

Discussion on

“Demand for Payment Services and Consumer Welfare:  
The Introduction of a Central Bank Digital Currency”  
by Huynh, Molnar, Shcherbakov, and Yu

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financial market infrastructures in Emerging Economies

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# Summary of the paper

A quantitative assessment of the effects of a CBDC introduction on the demand for existing means of payments in Canada.

Develops and estimates a structural model of payment choice.

Uses parameter estimates to simulate the introduction of a new payment instrument.

A new payment method can be used on average for every fourth or fifth transaction.

Consumer welfare can improve by 0.60 to 1.63 CAD per person, with significant variation across demographic groups.

A hypothetical CBDC that combines the best features of debit cards and cash (both in terms of perceived ease, cost and risk of use, and estimated transaction cost) would still leave significant, non-zero market shares for both debit and cash as a form of payment method and could compete mostly with the non-reward-paying credit cards.

# My reaction to this paper

A nice paper on the quantitative assessments of the use of CBDC from the consumer side.

Great effort to recover deep parameters from consumer surveys.

The focus on consumer benefit in this paper makes sense because most merchants accept three payment methods according to the survey.

# Discussion

What should we learn from Kim's great paper?

Put his results in the context of the recent introduction of CBDC in Bahama, Cambodia, and a pilot program in China

I argue the results based on "Best of both" and "Universal acceptance" are most plausible given the lessons from these economies.

I also suggest that Kim might wish to have another paper focusing on the changes in merchant behavior due to the availability of CBDC.

# Lessons from Cambodia, Bahama and China

## 1. Cash-like aspects

CBDCs have an upper limit of daily usage to comply with AML and to prepare for a possible “digital run.”

The upper limit may make CBDC a more cash-like low-risk instrument for small payments. (Assume that the upper limit of Debit card usage made by the demand deposit does not bind for small value POS payments).

## 2. Debit-like aspects

CBDC user interfaces can be smartphones, but also be a plastic card as Debit cards, to make it low cost and affordable to everyone for the sake of financial inclusion (China has a plastic card version).

**These features observed in real-life CBDC make a plausible model of future Canadian CBDC “best-of-both.”**

# Lessons from CBDC in practice

## 3. Low cost to merchants and finality

Merchants will pay low transaction costs for CBDC than those for Debit card in two respects:

Central banks are unlikely to ask merchants to pay a fee for the use of CBDC. One-time installation cost would be sufficient.

CBDC transaction is final, and merchants do not have to wait for the payments from debit card company.

**These features suggest “universal acceptance” more plausible because of lower transaction costs for merchants.**

**Thus, Kim’s benchmark scenario looks very good.**

# Going forward,...

A great advantage of CBDC over Debit may induce merchants to favor CBDC over Debit, especially if a central bank sets the upper limit for daily usage relatively high, which is beyond the scope of Kim's paper.

But this might make Kim's other papers considering merchant choice more useful.

For example, the dominance of CBDC over private payment instruments might prevent innovation in the private sector and reduce consumer welfare in the long run.