The future of money and monetary policy

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Digitization and the future of money

• Substitution of cash by electronic money
• Substitution of traditional bank deposits and bank notes by cryptocurrencies
• Substitution of bank deposits by “universal reserves” (central bank deposits for everyone)
• Substitution of bank lending by peer-to-peer lending on the basis of digital platforms
Substitution of cash by electronic money

### Euro area: Share of cash in money stock M1

![Graph showing the share of cash in money stock M1 from Jan-80 to Jan-18.](image)

### Use of cash in the euro area

- **Number of transactions:** 79%
- **Total value of all payments:** 54%

Source: Esselink and Hernández 2017
A cashless society is not very likely

• But the usage of cash can decline considerably, above all by contactless technology for payments under 25 Euro, which make up 81% of all payments at POS.

• Implications of a cashless society
  • Risk of bank-runs removed, but less market discipline for the banking system
  • ZLB removed: Central banks can enforce negative interest rates

• However, a regime would require a political decision to abolish cash, as in crisis situations the demand for cash would resurge

• At least from the German standpoint the end of cash is very unlikely
Substitution of bank deposits and cash by cryptocurrencies
Prospects for cryptocurrencies are limited

• Inconvertibility: No intrinsic value
• No legal tender: Risk of full implosion impairs store of value function
• While each issuer can limit the issue of its currency, the number of issuers and the total volume of cryptocurrencies is boundless
• High transaction costs and high transparency impair means of payment function
“Universal reserves“ could be a game-changer

• Substitute for cash and bank-deposits
• Attractive for large depositors as protection against bail-in (BRRD)
• Implications for central banks:
  • Risk of „digital bank runs“ (Cœuré)
  • Helicopter money becomes a possibility
  • ZLB only removed if cash is totally abolished
• Transformation of the financial system into a „full money system“ or „sovereign money system“ with restricted credit creation potential of the banking system
P2P-lending: Uberization of banking?

• Substitution of bank intermediation by direct lending („Capital market for small borrowers“)

• Platforms (Amazon?) are able to perform banking functions
  • Screening and delegated monitoring
  • Diversification of risks

• P2P-lending would require less regulations (capital, liquidity)

• Central bank control over P2P-lending is possible via control over short-money market rates
Implications

• Digitization does not erode the control of centrals bank over the financial system

• Massive regime changes (abolishment of cash, universal central bank reserves) are possible. But they would require a political decision and would strengthen the role of central banks

• For banks, P2P-lending and universal central bank reserves would fundamentally change (i.e. reduce) their role in the financial system