

PRESS RELEASE

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Fubon Bank (Hong Kong) & Ripple to showcase a novel Home Equity Line of Credit Pilot Project

(Hong Kong: 30 October 2023) Fubon Bank (Hong Kong) Limited (“Fubon Bank” or “the Bank”) and Ripple Labs Inc (“Ripple”) today announced the results and shared the insights of their Home Equity Line of Credit (“HELOC”) use case in the e-HKD Pilot Programme. As two of the participants in the Hong Kong Monetary Authority’s (“HKMA”) e-HKD Pilot Programme, Fubon Bank and Ripple demonstrate a use case for the settlement of tokenized assets which combines digital innovation with traditional banking processes, potentially allowing customers to embark on a seamless journey towards unlocking the untapped equity in their properties.

In the proposed solution, Fubon Bank, Ripple and its partners are employing state-of-the-art technology to provide a novel HELOC Pilot Project. This transformative process begins with Fubon Bank securely minting a hypothetical e-HKD, supported by a ledger fortified with robust multisig functionality (<https://youtu.be/K-3M79VfEdg>):

1. **Loan Application:** In the proof of concept, a simulated access to the HELOC function could be granted to customers through the Bank’s application. Upon acceptance, a hypothetical e-HKD wallet is automatically created and a tokenized version of the property lien is allocated to the customers. This lien token is then transferred to the loan protocol, facilitating disbursement.
2. **Flexible Fund Drawdown:** Customers could gain 24/7 control over hypothetical e-HKD funds, with real-time availability in their wallets.
3. **Seamless Repayment:** Repayment would occur at the customers’ discretion or via an automated function, transparently accounting for real-time interest accrual. Repayments are prioritized, enhancing financial security.
4. **Closing the Facility:** Upon full repayment, customers could choose to close the facility, releasing the lien token back to a bank wallet for potential reuse.

This streamlined online platform aims to provides quick loan approvals and 24/7 access to property equity, and allow customers to gain transparency and control through real-time data on Loan-to-Value Ratios, available funds and interest accrual. In addition, this innovative solution enhances efficiency

with end-to-end cryptography, guaranteeing auditable records, reducing manual processes and enabling real-time reporting (Please refer to the Appendix for the details of the HELOC Pilot Project).

As an advocate of the HKMA's initiatives, Fubon Bank is committed to exploring the potential benefits that could be potentially brought by an e-HKD. The Bank is delighted to collaborate with Ripple and a consortium of partners, including KodeLab, TOKO, Hex Trust, BCW and Stratford Finance, to kick-start this journey of innovation. It is believed that the novel HELOC Pilot Project has provided valuable experience and insights to enrich the HKMA's perspective and refine the HKMA's approach to the possible implementation of e-HKD, and contributed to strengthening Hong Kong as an international fintech hub.

Fubon Bank (Hong Kong) Limited

Fubon Bank (Hong Kong) Limited ("Fubon Bank") is a wholly owned subsidiary of Fubon Financial Holding Co., Ltd. ("Fubon Financial Holdings"), one of the largest financial holding companies in Taiwan. Committed to becoming one of Asia's first-class financial institutions, Fubon Financial Holdings has built a strong lineup of financial service companies. Fubon Bank operates 15 branches, 3 SME Banking Services Centres, 1 Offshore Banking Centre and 1 Securities Services Centre in Hong Kong, providing a wide range of financial services encompassing consumer and wholesale banking, wealth management, financial markets, securities brokerage and investment services. Fubon Bank holds an A-2 short-term, BBB+ long-term rating from Standard & Poor's. The rating reflects Fubon Bank's strong capitalization, good liquidity and sound asset quality.

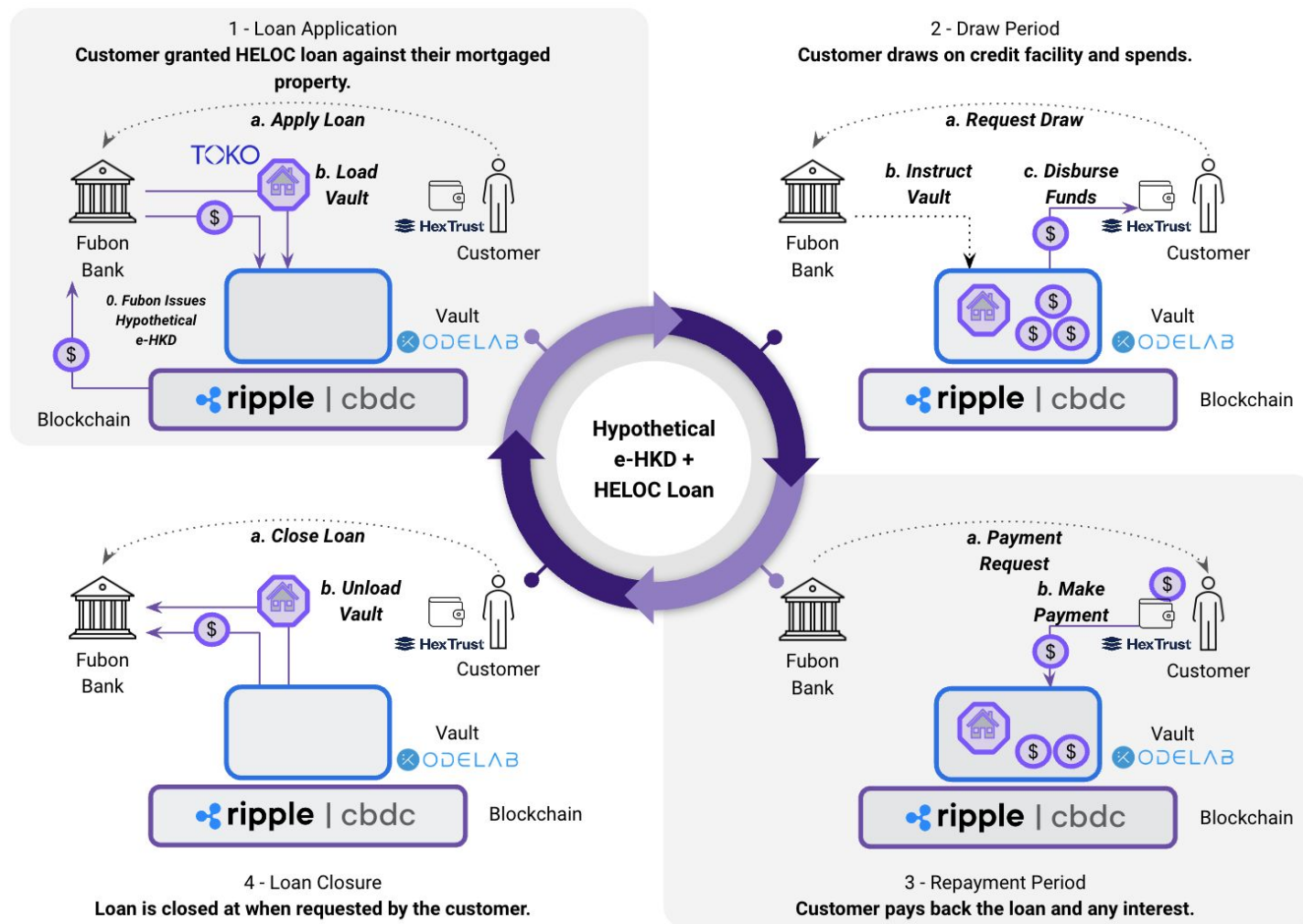
For more information about Fubon Bank, please visit Fubon Bank's website www.fubonbank.com.hk.

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e-HKD Pilot Programme

Participating Firms   In consortium with:    

Fubon Bank Home Equity Line of Credit (HELOC) Flows



High-Level Summary: Tokenization of Property Equity for HELOC Loans

Fubon Bank and Ripple have proposed the implementation of a Home Equity Line of Credit (HELOC) facility which combines hypothetical e-HKD, tokenized real estate (property liens in the initial implementation) and finance lending protocols to enable Hong Kong citizens to more easily and quickly access funds based on the excess equity in their properties. For the pilot, the loans are facilitated by Fubon Bank for existing customers, using tokenization and blockchain technology to reduce risks, operational efforts and inefficiencies throughout the entire loan lifecycle. The business process is:

- **(0)** Minting of Hypothetical Retail e-HKD - digital funds are pre-minted by Fubon Bank through a secure process with multiple authorised operators and multisig functionality built into the underlying CBDC ledger
 - The funds that Fubon Bank shall draw upon to back e-HKD issuance is to be explored - e.g. a tokenized form of deposits or full backing by Fubon Bank's reserves held at HKMA (i.e. could use wholesale e-HKD in a model proposed by HKMA/BIS in Project Aurum 2022).
 - The functionality of the Real Estate tokenization and HELOC loan use case extends to the possibility of an HKMA directly issued retail e-HKD.
- **(1)** Loan Application - Existing Fubon Bank Users access the HELOC function through the bank application which provides a loan offer based on the existing property held in mortgage with the bank, if accepted:
 - A CBDC wallet will automatically be created for the user
 - A tokenized version of the lien on the underlying property will be created and allocated to the user
 - The property lien token will be transferred to the loan protocol and used to setup a loan facility ready for disbursement

- **(2) Draw Period** - The user will be able to drawdown hypothetical e-HKD funds at their discretion (24x7) with real-time availability of funds for use in their wallet
- **(3) Repayment Period** - Repayment can be performed at the users discretion or via an automated function, transferring available hypothetical e-HKD funds from the users wallet back to the lending protocol. Interest accrues in real-time, transparently to the customer and paid down as first priority for each repayment.
- **(4) Loan Closure** - Once all funds are repaid the user can choose to close the facility, which will verify final full repayment and release the lien token back to a bank wallet, ready for reuse in another facility based on user instruction.

As-is processing for this type of lending is currently very paper-based, has many steps performed manually by operational staff and involves updates across multiple separate systems and record sets. This results in significant time and effort required by bank staff, operational risk and a poor user experience, and due to these challenges access to excess equity in properties is not currently a common occurrence.

Benefits of using e-HKD: Business Efficiency Realised

Consumers and Bank operations can use and later access data across property liens, loan approval and funds disbursement with end-to-end cryptography-based integrity guaranteeing alignment to achieve:

- A fully online, streamlined channel for accessing funds based on the excess equity in properties
- Faster approval of loans and drawdown facilitated 24x7 with real-time availability of funds
- Reduced manual operations and reconciliation efforts
- Elimination of paper-based processes
- Increased automation, real-time reporting and decision making
- Ability to facilitate more customised loans at greater scale
- Increased access to lending markets and customers

The solution is a non-invasive, responsible engine of e-HKD production, supporting a wider instant payment and settlement infrastructure and a more secure, transparent AML environment. This solution not only benefits bank customers in terms of flexibility and speed of access to credit, but also hints at synergy with some of HKMA's other priorities, such as potentially heightened compatibility and accuracy with any SupTech platform.

Key Findings and Learnings

- A hypothetical e-HKD would significantly enhance Hong Kong consumers' ability to convert equity in property they own into liquidity which can be used for diverse needs.
- Tokenization of real-world assets - in this case real estate - can be interoperable with tokenized money (e-HKD) to accelerate existing loan processes and reduce risk in the fulfilment and repayment of loans
- A lending protocol can be appropriately set up, managed and monitored by a commercial bank to meet their needs in the creation and servicing of collateralized loans.
- Tokenization of mortgage liens is an effective step towards broader tokenization of property deeds, particularly when used in a closed, limited ecosystem (such as a single commercial bank).
- The proposed HELOC loan use case is compatible with a range of CBDC issuance models. Basis for issuance of e-HKD is therefore an economic and policy consideration rather than functional requirement.

Next Step: Incorporate Learnings and Develop Market-Ready Solution

The current focus of the pilot run is building out an end-to-end working version of the property tokenization and HELOC use case and provide valuable deliverables to assess this initial step, including:

- Bank customer and operational staff engagement and assessment of the HELOC product and user experience
- Documented design for the initial pilot state and longer term production ready state of the solution
- White paper exploring the use of e-HKD for unlocking property equity
- Explainer material for socialisation of the use case and utility of e-HKD

We anticipate that based on the findings of this pilot run we will continue to build out a market-ready solution which can be available to Hong Kong consumers in line with e-HKD availability. The model can then be extended through the addition of strategic elements, including the full tokenization of property title deeds and use of this together with e-HKD across a broader lending market. In parallel we will look into additional markets for this use case and solution with the long-term aim of universal access to liquidity based on tokenized property without limitations of a specific lender or even a specific market/country.

