

# Libra or Librae?

Basket based stablecoins to mitigate foreign exchange spillovers

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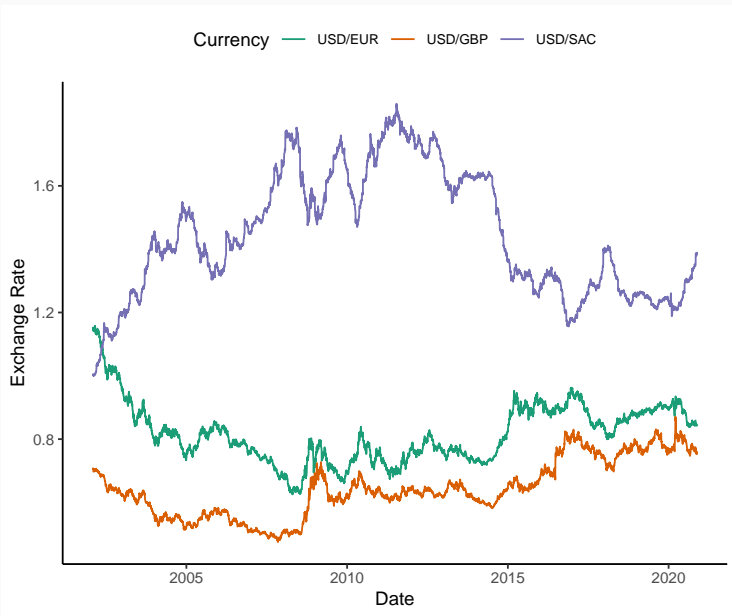
## Background - LIBRA (Diem)

- On 16 April 2020 the LIBRA (LBR) association has published the LIBRA white paper v 2.0, highlighting its mixed system of single and basket based currency stablecoins.
- "LBR can be implemented as a smart contract that aggregates single-currency stablecoins using fixed nominal weights (e.g., USD 0.50, EUR 0.18, GBP 0.11, etc.)".
- "This approach to the LBR design is similar to what is used by the International Monetary Fund (IMF) in the Special Drawing Rights (SDR)".
- The Libra network is intended to support global, cross-border exchanges by extending the functionality of fiat currencies, which are appropriately under the governance and control of central banks.
- Facebook's Libra has pushed stablecoins up the agenda for regulators and supervisors. Facebook can push Libra to its vast user-base, approximately 2.41 billion monthly active users.<sup>1</sup>

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<sup>1</sup><https://newsroom.fb.com/company-info/>

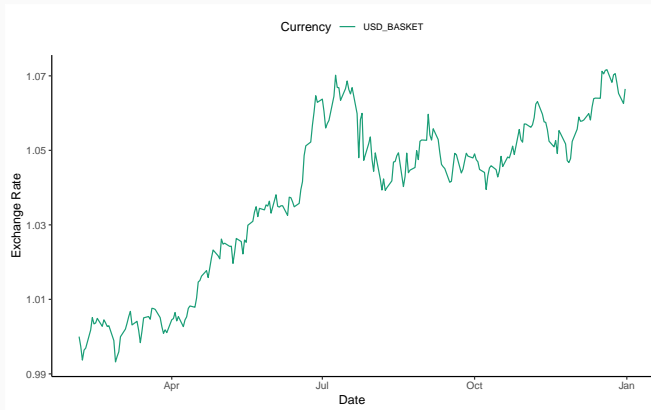
# Comparing exchange rates



We can change the optimisation problem to maximise the correlation between the dollar and a basket of selected currencies.

	AUD	CAD	CHF	EUR	GBP	JPY
Weight	0.00	0.56	0.00	0.00	0.43	0.01

# Dollars without dollars



# Some considerations for MiCA

- Where does Libra fit?
  - Asset referenced token (Multicurrency Libra would qualify as an ART)
  - E-money token (individual Libras would qualify as EMTs)
- ART issuers that issue several token types must provide one reserve for each token type
  - Is this problematic for the two tiered system?
  - *LBR can be implemented as a smart contract that aggregates single-currency stablecoins using fixed nominal weights [...] LBR is fully backed by the Reserve assets backing each single-currency stablecoin*
- How are the weights to be governed?
  - A determination of the type, and precise allocation, of the assets included in the reserve assets
  - When part or all of the reserve assets are invested, a detailed description of the investment policy and assessment of the impact of the policy on the value of the reserve assets

## Some wider implications

- Regulation of significant ART (SART) and EMT (SEMT) issuers.
- Implications for *global* stablecoins
- Are the barriers to entry too high?
  - For example, Tether, with currently approximately 25 billion US Dollars backing its stablecoins, would have to hold at least 750 million of own funds.
- Facebook monopoly on stablecoins?

# Conclusions

- We construct a basket based stablecoin based on an optimal control problem to determine the weights for a minimum varying currency
- The basket based stablecoin is less volatile than single currencies
- We can also construct stablecoins to track major currencies using other currencies / assets