

CBDC: Domestic and International Implications

Giovanni Dell’Ariccia

IMF Research Department

Central Bank Digital Currencies in Emerging Countries:

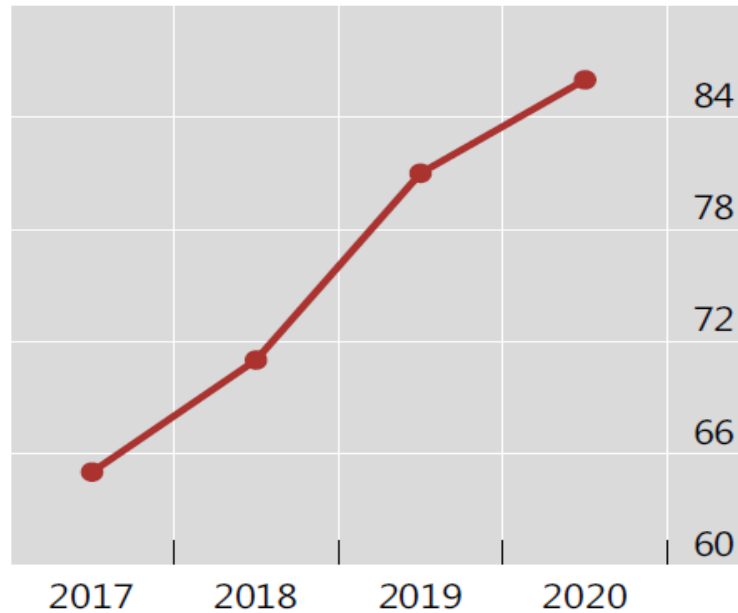
Opportunities and Challenges

OEET Roundtable, March 17, 2022

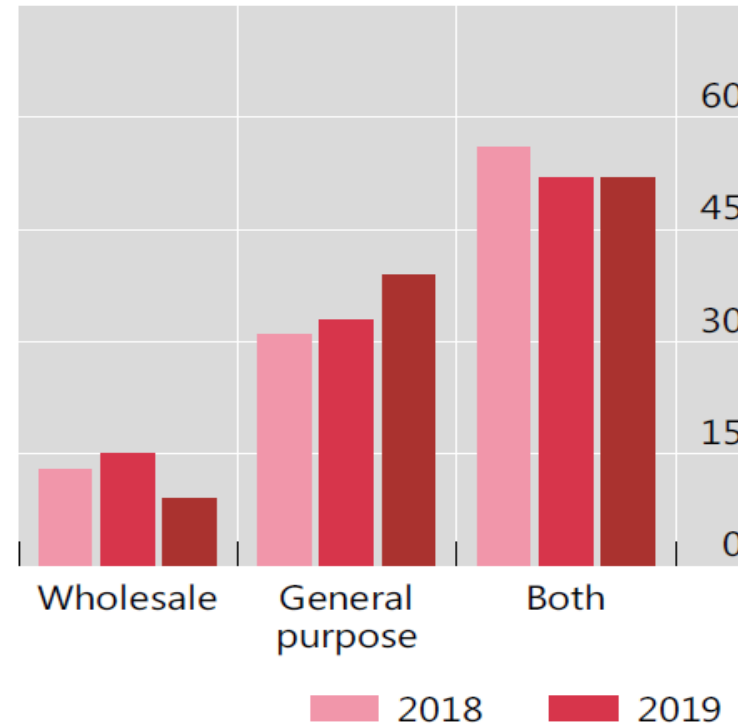
The views expressed in this presentation are those of the author and do not necessarily represent the views of the IMF, its Executive Board, or IMF management.

CBs are increasingly exploring CBDCs

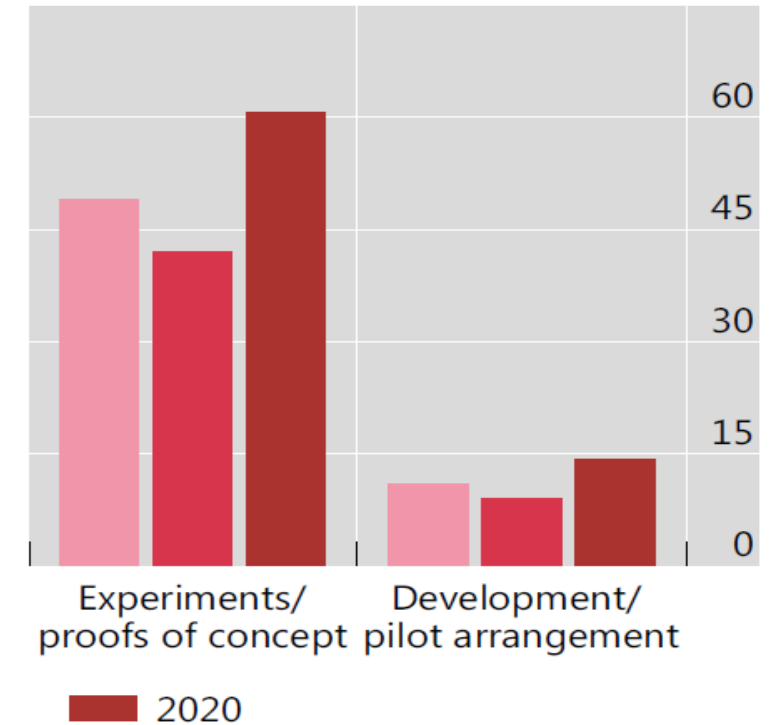
Engagement in CBDC work



Focus of work¹



Type of work in addition to research¹



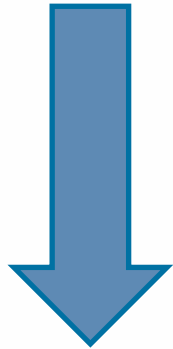
¹ Share of respondents conducting work on CBDC.

Source: BIS central bank survey on CBDCs.

Boar C. and A. Wehrli (2021), "Ready, steady, go? Results of the third BIS survey of central bank digital currency," BIS Papers No 114

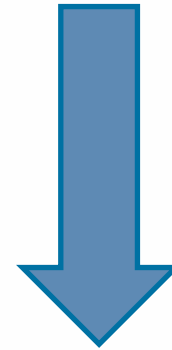
Implications of CBDC for EMDEs

Own CBDC



Domestic Implications

Foreign CBDC



International Implications

Domestic implications of retail CBDC

1

Financial integrity

Illicit flows/Privacy

2

Financial stability & bank intermediation

Disintermediation?

Run risk?

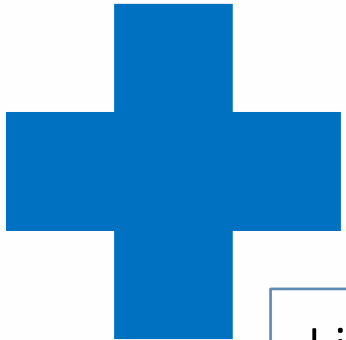
3

Monetary policy

Impact on transmission?

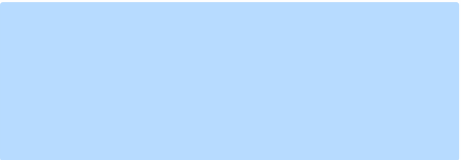
ELB

CBDC impact on integrity depends on design choices



CBDC can protect privacy without undermining integrity if...

CBDC can undermine integrity if ...



<p>Limits on size of transactions exist</p> <p>Appropriate customer due diligence in place & transactions recorded</p> <p>Identity revealed only if illicit activity suspected</p>	<p>Full anonymity and large-value transactions allowed</p>
--	--

CBDC impact on bank intermediation

Likely competitor for bank deposits

- What happens when CBDC is introduced?
- How are bank funding and lending affected?

Run-risk during systemic crises

- What happens during system-wide crises?
- Does the existence of CBDC increase run-risk?

Disintermediation during the transition

- Banks could lose or pay more for deposits
 - Alter liability side of balance sheet: less stable funding?
- How special are deposit taking institutions?
 - Synergies between payment and credit functions
 - Pre-funding versus commercial bank money
- Central bank recycling funds to banking system?
 - Role of depositors in market discipline?
 - Likely small on credit quality
 - But more important in services etc.

Impact on run-risk depends on type of crisis

Type of crises	Run-risk increase?
Currency or sovereign crisis	Probably not <i>(runs are typically away from local assets)</i>
Individual bank insolvency	Probably not <i>(runs among banks already easy)</i>
Systemic bank crisis	Likely (especially in speed) <div style="border: 1px solid green; padding: 5px; margin-top: 10px;">Deposit insurance, liquidity provision and limits can mitigate risks</div>

The transmission of monetary policy could be enhanced by a domestic CBDC

Transmission channel	Impact of CBDC
Interest-rate	Could increase if financial inclusion increases or CBDC pays interest
Bank lending	Could increase if banks rely more on wholesale funding
Credit	No major effect expected
Exchange rate channel	No major effect expected

Additional considerations - MP transmission

- Effective lower bound will continue to exist if cash is used
- If banks were displaced, monetary policy with interest on CBDC
Most liquid & safe asset

International implications of CBDC for:

- 1 Cross border payment efficiency
- 2 Currency substitution & monetary policy
- 3 Capital flow & financial stability

Cross border (XB) payment efficiency (small amounts...)

Current frictions in XB payments

- Long transaction chains
- Low traceability and transparency
- Fragmented data standards
- Limited operating hours
- Funding costs
- Legacy technology platforms
- Weak competition



High costs and low speed

Potential improvements from CBDC XB use

- Fewer intermediaries
- Potential for greater transparency and traceability
- Enhanced integration and safety
- 24x7 operating hours
- State of the art technologies
- Foster competition



Lower costs and increased speed

Foreign CBDC could impact use of domestic currency and conduct of MP

- Foreign CBDC used in international trade and finance (with large network effects) becomes widely available
- Weak local currency (due to macro and institutional factors)



Currency substitution



- Weaker monetary policy transmission & effectiveness
- Reduce ability for CBs to act as LORs

The use of foreign CBDC could affect capital flow and financial stability

- Larger gross flows
- Capital flow volatility could increase
- Faster transmission of global financial conditions

Addressing international implications of CBDC

- To curb currency substitution countries could explore:
 - Feasibility of limiting CBDC in circulation (issuer)
 - Desirability of imposing restrictions on XB cross-border transactions
 - Robust legal tender provisions to ensure that the national currency is favored
- To ensure the stability of the international monetary system, cooperation among CBs to provide backstops will be critical in case currency substitution increases

Conclusions

- CBs are increasingly exploring CBDCs
- There could be domestic and international implications associated with CBDC
- Appropriate design and regulations could mitigate some of the risks
- Cooperation across countries will be key to minimize negative cross border implications