INSTITUTE OF INTERNATIONAL MONETARY RESEARCH

Analysis and insight into trends in money and banking, and their impact on the world's leading economies

Four Lectures on the History of Monetary Theory

by

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Lecture 4

Central Banking

We can never hope
to preserve the economic order
unless we take from government
the monopoly of issuing money.

F.A. Hayek.

Central Banks and Government

- Observation shows the close connection between management of the currency, central banks and government
  - Again, as with money, are central banks a State creation?
  - Or are they an unplanned result of commercial life?
- Many were born as a means of public finance
  - Monetary monopolies in exchange for loans to the Government, as with the Bank of England: 1694, capital £1.2 m, doubled in 1709, lent to the State at 3%
  - A Spanish example: during the Thirty Years War the Count Duke of Olivares enlisted the help of Phillip IV to try and turn municipal pawn houses and savings banks into a national central bank, to finance the wars against France
- The Bank of Amsterdam, a contrary example

Central Banks as heads of bankers' clubs

- Charles Goodhart *The Evolution of Central Banks* (1988)
  - The press and the clearing house function in Scottish banking
  - The development of non-profit-maximizing and non-competitive central banks to supervise and regulate the commercial banking system fulfils a necessary and natural function, says Goodhart
  - Independence?
    - ❖The role of the Fed in the 2007 crisis
- Has the spontaneous evolution gone too far?
  - Growth in the size and power of the State
  - The parallel growth of public debt

The logic of central banking

- I have another story to tell (or is it another fairy tale?) after the progress towards fiat money
  - Charles Goodhart (1988): The slow transformation of commercial central banks into governmental institutions: non competitive, non profit maximising bodies, maintaining financial discipline and giving support in times of crisis
  - My experience at the Bank of Spain
    - ❖Hjalmar Schacht succeeded the notorious Rudolf Havenstein as president of the Reichsbank in 1923. He launched a new currency, the *Rentenmark*, by means of extensive exchange controls, which were a novelty. A further step in turning the central bank into a state bank, especially after its nationalisation in
    - ❖When I was at the Bank of Spain in the 'sixties the functions of the Bank were seen as:
      - ❖ Banker of the Government
      - ❖ Manager of the public debt
      - ❖ Keeper of the currency and Instrument of the Government's monetary policy
      - ❖ Manager of the foreign reserve, and exchange and capital exports controller (with IEME)
      - ❖ Supervisor of the banking system

      All directly overseen by the Government. Contradictory?

The Bank of Amsterdam

- Adam Smith's interest in an 'invisible hand' institution
  - Long digression in *WoN* IV.iii
- "Amsterdamsche Wisselbank" set up by the Municipality in 1609
  - As Adam Smith explained initially a way of bettering the state of the coinage without doing so physically: coinage in any state was credited in the books of the Bank at face value and could be used for virtual exchange
  - Bullion could be deposited for safekeeping against a receipt, valid for 6 months; and the same sum was credited to the depositor in bank money
  - In effect, a temporary advance of bank money against bullion
- Another step towards a paper money system, sounder than John Law's 1716 project

Central Banks come to life

- Bank of Amsterdam (sort of) 1609
- Swedish Riksbank 1668
- Bank of England 1694
- Banque de France 1800
- Reichsbank 1875
- Swiss National Bank 1805
- Austrian National Bank 1816
- Danish Rigsbank 1818
- Banco de España 1856 (Banco de San Carlos 1782)
- Bank of Japan 1882
- Banca d'Italia 1893
- Federal Reserve 1913

Scottish free banking, success or failure?

- Paper money of private banks, invigilated by clearing house / publicity, and convertibility deferral at 5%. Liquidity in BoE paper or coin
- According to Lawrence H. White, *Free Banking in Britain: Theory, Experience, and Debate, 1800–1845* (Cambridge University Press, 1984) the free banking system of Scotland (1717-1845) was superior to that of England preside over by the BoE on two counts: that there were fewer financial crises north of the Border in that period; and fewer bank failures
- Murray Rothbard, in "the Myth of Free Banking in Scotland" (2112) criticizes Larry White's theory by stressing that Scottish free banking in fact relied on the bills or the gold of the BoE
- George Selgin, in three CATO posts (2018), defends the Scottish banking system from the taint that it was unstable *per se*. The fractional reserve Scottish banking system based on BoE paper would have posed no threat to market stability had it not been for the restrictive legislation promoted by Scotch special interests in 1765

Henry Thornton and central banking

Henry Thornton: *An Enquiry into the Nature and Effects of the Paper Credit of Great Britain (*1802)

- Thornton was the originator of the idea that the BoE should lend almost without limit to the 'money market', as Bagehot would it some 70 years later
- He spoke of "circulating paper", to include "bank notes" and "bills of exchange" – a wide definition of money that did not (yet) include sight deposits
- "Fallacy involved in the supposition that Paper Credit might be abolished"
- "Reasons for never greatly diminishing its [BoE] notes"
- "The tendency of a too great Issue of bank paper to produce and excess of the market price above the mint price of gold."

Ricardo and central banking

- Ricardo had many things to say on money and the convertibility of the pound, in print and in Parliament
  - Especially sensible on the resumption of cash payments in 1819
- On the institution of the central bank he proposed: (you are in for a shock)
  - ❖ *Proposals for an Economical and Secure Currency* (1816). "uniformity in the value of the circulating medium is an object greatly to be desired" but at minimum cost. Instead of resuming cash payments as before 1797 ("a better system can be *imagined*") and having gold coins circulated, which was expensive, he would have a note circulation, convertible to bullion for a minimum of £500. Ricardo deserved index numbers
  - ❖ In the posthumously published *A Plan for the Establishment of a National Bank* (1824) Ricardo proposes the nationalisation of the issue of money by taking that department from the hands of the Bank of England. The Government would buy the debt it owes the Bank. The cheap medium of paper instead of the expensive of gold. Could the Government be safely entrusted with the power of issuing money? Five independent commissioners. The Bank and country banks would redeem all their notes. In new money.

Lender of last resort

- Considered and advised by Henry Thornton
- 1825 crisis saved, as Bagehot retells
  - ❖Jeremiah Harman a director of the BoE later explained how the Bank "lent to every man"

    "We lent […] by every means possible and in modes we had never adopted before: we took stock on security, purchased Exchequer bills, we not only discounted outright, but we made advances on deposits of bills of exchange to an immense amount, in short, by every possible means consistent with the safety of the Bank …"
- In the 1837 crisis the Bank of England had to be lent gold by the Banque de France
- Bagehot ch. XII: "nothing can most aggravate the panic than […] non-lending or niggardly lending."

Walter Bagehot

- Peel's Act (1844): the rule of separation between the currency and commercial departments apparently changed the money market
- *Lombard Street* (1873) considered the locus classicus of central banking in the 19th c.
  - Takes the 1844 Peel's Act for granted: deals with situations of crisis that were thought to had disappeared with the strict application of
  - Mainly touched on the need for BoE to lend and discount paper in the event of a crisis: quotes 1825 director of the Bank
  - Many of the functions of central banks grew after Bagehot wrote (Peter Conti-Brown, *New Rambler*, 2016)
  - Flooding the **market**, not saving single companies in distress: "Lend freely, at a penalty rate, against good collateral." denies this quotation can be found in *Lombard Street*
    - Bagehot put all the weight on 'lend freely in a crisis'
    - Penalty rates at the BoE window so as to force borrowers back onto the inter-bank market

What Bagehot did not say of the BoE

See Peter Conti-Brown: “Misreading Walter Bagehot” *The New Rambler* (2018)

- Bagehot thought free banking the natural system
- “The Bank of England, by the effect of a long history, holds the ultimate cash reserve of the country; whatever cash the country has to pay comes out of that reserve; […] It is as the Bankers' Bank that the Bank of England has to pay it.”
- Discounted the gains from centralisation of the gold reserve
- As to his famous dictum: “lend freely, at a penalty rate, against good collateral”, only the first proposition was his thought for penalty rate intended to force the needy onto the interbank market; and good collateral was a matter of course.

Central banking rules or discretion

- Independence of Central Banks from the Government
  - Not only a matter of what is best, but also of what is possible, as we saw in 2007-2010
- The governance of Central Banks
  - Questions of remit, institutional arrangements, personnel as studied by Public Choice
  - Rules or discretion
  - Milton Friedman’s rule
  - Robert Lucas’s critique of macroeconomic models
  - Taylor rules.
- Tim Congdon’s rule
  - Broad money supply and nominal (and real?) GDP
  - A strong empirical regularity
- Bagehot: Some claim that the BoE should keep a hundred per cent reserve against this liability, but “I am satisfied that laying down ‘such a hard and fast rule’ would be very dangerous; in very important and very changeable business, rigid rules are apt to be often dangerous. […]

Heterodoxies: the New Keynesians and money

- The new Keynesians: fiscal rather than monetary policies
- IMF and EU recipes: austerity based on tax hikes rather then expenditure cuts

But see:

- Tim Congdon: "In praise of expansionary fiscal contraction" *Economic Affairs*, (Feb. 2015)
- To be read: Alesina, Favero, Giavazzi, eds.: *Austerity, when it works and when it doesn't*, Princeton University Press (2019)

Going back to the history of the theory of money … and central banking

- Looking back to the small change problem, to the forlorn attempt of John Law to replace gold with paper, to the efforts of silver bugs to do away with gold, to the arguments of the advocates of fiat money in the 20th c.
- Are we witnessing another move to compete with big state currencies?
  - Fed by the abuse of currencies for political goals, as is the late depreciation of the Chinese yuan
- Is the theory of central banking in a healthy state?
  - Students of the development of Central Banks do not pay enough attention to public choice theory and to the political and democratic framework of monetary theory and policy
  - It’s all very well to say what Central Banks should do but who guarantees the right Governor and Council will be chosen?
  - Are Central Banks to blame for what happened in 2017, leaving apart their measures once the crisis was upon us?

What has happened to my twin stories

- We have created fiat currencies enslaved to Government and the State
- As regards Central Banks, is it development or unalloyed progress?
- "The development of non-profit-maximizing and non-competitive central banks to supervise and regulate the commercial banking system" of which Charles Goodhart spoke
- We have learnt to avoid some mistakes, as Bernanke told Milton Friedman and Ana Schwartz about the lessons of the Great Depression
- But Government Central Banks are a part of the modern growth of Leviathan
- Also, much of the uncertainties of Monetary Theory reflect our ignorance and our attempt to correct it top down, as Hayek would say

Monetary choice is of the essence

Why do we use this currency instead of that?

- ➢The free marketeers appeal to the desire of ordinary people to have a currency with a stable purchasing power, widely accepted, and one that is here to stay
  - We want a currency with moderately stable purchasing power
  - We want to be sure that people will accept the currency we previously received in payment for the goods and services we sell
  - We want to be sure of obtaining finance at non-usurious interest rates
  - We want to be sure that assets denominated in that currency will not catastrophically lose their value in a financial crisis
- ➢The statists see the tradition of a currency issued by a State-cum-Central Bank is the essence of the social institution of money
  - The issuers use ‘legal tender’ as a guarantee that the money we receive for the goods and services we sell will in turn be accepted by all and sundry (especially the Tax Authority)
  - In this way the fact that money is a network good has been used to promote state currencies that have proved unstable and prone to financial crises
- ➢Little choice left

Enter digital and crypto currencies

- Distinction between digital and crypto currencies
  - Digital currencies (such as Facebook's Libra) fully piggyback on existing strong currencies as the Hong Kong dollar does on the US dollar: to keep the fixed exchange rate orthodox economic policies have to be respected in HK
  - Crypto currencies (such as Bitcoin of Ethereum) are attempts to create new fiat currencies not backed by a basket of goods or a basket of currencies
  - In that sense the US dollar the Euro, the Yen ironically are crypto or fiat
- Digital currencies reduce monetary transaction costs and therefore make it easier to prefer 'better' currencies when legal tender money is abused
- Crypto currencies open the way to fiat currency competition when legal tender currencies suffer from the effects of public choice maladies

Digital and crypto currencies as network goods (I)

- Let's propose with Kevin Dowd* a Demand for Money hypothesis based on the Quantity Theory ($M/P = Y/V$). If we see changes in velocity as attempts to correct for unwanted changes in nominal income, then

$$M/P = \alpha Y^{\beta} \qquad (1)$$

  where demand for real money (M/P) is a function of αY (compensated income). Then is real income as a proxy of the level of transactions, β is the income elasticity of demand, which empirical studies suggest might be in the region of 0.5.
- If $\beta = 0.5$, the real demand for money is proportionate to the square root of the level of real income
- So the demand for a cybercurrency will be that of a luxury good, depending on the growth of real income with a lag

* Kevin Dowd: *New Private Currencies. A Bit–Part Player* (IEA, 2014, pg. 56)

Digital and crypto currencies as network goods (II)

- This suggests a corresponding new currency N demand function of the form:

$$M_N P_N = \alpha Y^{\beta}\theta \qquad (2)$$

  where M_N is the demand for the digital currency, P_N is the relative price of the new currency against goods and services (or the inverse of the price level measured in the new currency), and $0 \leq \theta \leq 1$ is the digital currency market share.
- So the demand for a digital or a cryptocurrency will be seriously dependent on the country's real income and its market share
- Hence, a large market share at the start (or an imposed legal tender) is crucial for the success of a new currency

Fakebook's Libra as a *digital* currency

- How the launching of the libra is being planned
- A 'Libra Association' of companies will run the currency
  - Facebook: 4.7bill users/month
  - More than two dozen partners
  - Initial capital $1bn
- The currency pegged to a basket of international currencies, HK style
- Domiciled in Geneva and regulated by Swiss Financial Authorities
- People will have free wallets created by 'Calibra', an independent company
- Transactions secured in distributed ledgers under the blockchain system
- Libra starts with a huge share of goods and services market
- Different from a fiat money, as the dollar or the euro are
- The unhooking of libra demands creation of confidence, a long process
  - Perhaps fractional reserve lending will open a chink in the wall of state currencies

Hayek and the privatisation of money

- Hayek’s reaction to the misbehaviour of monetary oligopolists: the privatisation of money
  - ❖ *The Denationalisation of Money.* IEA, 1976
  - ❖ *The Denationalisation of Money. The Argument Refined.* IEA, 1990
- Suddenly, Hayek's idea does not seem so far-fetched
  - ❖ Was Hayek unknowingly speaking of crypto-currencies?
  - ❖ What future for crypto currencies?
  - ❖ Don’t forget they are network goods
- I would not give central banks for dead

State moneys and Central Banks not out

- Civilised countries learn
  - In the 19th c. advanced countries fixed the exchange to gold and developing countries in practice floated
  - In the 21st c. advanced countries float while developing countries dollarise or peg the exchange
  - Democracies could learn to manage moneys properly
- Proper money management is growingly valued
- A Central Bank is not an island
  - Flexible exchange rates do not insulate economies fully
  - Agreement among quasi-imperial currencies

Conclusions to the lectures

- **Perennial problems**

✓ The value of money
✓Inflation and deflation
✓Interest and usury
✓Money and growth
✓Money and the trade cycle
✓Money and international trade
✓Monetary management and political power
✓Central Banks and crypto currencies