The Effect of Bitcoin on Central Banking
By Rodi Ihatsu

Underlying Trends
- Cash Usage is Significantly Decreasing
  - At the end of 2016, 5+ million Swedes (over 50% of the population) used the Swish mobile phone app, which allows people to transfer commercial bank money with immediate effect. This trend has resulted in cash in circulation falling under 1.2% of GDP.
- Bitcoin: Increasing interest from the general public
  - 2017 was bitcoin’s best year so far. Its market cap topped $300 billion, or the GDP of Pakistan, and the number of transactions continued its exponential climb toward 400 million. Bitcoin showed us it can gain momentum, and although its value is currently down, it cannot be promised that bitcoin or other cryptocurrencies won’t rise aggressively again.

The money flower: a taxonomy of money

Central banks’ response to the threat of increased usage of digital cash and cryptocurrencies

- Central banks do not launch their own digital initiatives
  - Bitcoin remains marginalized, and fiat currencies remain prominent
    - Bitcoin’s roughly $70 billion market cap constitutes under a puny 0.1% of the world’s roughly $90 trillion broad money supply
    - Irrelevant effect on central banking

- Central banks launch their own digital initiatives
  - Major effect on central banking
    - Bitcoin gains a stronger footing
      - Bitcoin becomes a reliable store of value
        - Bitcoin becomes a commonly used medium of exchange
          - It acts like a commodity — e.g. gold
            - Irrelevant effect on central banking

    - A) Digital counterpart for fiat currency — standard, centralized way
      - Reserve accounts at central banks for general public
        - Results in an unstable fiat currency (exchange rate) which in turn may complicate efforts to stem price and credit risk
          - Irrelevant effect on central banking

    - B) Complement existing fiat currency by utilizing distributed ledger technology
      - Alternative central bank money — driven by cost reduction, resilience, efficiency, instead of redefining how we transact
        - Consumers choose between commercial and central accounts
          - Many central banks are interested in enhancing wholesale payment infrastructures (where banks pay banks)
            - Irrelevant effect on central banking

    - C) Develop own cryptocurrency — Central Bank Cryptocurrency (CBCC)
      - Central bank issued money transferred peer-to-peer over distributed ledger network
        - E.g. FEDcoin — anonymous (like cash), not that volatile (tied to USD), own monetary policy

Irrelevant effect on central banking

Central banks have to turn to alternative ways of controlling aggregate demand

- Quantitative easing
  - Fiscal stimulus (government)
    - Small but empirically proven effect — not enough
      - Politics can easily become cumbersome — not sustainable

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