Cash and the zero-lower-bound constraint

Cash on Trial
Frankfurt, 20 May 2019

The views expressed in this presentation are those of the author and do not necessarily reflect those of the ECB or the Eurosystem
Limited space for conventional interest rate policy

Interest rates are typically lowered by about 5 pp in a downturn (Summers 2018)

Source: Assenmacher and Krogstrup (2018)

Core inflation and policy interest rate in OECD countries in 2017
The monetary transmission mechanism

- Changes in the policy rate propagate through changes in money market, capital market and bank funding rates to lending rates and the real economy.
- The zero nominal rate on cash introduces an important friction in the transmission process of negative interest rates.
- Agents switch into cash if close substitutes yield a negative return, giving rise to a zero bound on nominal interest rates.
- Though zero is not the lower bound, an effective lower bound does exist.
- Holding cash entails costs that depend
  - On the amount held,
  - The expected duration of negative interest rates.
Experience with negative rates in the euro area

Market rates followed the policy rate into negative territory

Key interest rates and the interbank overnight rate
(in percent)

Euro area and German 10-year rates
(% per annum)

Source: ECB, Thomson Reuters.

Source: Thomson Reuters, Bloomberg.
Note: The 10-year rate refers to the 10-year OIS rate for the euro area and the 10-year Bund yield for Germany. Latest observation: 13 May 2019.
Bank margins compressed because deposit rates are bounded at zero

Interest rates and margins on new loans and deposits
(% per annum)

Distribution of deposit rates to HHs and NFCs
(x-axis: deposit rates in percentages per annum, y-axis: frequencies in percentages)

Sources: ECB, ECB staff calculations.
Notes: Loan and deposit composite rates are calculated using corresponding outstanding amount volumes as weights. Aggregations are based on a sample of 12 euro area countries. Latest observation: March 2019.

Source: ECB.
Note: Deposit rates on new business as reported by individual banks for each of the available product categories. The dotted lines show the weighted average deposit rates in Jun-14 and Dec-18.

Cash and the zero-lower-bound constraint
Monetary policy below the zero lower bound

• Very low rates may cease to be expansionary
  – Pass-through to lending rates no longer assured (Brunnermeier and Koby 2017, Eggertson et al. 2017).
  – The longer low rates persist, the more bank margins get compressed.
  – Financial stability problems may arise.

• Can we create preconditions to set interest rates below zero?
  – Cash plays an important role as a means of payments.
  – Increase cost of holding cash.
  – Implement a negative interest rate on cash.

• Many proposals...
... and one example

- Silvio Gesell’s «Freigeld» (1916): Banknotes lose value over time. Scheme was realized 1932/33 in Wörgl (Austria), but stopped by the authorities.
Conclusions

• Cash constrains the monetary policy space.
  – CBs could unconventional policies such as forward guidance, quantitative easing and FX interventions instead.
  – These measures face limits as well, e.g. with regard to the size of the central bank’s balance sheet.
  – Potential side effects include distortion of asset prices, financial instability and moral hazard.

• There is a case to increase the space for interest rate policy.
• Cash plays an important role as a means of payment.
• Do we need a nominal asset with a zero nominal rate?
Thank you