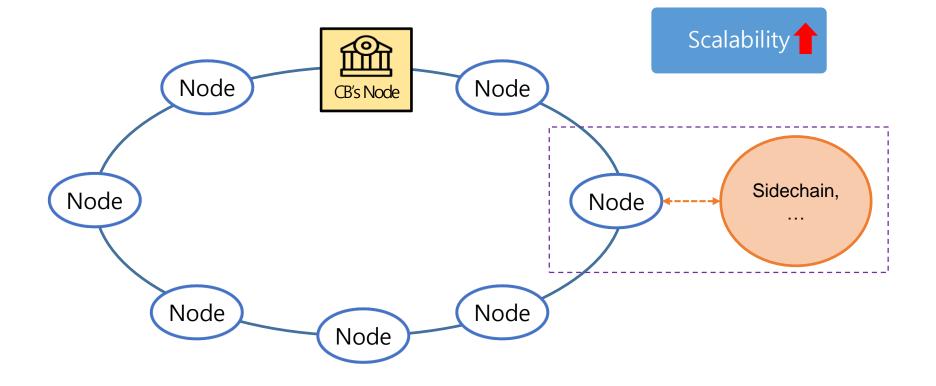












# Current Work Plan

	Phase I	Phase II
Period	July 2021 - Dec. 2021	2022
Main Tasks	<ul> <li>Building a CBDC system on a virtual machine</li> <li>Testing basic functions of CBDC life cycle such as issuance, distribution, and destruction</li> </ul>	- Adding various CBDC features to the experimental environment constructed in Phase I, and test their feasibilities

Q & A