

# Libra: Global Currency of the 21st Century?

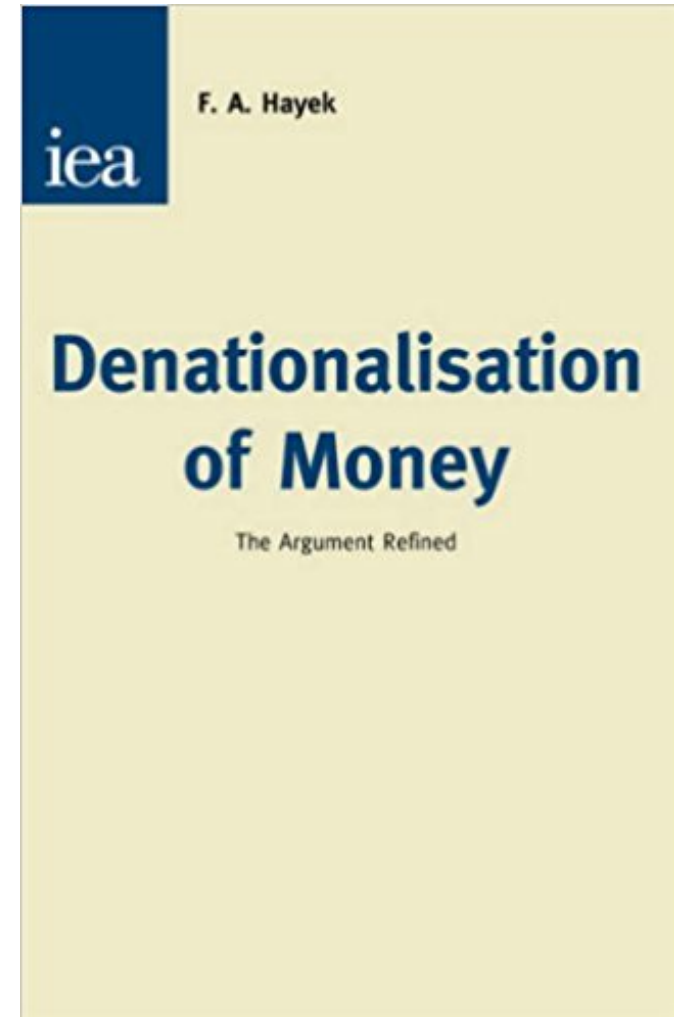
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# The vision of Friedrich A. von Hayek (1899-1992)

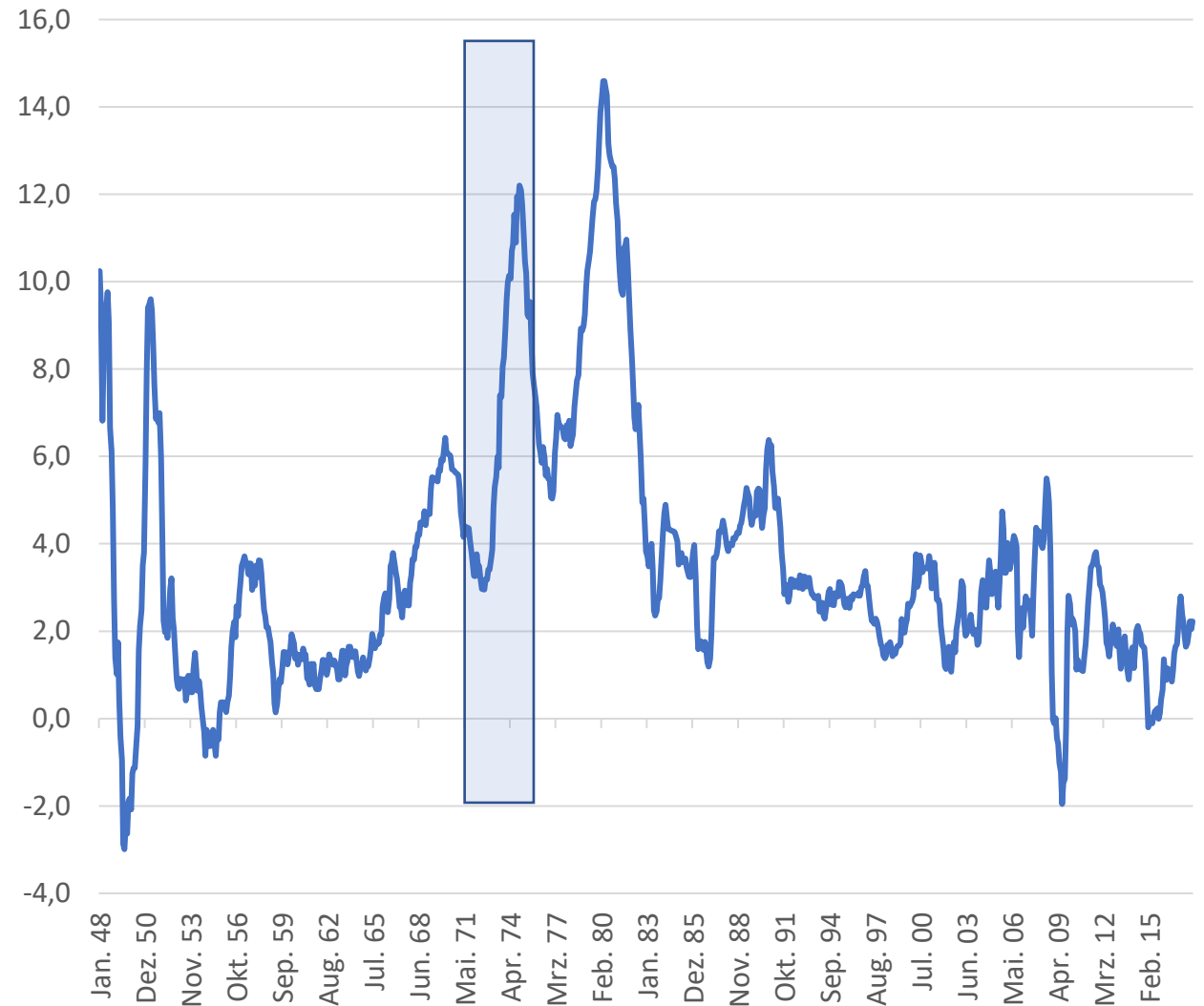


“Neither a general increase nor a general decrease of prices appears to be possible in normal circumstances so long as several issuers of different currencies are allowed freely to compete without the interference of government.”



Hayek: “A single monopolistic governmental agency can neither possess the information which should govern the supply of money nor would it, if it knew what it ought to do in the general interest, usually be in a position to act in that manner.”

United States inflation rate



# Hayek's money: an early version of Libra?

- “I would announce the issue of non-interest bearing certificates or **notes**, and the readiness to open **current cheque accounts**, in terms of a unit with a distinct registered trade name such as 'ducat’.
- The only legal obligation I would assume would be **to redeem these notes and deposits on demand** with, at the option of the holder, either 5 Swiss francs or 5 D-marks or 2 dollars per ducat.
- This redemption value would however be intended only as **a floor** below which the value of the unit could not fall because I would announce at the same time my intention (...) to keep their (precisely defined) purchasing power as nearly as possible constant.
- “ (...) it seems **neither necessary nor desirable that the issuing bank legally commits itself to maintain the value of its unit.**”

# Core insights by Hayek

“It seems to me to be fairly certain that

(a) money generally expected to **preserve its purchasing power approximately constant** would be in continuous demand so long as the people were free to use it,

(b) with such a continuing demand depending on success in keeping the value of the currency constant one could trust the **issuing banks to make every effort to achieve this better than would any monopolist** who runs no risk by depreciating his money,

(c) the issuing institution could achieve this result **by regulating the quantity of its issue**, and

(d) such a regulation of the quantity of each currency would constitute the **best of all practicable methods of regulating the quantity of media of exchange** for all possible purposes

# A taxonomy with four dimensions of „money“

- Privately issued money versus money issued by government
- Electronic money versus physical money
- Money with fixed-rate convertibility guaranteed by the issuer versus „fiat money“ with no convertibility commitment by the issuer
- Centralized accounting mechanism versus decentralized accounting mechanism (peer-to-peer)

Electronic

Public

**Libra**

Peer-to-Peer

Convertible at a fixed rate

Central Bank Reserves/  
**Central Bank Digital Currency**

Bank Deposits/  
Stable Coin

Cash

Central Bank Deposit  
Gold-Standard

FedCoin

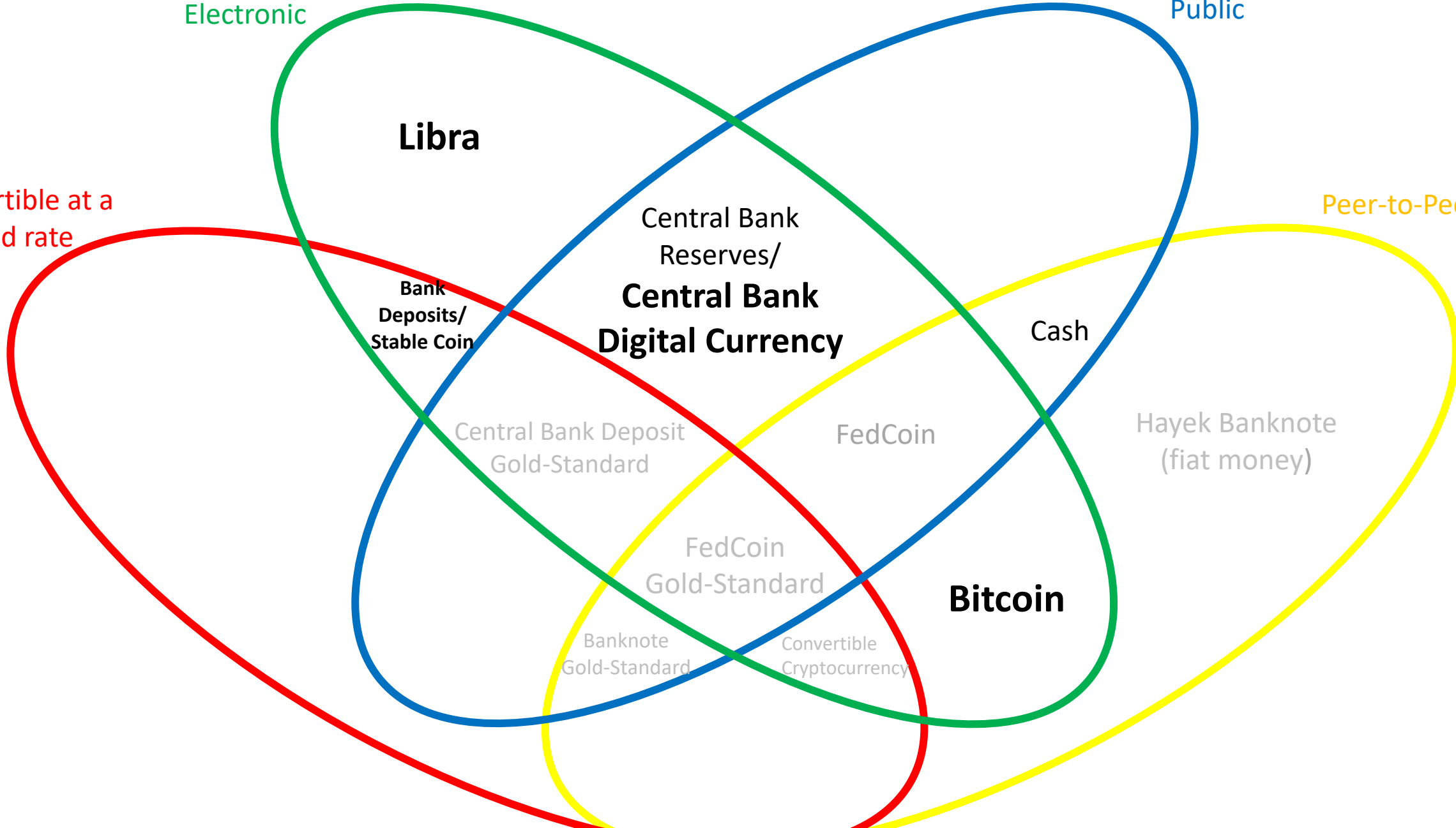
Hayek Banknote  
(fiat money)

FedCoin  
Gold-Standard

**Bitcoin**

Banknote  
Gold-Standard

Convertible  
Cryptocurrency



# What kind of money is Libra?

- Inconvertible: „**Fiat money**“ like bank notes and central bank digital currencies
  - **Electronic** like bank deposits and central bank reserves held by commercial banks
  - **Private** like deposits held with a commercial banks
  - **Centralized accounting mechanism** like bank deposits
- 
- Libra and also Bitcoin can be regarded as „base money“, as they do not provide a legal obligation of the issuer(s) to exchange them at a fixed rate into another asset



# How is Libra created?

- Monetary base is typically created in transactions, i.e. by
  - Purchase of foreign assets (fx interventions)
  - Purchase of domestic assets (government or corporate bonds)
  - Loans to banks (refinancing policy)
- Libra is created by the purchase of established currencies („foreign assets“)
- Bitcoin and other cryptocurrencies are created in a mining process, i.e. without transactions. They can be regarded as a form of helicopter money

# Is Libra a „stable“ currency?

- Libra is defined as a currency basket
- The currency basket of the Special Drawing Right

| Currencies defining the basket     | Fixed amounts of basket currencies (x) | USD exchange rate (on 25 June 2019) (y) | USD value of basket components (xy) | Relative weight of components (xy as % of USD basket value) |
|------------------------------------|--|---|-------------------------------------|---|
| US-Dollar                          | 0.58252                                | 1                                       | 0.58                                | 41.91   |
| Euro                               | 0.38671                                | 1.14                                    | 0.44                                | 31.61   |
| Chinese Yuan                       | 1.0174                                 | 0.15                                    | 0.15                                | 10.64   |
| Japanese Yen                       | 11.9                                   | 0.01                                    | 0.11                                | 8.01  |
| Pound Sterling                     | 0.085946                               | 1.27                                    | 0.11                                | 7.83  |
| USD value of basket (25 June 2019) |  |   | 1.39                                | 100   |

# Is Libra a „stable currency“?

- Exchange rate risk: Libra deposits are to a large degree FX-deposits
- Liquidity risk:
  - Libra holds its reserves in bank deposits (risk of bail-on in major banking crisis) and in government bonds (risk of losses in case of high sales)
  - Risk that Libra is not accepted by stores in case of a „run“. It is not legal tender.
- Convertibility risk: Libra gives no binding commitment to convert its assets back into the public monies

# Main areas of currency competition

- Functions of money
  - Money as an object
    - Means of payment
    - Store of value („safe asset“)
  - Money as a unit of account/unit of measurement
    - Numéraire: Unit in which absolute prices of goods are measured (temporal and intertemporal comparisons)
    - Standard of deferred payments: Unit in which the intertemporal value of a debt is measured
    - Standard for accounting: Unit in which the increase of the net value of a firm is measured

# What makes currencies attractive?

- **Libra as global means of payment:**
  - Most payments are made within countries
  - With **electronic payments systems** the liquidity dimension becomes less relevant.
- **Libra as a safe asset:**
  - Stability in terms of the basket does not guarantee stability in terms of the national unit account. Inconvertibility and liquidity risk
- **Libra as unit of account:**
  - **Hayek:** “I believe it would prove that **suitability as a unit of account** would rule the roost.”
  - It is unlikely that Libra will outcompete established currencies as unit of account
  - Some potential in developing countries. But in countries with unstable monetary systems the dollar is already well established as parallel currency.

# Stability guarantees for the store of value function

|  | Libra   | Euro bank deposits   | Euro bank notes issued by ECB   | Euro reserves held with the ECB |
|--|---|--|---|---------------------------------|
| Convertibility obligation by issuer            | No: fiat money  | Convertible in euro bank notes   | No: fiat money  | No: fiat money                  |
| Legal Tender                                   | No  | No   | Yes   | No                              |
| Mechanisms to guarantee the stability of value | <ul style="list-style-type: none"> <li>Reserve holdings of the Libra association</li> </ul> | <ul style="list-style-type: none"> <li>Banking supervision</li> <li>Capital buffers</li> </ul> | <ul style="list-style-type: none"> <li>Article 127(1) TFEU defines the ECB's primary objective to maintain price stability.</li> <li>ECB has the monopoly over the issuance of euro monetary base</li> <li>ECB is actively engaged to control the value of the euro with its monetary policy instruments and so far quite successful</li> </ul> |                                 |
| Risk of a total loss                           | High. No stabilization mechanism in a crisis of confidence                                  | Limited by deposit insurance and lender of last resort function of ECB                         | Hyperinflation is very unlikely   |                                 |

# How a stable Libra would look like

- Libra gives a legally binding convertibility commitment for Libra deposits
- Libra holds its reserves in the form of central bank deposits (synthetic CBDC): model of Alipay
- Libra issues \$-Libra, €-Libra, ¥-Libra, £-Libra. A global currency is not required for an efficient global payments system

# Summary: Potential for Libra is limited

- Libra is a great business model for Facebook: It is neither equity nor debt.
- For users in advanced economies Libra is not very attractive:
  - Inconvertibility: No intrinsic value
  - Stability: As a currency basket Libra cannot be targeted to national price indices
  - No legal tender: Risk of full implosion impairs store of value function
  - Fundamental flaw: An effective global payments system doesn't need a global currency
- For developing countries with unstable domestic monetary systems Libra could be attractive.
- A truly stable Libra would be much less attractive for Facebook



# Libra versus Bitcoin and traditional bank deposits

|  | Libra                              | Bitcoin                      | Traditional bank deposits (Money stock M1)          |
|--|------------------------------------|------------------------------|---|
| Issuing process                        | Purchase of established currencies | Mining                       | Credit creation                                     |
| Supply                                 | Fully elastic: Demand determined   | Inelastic: Supply determined | Determined by supply (banks) and demand (borrowers) |
| Convertibility                         | Unclear                            | Inconvertible                | Full convertibility into bank notes                 |
| Stability (store of value, safe asset) | Stable in terms of currency basket | High volatility              | Stable in terms of the domestic unit of account     |
| Liquidity                              | Facebook Community                 | Very limited                 |   |
|  |                                    |                              |   |