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Webinar on Crypto-Economics

The Macro-Impact of Public E-Currencies and Payment Systems

Financial Innovation and Monetary Policy: Challenges and Prospects

Stefan Kooths
Forecasting Center

Monetary fundamentals

- Money = generally accepted means of exchange
  - » store of value
  - » unit of account

  subordinate, non-constitutive characteristics

- Money once emerged as a product of the free market

- Money constitutes a good category sui generis
  - » No consumption good (no direct satisfaction of human needs)
  - » No production factor (productivity does not depend on its quantity)

⇨ **Global network good: Optimal currency area = world**
(if not used as policy tool for macro-interventions)

Monetary systems

- As long as money circulates as commodity money – either as money proper (coins) or money certificates (fully covered notes and demand deposits) – money can be provided in a competitive way without the need for central coordination.

- The monopolization of money opens a window for excessive money production.

- Today, the provision of money is organized as a public-private partnership between central banks (public part) and commercial banks (private part) and tends to be inherently unstable.

Currency competition in the digital age

- Currency competition via private digital money might come from issuers beyond the banking sector (Google, Microsoft, Amazon, Apple, Facebook, …).
- Guaranteed convertibility of private digital money could boost acceptance and reputation-building while also promoting initial stability.
  - Peg to existing fiat money: No new money, legal tender regulations
  - Physical reserve media or basket of goods: Global free banking
- Even within the current monetary system the option on privately issued digital money may limit the conduct of monetary policy (Hayek 1976/1978).
- Room for experimenting with parallel currencies

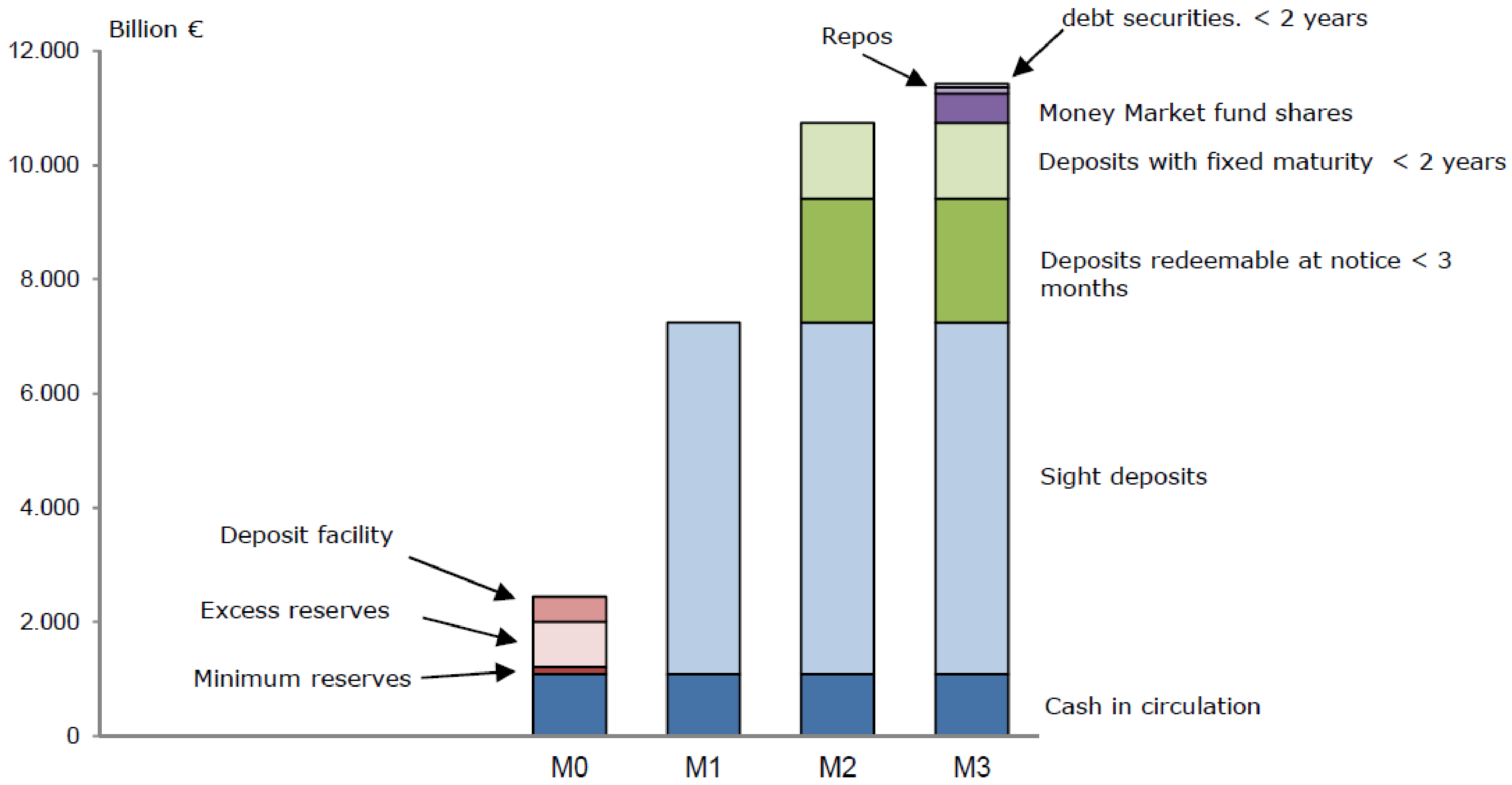
Implications of a central bank digital currency

- Non-cash high powered money circulating beyond the commercial banking sector (Fedcoin accounts for everyone)

- Potential substitute for bank deposits challenging the present fractional reserve system at its core
  - » Short-run impact on commercial banks may be similar to a bank run
  - » Trend towards fewer maturity transformation
  - » Sharp increase of base money, higher seignorage gains for CB
  - » Lower elasticity of money and credit creation
  - » If parallel to fractional reserve banking: Higher risks of pro-cyclical shifts between bank deposits and Fedcoins

⇨ **Drift towards 100-percent banking (Chicago Plan 2.0)?**

Money aggregates in the euro area (Jan. 2017)



Data source: European Central Bank.

Substituting/abolishing cash

Technically

Relaxing the lower zero bound for monetary policy

BUT

Market participants in search for reliable means of exchange since the beginning of the monetary era

Increased potential competition from private e-currencies leaves central banks with less room for maneuver

Briefing Paper

- Salomon Fiedler, Klaus-Jürgen Gern, Stefan Kooths and Ulrich Stolzenburg
- http://www.europarl.europa.eu/cmsdata/118906/KIEL_FINAL%20upload.pdf

Feedback welcome

Prof. Dr. Stefan Kooths
Head of Forecasting Center

T (Kiel) +49 431 8814-579
T (Berlin) +49 30 2067-9664

stefan.kooths@ifw-kiel.de

@kielinstitute

www.ifw-kiel.de