

Crypto and Digital Currencies - Challenges to Central Banks

Beatrice Weder di Mauro
INSEAD, CEPR and ABFER

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Research & Policy Network @ CEPR
on Fintech and Digital Currency
Lead by Antonio Fatas



Outline

1. Why do Central Banks care?
2. How big a problem is the problem for Central Banks?
3. What solutions?

1. Options for Central Bank Digital Currency , CBDC

Technologically superior

	General purpose token	accounts
24/7 availability	✓	(✓)
Anonymity vis-à-vis central bank	(✓)	✗
Peer-to-peer transfer	(✓)	✗
Interest-bearing	(✓)	(✓)
Limits or caps	(✓)	(✓)

Extract from BIS , Central Bank Digital Currencies, March 2018, Table 1

1. Why Central Banks care

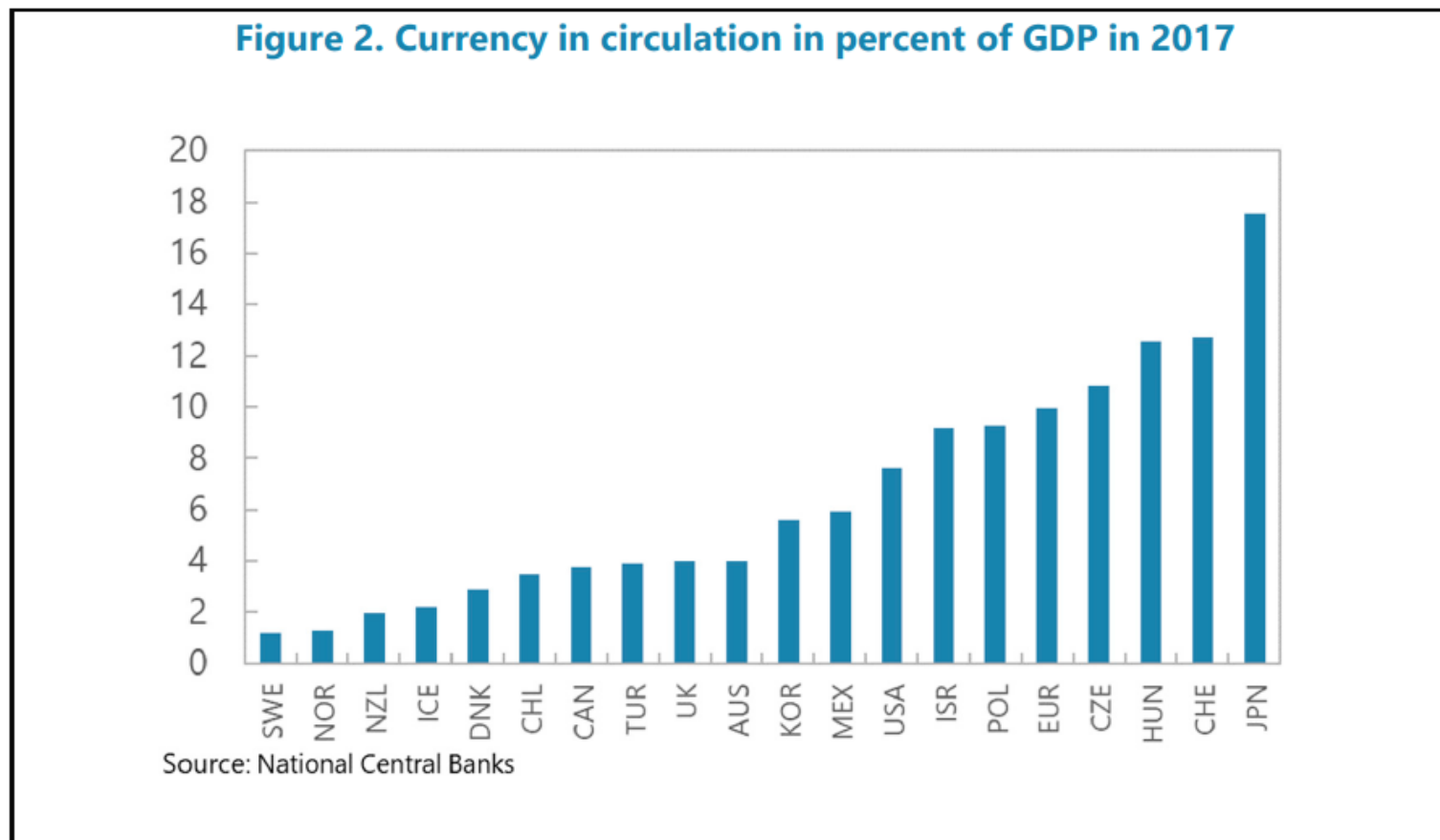
Loss of control

- Competition for legal tender, monopoly of issuance
 - Financial stability, unregulated sector
 - Fraud, conduit for money laundering, illegal transactions
- > regulation, consumer protection

Gaining control

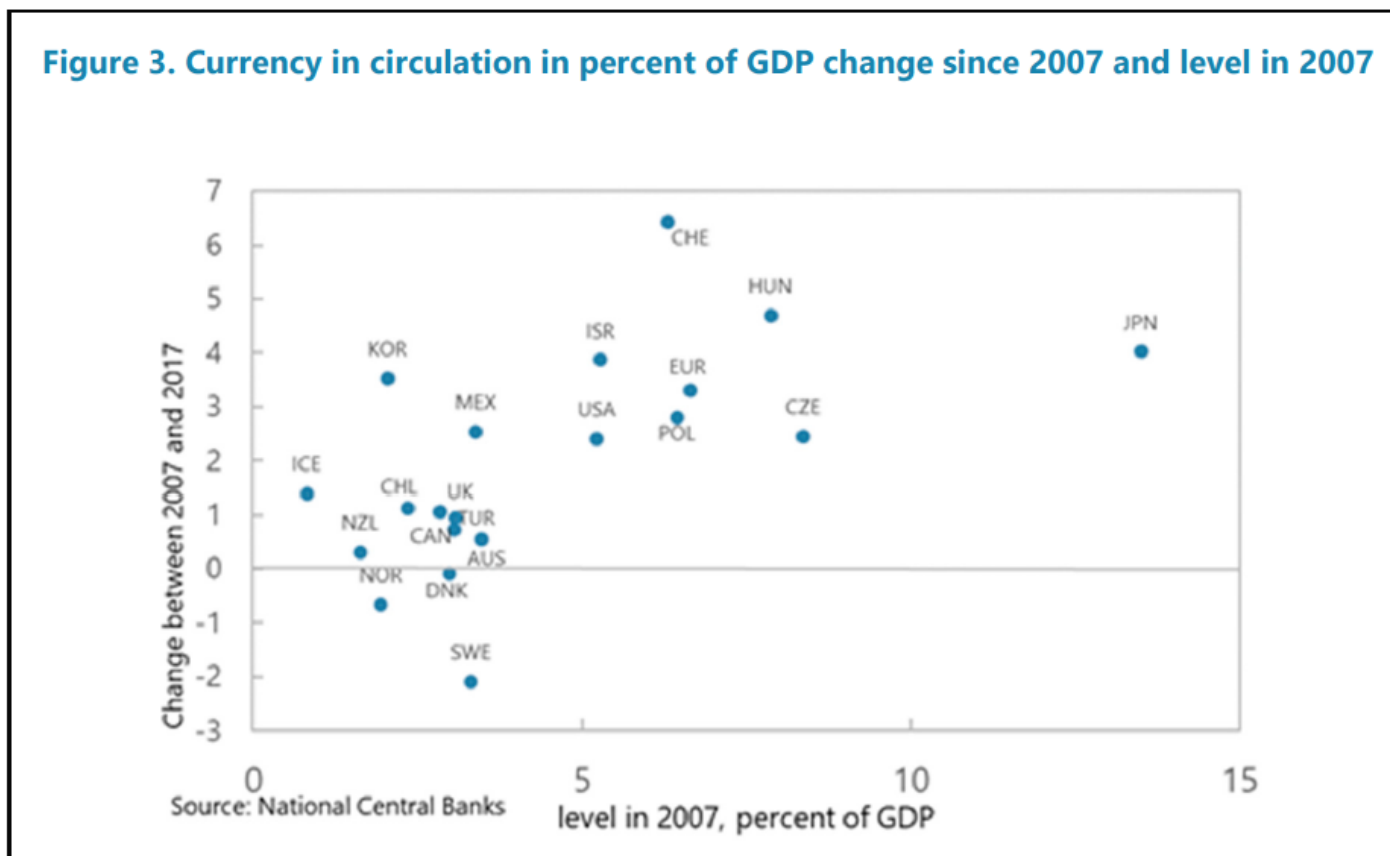
- Payments system, low cost, cross border
- Do it yourself (CB deposits for all)
- Gain room at the ZLB, monetary policy

2. How bad is the competition?



Source : Assenmacher and Krogstrup, IMF WP/18/191

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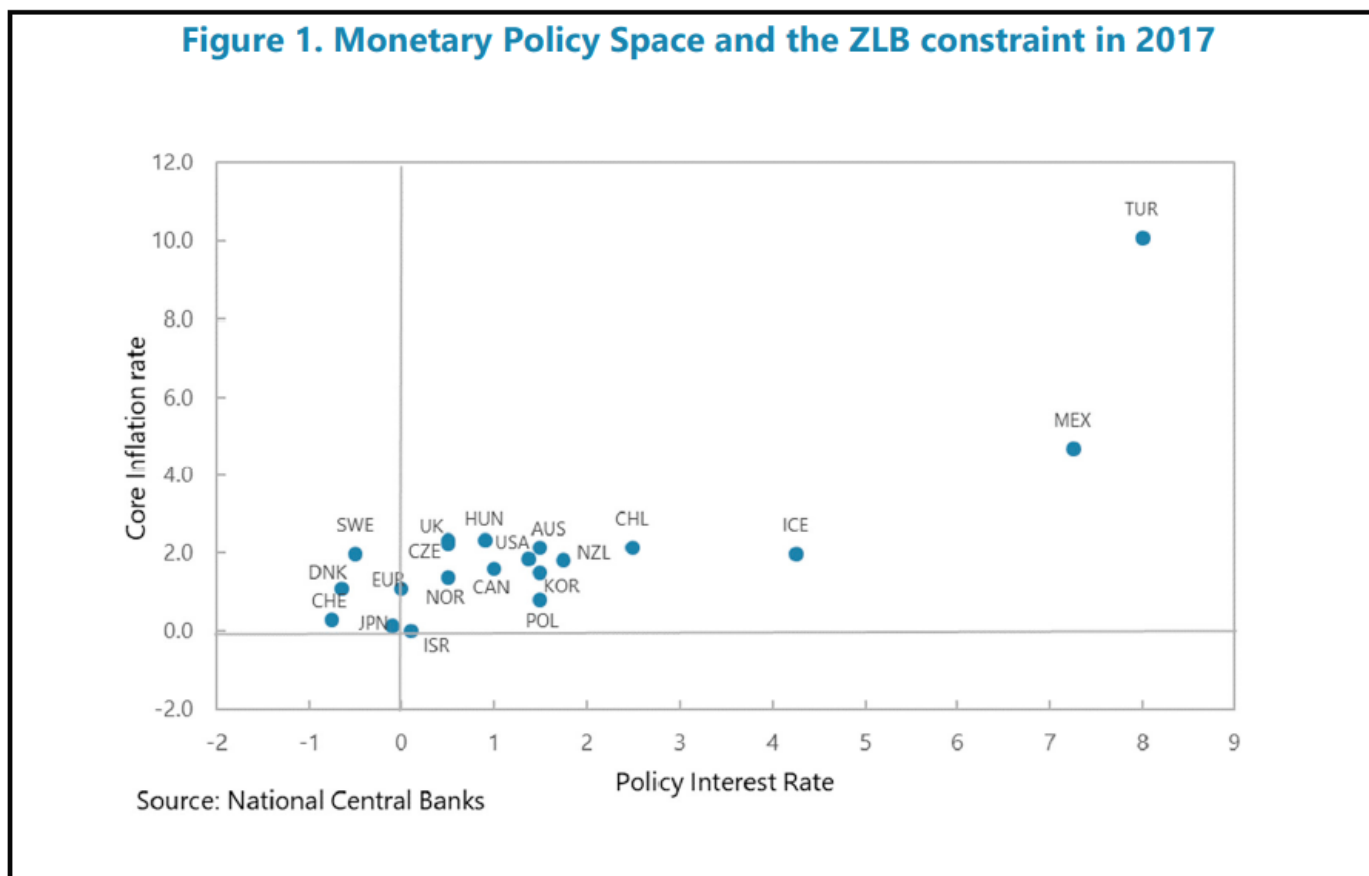
Source : Assenmacher and Krogstrup, IMF WP/18/191

2. How bad is the competition / is cash doomed?

Use of cash will depend, inter alia.

- Subsidy of cash (by CBs and banks)
- Ease of accessing electronic wallets/watches
- Stable coin (from facebook)
- Trust in institutions (cash as freedom...)

2. How bad is the Zero Lower Bound?



Source : Assenmacher and Krogstrup, IMF WP/18/191

2. Are we stuck in a low interest rate equilibrium?

- And bound to hit the ZLB frequently?
- Larry Summers is not alone
 - Financial markets “predictions”
 - This time is different
 - Japanesation

3. Solutions : What can CBs do?

- QE forever
- Set higher inflation targets (and reach them...)
- Talk to the treasury....

- Set lower interest rates (deeply negative)
 - Abolish cash and introduce CBDC deposits for all
 - Dual currency system

3. CBDC for all and negative interest rates ?

- Risks of CBDC Central Banks
 - Balance sheet risks,
 - AML/KYC
 - Independence
- Financial stability , runs on bank deposits
 - Disintermediation
 - Financial stability risks for other intermediaries
- Safe haven inflows in times of stress
- “Savers **hate** negative nominal rates”

3. How?

- Implementation questions for CB accounts for all
 - CBDC for limited amounts
 - Residents only
 - Only transaction account, no positive interest rate
- Negative nominal interest rates on cash
 - Crude methods to tax cash: stamp notes, expiration date (India)
 - More elegant : dual local currency system, divide money supply into cash from electronic money, negative carry cost on cash, "depreciating" rate at which cash can be converted into central bank reserves (by banks)
K&A(2018)

Conclusions

1. Central Banks have to care about becoming cashless – **but not too much, not a good reason for CBDC**
2. Central Banks should worry about the ZLB – **probably more than they do**
3. CBDC might be a partial solution – **but not the first best**

Thank you