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History of Economic Thought

5. Money and Banking in the Nineteenth Century

Leipzig University | May 13, 2024

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V. Money and Banking in the Nineteenth Century

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1. The Institutional Background

- Great Britain on a *de facto* gold standard since 1717
- Gresham's law: gold was slightly overvalued against silver at the legal rate

British Banking Developments

- Bank of England monopoly of note issue in London area, corporate banking outlawed
- Scottish banks began operating early 1700s, almost free entry into banking
- Irish currency and banking separate and later
  - Bank of Ireland established by Act of Parliament 1781, opened 1783
  - Ratio of Irish to British pound: 108:100

18th Century Monetary Thought: Cantillon and Hume

Scottish Banks and Country Banks

Bank Expansion

- Scottish circulation of currency almost entirely in the form of private banknotes
- In England, private country banks expanded outside London, especially in 1780s: nearly 400 banks by outbreak of French war

Both systems based on the Bank of England

- Scottish banks kept their ultimate reserves at the BoE
- Country banks kept their reserves through city banks at the Bank of England
- Some gold coin circulated, but increasingly centralized in the BoE
- For most businessmen, money meant banknotes (or deposits subject to cheque)
- *De facto*, Bank of England notes were the ultimate legal tender, although not *de jure* until much later (as we shall see)
- Credit instruments, especially bills of exchange, also widely used in commerce in stead of banknotes or coin

War and Inflation

War with France from 1792

- Crisis 1793: nearly one third of all country banks suspended payments
- Bank of England save through 1793, but increasingly felt the strain
  - Inflationary war finance
  - Drain of gold abroad
  - Increased domestic demand for gold

Run on the Bank of England

- Massive run in February 1797, on the country banks and the Bank of England
  - All banks suspended redemption of notes, including the Bank of England
- BoE “forced to” suspend by the Bank Restriction Act of 1797
  - Temporary measure renewed again and again until 1821
- Result: British monetary system based on inconvertible paper

Cantillon on Money

The "Cantillon Effect"

- Cantillon showed the gradual effects of money creation
- Prices change in a step-by-step process as money enters the economy, depending on where it first came in, leading to redistribution

Money and the Interest Rate

- The Cantillon effect also holds if money enters loan market first:
  - The rate of interest will temporarily decline
- If money goes first to consumption, the market rate of interest might rise
  - Entrepreneurs increase borrowing to expand production in order to meet higher (monetary) demand
- Fundamental difference between specie and bank notes: latter is costless

International Monetary Equilibrium

What happens when new money enters the economy?

- Expenditures on imports go up
- Domestic prices increase, lowering exports, adding to imports
- Temporary unfavourable balance of payments: money flows out to pay for imports
- Money supply reduced, prices fall, incomes fall, leading to reversal: exports increase and imports fall

Hume's Price-Specie Flow Mechanism

Money supply increases in one country

- Prices rise in one country, reducing its exports and increasing its imports
- Unfavourable balance develops, money flows out to pay
- Contraction of the domestic money supply the result, fall in prices
- Reversal of unfavourable balance results

Bullionism self-defeating

- The free market equilibrates international money flows, balance of payments

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2. The Bullionist Controversy, Part 1

Development of the Situation

- Restriction initially not problematic: the Bank was cautious, the government did not make demands on it
- First problems: large domestic price inflation 1799
- Spring 1800: war expenditures and inflationary bank financing accelerate

Depreciation and Inflation

- Pound sterling depreciated 9 percent in Hamburg (the main foreign exchange market)
- Price of gold (bullion) rose 9 percent above par
- Domestic price inflation accelerated

Walter Boyd (1754-1837)

The First Bullionist

- Private banker engaged in government financing
- Floated loan for Austria 1794
- Received contract for £30 million in British government debt
- Depended on BoE financing: Bank refused to extend discounts in 1796, Boyd, Benfield and Co. went bankrupt 1800
- Boyd first critical of BoE for tight credit policies in 1796-97

The *Letter to Pitt*

- Written November 1800, published 1801
- Boyd now denounced the Bank for causing the inflation
- Boyd went to France, prisoner there, back in England 1815 and MP

Boyd's Arguments

Three New Unwelcome Conditions

- Premium of gold bullion over the pound sterling
- Depreciation of the pound sterling in foreign exchange markets
- A general rise in domestic prices

A Common Cause

- Uncontrolled issue of bank notes
- Since there is no obligation to redeem bank notes in specie

"The premium on bullion, the low rate of exchange, and the high prices of commodities in general, are… symptoms and effects of the superabundance of paper."

Boyd's Distinction between Money and Credit

By the words 'Means of Circulation', 'Circulating Medium', and 'Currency', which are used almost as synonymous terms in this letter, I understand always ready money, whether consisting of Bank Notes or specie, in contradistinction to Bills of Exchange, Navy Bills, Exchequer Bills, or any other *negotiable* paper, which form no part of the circulating medium, as I have always understood that term. The latter is the *Circulator*; the former are merely *objects of circulation*.

- Boyd followed Smith in making this sharp distinction
- Bank deposits included with notes as fully ready money

Boyd's Diagnosis: Paper Inflation

Bank Notes

- When inflation takes the form of banknotes, it cannot drain abroad
- Paper inflation must lead to a rise in domestic prices
- Depreciation of the pound against gold and foreign exchange follow

Who's to Blame?

- Boyd placed the blame on the Bank of England
  - Country banks could not have expanded their circulation unless their reserves expanded proportionately
  - Their reserves in the form of Bank of England notes
- In the absence of irredeemable Bank of England notes, a system of private banks redeeming notes in gold could function well (following Smith)

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Boyd on Paper Inflation

The circulation of Country Bank-notes must necessarily be proportioned to the sums, in specie or Bank of England notes, requisite to discharge such of them as may be presented for payment: but the paper of the Bank of England has no such limitation. It is itself now become (what the coin of the country only ought to be) the ultimate element into which the whole paper circulation of the country resolves itself. The Bank of England is the great source of all the circulation of the country; and, by the increase or diminution of its paper, the increase or diminution of that of every country-Bank is infallibly regulated.

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The First Anti-bullionists

Sir Francis Baring (1740-1810)

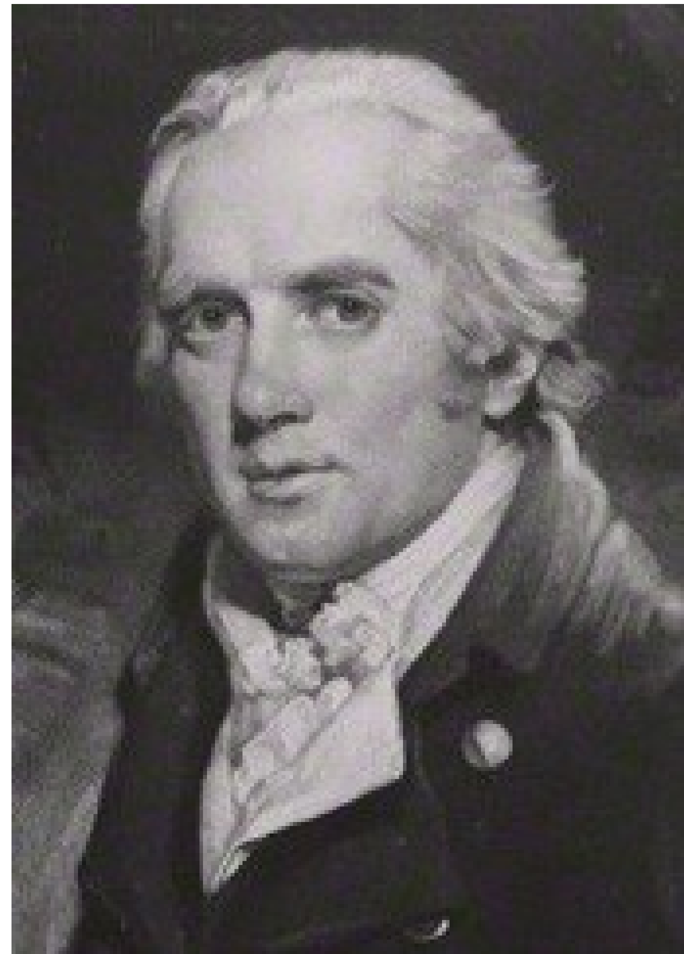
- Founder of Baring Brothers and Co., chairman of EIC and longtime Whig MP
- Most famous response to Boyd
- Supported restriction, but worried that it would lead to depreciation
- Attacked Boyd: the BoE did not cause the rise in domestic prices
- Only the movement on the exchanges was due to monetary factors

Henry Boase (1763-1827)

- Exchange rates have nothing to do with the money supply
- Exchange rates determined by the balance of payments
- Balance of payments in turn solely determined by real factors

Henry Thornton (1760-1815)

- Successful banker, MP 1782
- Leader of the "Clapham sect"
- Moderate, with pro-Bank bias
- First reflections on money 1793: the BoE must play a supporting, expansionist role
- Gave testimony after Restriction Act, only London banker to do so
- Suspension necessary to avoid monetary contraction, crisis



An Enquiry into the Nature and Effects of the Paper Credit of Great Britain

Against Boyd

- Published February and March 1802
- The leading anti-bullionist work
- Focus on real factors as the cause of depreciation and inflation
- Moderate in conceding the theoretical possibility of monetary factors – but not the cause in this case

Against Deflation and Contraction

- Thornton argued at length that the horrors of deflation and bank credit contraction had to be avoided at all costs
- He even urged the Bank to neutralize outflows of gold by inflating the supply of notes as a replacement

Thornton on Money

Real Bills Doctrine

- Real-bills limit on inflation does not work with inconvertible paper
- Quantity of paper money can be increased indefinitely, the monetary value of real bills is inflated
- The "limit" becomes indefinitely elastic, an open channel for credit inflation
- Holding the bank rate under the profit rate (e.g., usury laws) would stimulate borrowing → the money supply expands to meet the demand

Thornton and Velocity

- Clearing systems
- Frequency of payments
- Confidence in the money
- All influence the velocity of money

The Money Supply

- Banknotes, bank deposits, and bills of exchange included in the money supply

Francis Horner

Moderate Anti-Bullionist

- Important review of Thornton's *Paper Credit* for the *Edinburgh Review* in October 1802
- Brief, systematic account of Thornton, reinforced his fame
- Horner emphasized the unclear boundary between money and non-monetary assets: there is no clear boundary, it's simply a matter of degrees of convertibility

Peter, Lord King (1776-1833)

- Distinguished Whig lineage: first Lord King married Locke's cousin
- Generally a militant
  - Against the corn laws
  - For Catholic emancipation
- Not very active in the House of Lords before entering the bullionist debate

Lord King's Contribution

Peacetime Restriction

- Peace with France 1802 – but the government asks for extension of restriction
- So long as the balance of payments is unfavourable, suspension must continue

Lord King's Speech

- In House of Lords 22 February 1803
  - The unfavourable balance of payment is a consequence of increasing the quantity of paper money
- Important pamphlet follows May 1803: *Thoughts on the Restriction of Payments in Specie at the Bank of England and Ireland*
- Lord King's contributions the culmination of bullionist analysis

Lord King's Analysis

Supply and Demand and Money

- There are two causes of depreciation
  - Loss of confidence by the public
  - Excessive increase in the quantity of notes
- Both causes will soon appear with any inconvertible paper money

Foreign Exchange

- Lord King develops the purchasing power parity theory
- Exchange rate of an inconvertible currency is set by its relative purchasing power
- Denounced the BoE as an unjust and damaging monopoly
- Lord King won Francis Horner for bullionism

Irish Debates

Irish Developments

- Bank of Ireland sounder than BoE in 1797, but took advantage of restriction
- Irish bank far more inflationary, Irish notes depreciated against gold and £

Debates 1804 over Irish Currency

- Thornton converted to (moderate) bullionism
- Suggestion that Irish pound be made redeemable in Bank of England notes
- Henry Brooke Parnell, first Baron Congleton (1776-1842)
  - Applied bullionist principles to Irish case
- James Maitland, eighth Earl of Lauderdale (1759-1839)
  - Endorsed tough measures in Ireland
  - The depreciation of the Irish pound due to excessive paper issue
- Irish bank officials pursued harder policies, brought Irish pound back to par

The Three Schools

The Anti-Bullionists

- Denied any role of money, explained everything from real factors
- Mainly the apologists of the Bank and the government

The Bullionists

- Focused on monetary factors as the fundamental cause
- Real factors only play a temporary and subordinate role
- The Bank of England's overissue of paper the cause of all evils
- Headed by Lord King and William Boyd

The Moderates

- Agnostic on theory, either monetary or real factors could be responsible
- A question of empirical investigation which set of factors important in a given case
- Became convinced of bullionist position on empirical grounds
- Thornton and Horner

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3. The Bullionist Controversy, Part 2

New Round of Inflation

- First round of debates ended c. 1804, BoE pursued less expansionary policies
- Bank of England started inflating again in 1809 to finance the war
- Bank note circulation increased from £17.5 to £19.8 million from Nov. 1808 to Aug. 1809
- Pound depreciated 20 percent on the foreign exchange
- Gold reached 20 percent premium over legal par

The Key Elements of the Second Round of Debates

- Ricardo's contribution
- *The Bullion Report*
- Resumption Act of 1819

Mechanistic Bullionism

An extreme version of bullionism

- Only changes in the money supply important
- Real factors had no, not even short-term effects
- John Wheatly (1772-1830) first of the mechanists
- *Remarks on Currency and Commerce* 1803
  - Only monetary factors explain the flow of gold
  - Prices move strictly in proportion to the quantity of money
  - Foreshadows modern split between nominal and "real"
- David Ricardo the other main mechanist
- The key bullionist agitator in new debates from 1809

Ricardo's Contribution

Ricardo's First Publication

- "Price of Gold" in the *Morning Chronicle* 29 August 1809
- Two more letters followed shortly
- The letters expanded into Ricardo's first book: *The High Price of Bullion, a Proof of the Depreciation of Banknotes*, published early 1810

Ricardo's Great Impact

- Partly due to hard theorizing
- Partly an impressive command of empirical and institutional facts
- Key distinction of Ricardo's theory
  - Inflation and depreciation are purely monetary phenomena
  - Real factors play no role at all

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Ricardo's Bullionism

- The goal: revive bullionism and convert Henry Thornton
- There is never a shortage of money, specie or otherwise:

If the quantity of gold or silver in the world employed as money were exceedingly small, or abundantly great... the variation in their quantity would have produced no other effect than to make the commodities for which they were exchanged comparatively dear or cheap. The smaller quantity of money would perform the functions of circulating medium as well as the larger.

- Only monetary factors cause inflation or influence exchange rates
  - Money is always, even in the short run, neutral
  - To the economy, to everything except overall prices

Ricardo's Bullionism

Monetary vs. Real

- Ricardo postulated rigid split between the monetary and real economy
- Money is merely a "veil" that overlays the real economy
- Value or price can only have real determinants – hence, Ricardo's focus on the labour theory of value
- This idea is the origin of the split between micro and macroeconomics

Compromise Bullionism

- Ricardo argued for redemption in bullion (bars of gold) only
- Gold restricted to wealthy financiers, in 4th edition of *High Price* in 1811
- Ricardo in the first rank of bullionist writers primarily due to his grasp of the facts, his untiring activity in refuting his opponents in detail

The *Bullion Report*

The Bullion Committee

- Ricardo sent a copy of *High Price* to Francis Horner.
- Horner an instant convert, moved to set up a select committee in the House
- The bullion committee issued its report in June 1810, recommending return to gold standard in two years' time
- Written by Horner, Thornton, and William Huskisson (1770-1830), a leading Tory MP

Resulting Debates

- Argument for resumption on strictly empirical grounds, the *Report* squarely in the moderate camp
- Publication led to anti-bullionist campaign master-minded by the government and the Bank
- Pamphlet war: about 90 pamphlets published over the issue 1810-11
- Climax May 1811: the *Report* finally debated, defeated in the House
- Parliament resolved that banknotes everywhere esteemed on par with gold coin
- Lord King's practical protest: he would henceforth only receive rent payments in gold, or in bank notes at their real market value
- The government forced to officially make notes legal tender, first for payment of rent, then for all payments 1812

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4. Robert Peel and Resumption

Post-War Economic Crisis

- BoE credit contraction
- Money supply contraction
- Pound sterling appreciation

Time For Resumption?

- Parliament slow to act

Post-War Depression

Monetary Contraction

- Bank of England credit fell
  - £44.9 million outstanding in August 1815, £34.4 million a year later
- Country bank note circulation contracted
  - From £22.7 million in 1814 to £19 million in 1815 to £15.1 million in 1816
- Total money supply fell from £60.7 million to £50.4 million 1815-16
- Fall in prices: from peak of 198 in 1814 to 135 in 1816 (1790=100)

Appreciation

- Gold premium driven down by contraction, expectation of return to gold
  - From high of £5. 10*s.* in 1813, c. 45 percent over legal par of £3. 17*s.* ½*d.*
  - To low of £3. 18*s.* 6*d.* in October 1816, a premium of less than 1 percent
- Hamburg exchange reached par in 1816
- Parliament slow to adopt resumption
- Coinage Act of 1816 meant official adoption of a monometallic gold standard

Post-War Depression

Reluctance to Resume Specie Payments

- Due to widespread phobia about deflation
- Establishment wanted to resume cheap credit policies
- Anti-bullionists blamed falling prices, depression on contraction of money supply!
- Pound began to depreciate once it became clear resumption was delayed and that inflation was underway again
  - Hamburg 5 percent above par, domestic prices reached 150 in 1818

Inflationists Emerge

- Thomas (1783-1856) and Matthias Attwood (1779-1851), bankers
  - Advocated inconvertible paper, inflation and public works programmes
  - Spokesmen for Birmingham industries that had profited from wartime boom
- Alexander Baring (1774-1848), the BoE, and the landed aristocracy joined the Attwoods in opposing resumption

Sir Robert Peel the Younger (1788-1850)

- Son of one of the wealthiest industrialists in Britain
- Destined for high office in his father's High Tory tradition
- Graduated Oxford 1808, his father purchased a seat in Parliament for him
- Initially followed paternal lead: opposed *Bullion Report* in 1811

Sir Robert Peel and Resumption

Parliamentary Resumption Committee 1819

- Peel chosen as chairman
- Peel's great reversal: orchestrated a report favourable to resumption
  - Broke with Peel Senior over the issue

Why the Reversal?

- The Rev. Edward Copleston (1776-1849)
- Tutor to Peel at Oxford, a Tory but moderate liberal in church affairs, important in reforming Oxford
- Criticized inflation and depreciation for the destructive effects on creditors, holders of fixed incomes
- *Letter to the Rt. Hon. Robert Peel… On the Pernicious Effects of a Variable Standard of Value* on 19 January 1819
  - First edition sold out immediately, three more within a month
  - *Second Letter…* in March, elaborating ill effects of inflation on the poor
- Probable that Copleston's pamphlets the first thing Peel read on monetary matters

Resumption

Coinage Act of 1816

- Monometallism
- The sovereign valued at £1 replaced the guinea valued at £1. 1*s.*
- Silver only used as subsidiary coins – token coinage

Peel's Resumption Act 1819

- Resumption originally planned for 1823, took place 1821
- UK back on the gold standard 1821 – after 24 years of paper money
  - Bank of England still had central role
  - Gold coins circulated, but gold holdings centralized in the Bank
  - Banknotes and deposits the main form of money circulating

Boom and Crisis of 1825

Expansionary Boom 1823

- Fuelled by BoE credit expansion
  - Bank credit rising from £17.5 million in August 1823 to £25.1 million two years later
- Boom in speculative Latin American stocks especially
- Exchanges turned unfabourable in late 1824, gold began to flow abroad
- Internal drain in 1825: Britons began taking gold out of the banks

Crisis 1825

- In February, Bank reserves at their lowest in 5 years, at £8.86 million
  - Fell to £3.0 million end of October, £1.0 million by the end of the year
- Government refused suspension of specie payments despite pleading from the Bank
  - Panic stemmed with massive loans, rediscounts
- Clear that the gold standard not enough to stem inflationary credit expansion

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5. The British Banking Crises

- Rechartering of the Bank of England in 1833
- The boom of the 30s
- The crash of 1837

Rechartering the Bank

New Bank of England Charter

- Bank of England up for recharter in 1833
- Monopoly on notes within 65 mile radius of London retained
- Bank of England notes granted legal tender

Changes in Banking Law and Practice

- Restrictions on joint-stock (corporate) banking removed
- Only remaining restriction: BoE note monopoly in London
- Corporate banks now no longer kept their own gold reserves, held BoE notes instead
- Stamp Act 1815 introduced stamp tax on bills of exchange
  - Bills previously widely used as means of payment
  - The tax had to be paid every time a bill was rediscounted
  - BoE notes exempt from the tax

The Boom of the 1830s

- Huge increase in number of joint-stock banks: 14 before 1833, 44 new banks founded 1833-35, 59 in 1836 alone
- Credit expansion followed – large increase in bank money
  - Country bank note circulation rose from £10 million to over £12 million 1833-36
  - Mostly from corporate banks: their issue expanded from £1.3 to £3.6 million
  - Fuelled by the Bank of England: discounts rose from £1.0 million to over £11 million end of 1835
- Total bank credit rose from £24 million to £35 million 1833-37

The Crash of 1836/7

- Financial crisis and panic ensued end of 1836/beginning of 1837
- Fall in specie reserves
- Sharp contraction of bank credit
- Production declined, numerous bankruptcies
- Increase in unemployment

New Boom and Crash

- New boom 1837-38

… followed by another crisis in 1839

- Bank of England reserves fell to extreme low of £2.4 million
- Kept on expanding credit in violation of its own rules
- Government contemplated new restriction in July and August
- The Bank only saved by massive credits from the Bank of France and from Hamburg

Clear something had to be done

- New select committee in Parliament 1840 and 41
- Leading up to possibility of changes to the Bank's charter in 1844

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6. The Currency School

Key features

- Distinction between notes and deposits
- The currency principle

Key People

- James Pennington
- Colonel Robert Torrens
- Samuel Loyd, Lord Overstone

The Currency Principle

That only is a sound and well-regulated state of things, when no greater numerical amount of paper is in circulation than would have circulated of the precious metals if no paper had existed.

James Pennington (1777-1862)

- Merchant, accountant, consultant to government

Key Contributions

- three memoranda written to William Huskisson, president of the board of trade, 1826-27

First Memo: Banking and the Money Supply

- private banks extend loans, creating demand deposits, and thus expanding the money supply

Second Memo: First Indication of the Currency Principle

- Paper (bank) money is a danger to the gold standard, but can be neutralized:
- "It is possible to regulate an extensive paper circulation...to render its contraction and expansion...subject to the same Law as that which determines the expansion and contraction of a currency wholly and exclusively metallic."

Third Memo: the Currency Principle

- The issue of notes must be regulated to conform to the movements of gold
- If BoE is the monopoly issuer, simply keep its earning assets (securities) fixed
  - Then it could only issue notes against new gold
  - A marginal 100 percent cover
- However, Pennington did not see how deposits could be regulated the same way

Colonel Robert Torrens (1780-1864)

Anti-Bullionist, for the Currency Principle

- Originally an anti-bullionist, attacked resumption in 1819 and after
- 1833 *both* attacked resumption *and* supported the currency principle
- 1837 his key pamphlet on banking: *Letter to Lord Melbourne*

Banking and the Money Supply

- Notes and deposits are parts of the money supply
- *Letter to Lord Melbourne* contains a lucid description of the process of credit expansion
- Later, Torrens wrote as if deposits were irrelevant
  - It was enough to ensure gold cover for notes
  - He assumed there was a fixed relation between notes and deposits

Samuel Jones Loyd, Lord Overstone (1796-1883)

- Banker and key financial expert in the 1830s

On the Money Supply

- Bank notes and bank deposits are completely different

Practical Reform Idea

- split the Bank of England into issue department and banking department
- Issue department could only issue bank notes against actual supply of gold
  - The supply of notes would behave as if it was a wholly metallic currency
- Banking department would be left totally free and unregulated
  - Since its credits and deposits were totally irrelevant to the money supply
- A reform very similar to this proposal eventually became the enacted in 1844

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7. The Banking School

Key Tenets

- Notes and deposits are equally money
- Banks and the money supply are “passive”, not drivers of inflation
- The Principle of Reflux and the Real Bills Doctrine

Key People

- Thomas Tooke and Fullarton
- Wilson and JS Mill

Opposition before Tooke

The Birmingham Economists

- Opposed the currency school from its inception
- The Attwood brothers and from early 1840s the widely circulated *Gemini Letters*
- Opposition to the currency school coupled with opposition to the gold standard
  - The goal was an inconvertible paper money and inflation
  - To stimulate spending, ensure full employment, inflate away government debt

Country Bankers

- Henry Burgess and the committee of country bankers, through the *Circular to Bankers*
- Attacked the BoE for being too restrictive

Bank of England and Governor John Horsley Palmer

- The Palmer rule: bank money should pyramid on top of a fixed ratio of reserves to liabilities
- The Bank never followed this rule – it never consistently shrank its issue when gold flowed abroad
- In pamphlet war of the 1830s, Palmer blamed inflation on everyone but the bank
  - Bank runs, reckless practices at private banks, shipment of funds abroad

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Thomas Tooke (1774-1858)

Statistics

- Originally a bullionist
- *History of Prices and the State of the Circulation from 1792* (1838-48)
- Tooke converted by his statistical work
  - Rising prices had been due solely to bad harvests and obstructions of trade
  - Falling prices after 1815 due solely to resumption of trade and better harvests

"The prices of commodities do not depend upon the quantity of money indicated by the amount of bank notes, nor upon the amount of the whole of the circulating medium: but that, on the contrary, the amount of the circulating medium is the consequence of prices."

Key Banking-School Tenet

- Banks and the money supply are passive
- They respond to changes in real economic activity

John Fullarton (c. 1780-1849)

The Law of Reflux

- Bank notes are only lent to the borrower and are returnable to the issuer
- The issue of notes does not increase the money supply, since notes are returned
- Torrens's response: this only holds if repayment of the notes is immediate

The Real Bills Doctrine

- It is impossible for banks to overissue, if they only discount real bills
  - Short-term, self-liquidating loans matched by inventories of goods in process
- Problem: the RBD overlooks that the demand for loans is not independent of the terms on which loans can be had
  - E.g., the rate of interest or conditions of repayment
- Fullarton supported the "doctrine of the Bank Directors of 1810"
  - Banks cannot overissue so long as they stick to real bills
  - Even in 1810 – a year of inconvertible paper

James Wilson (1805-60) and J. S. Mill

Wilson, Founder of *The Economist*

- Adamant in defense of the gold standard
- Opponent of the currency principle as embodied in Peel's Act
- Real bills doctrine enough to avoid overissue, even absent gold standard
- BoE could never overissue in convertible system

J. S. Mill and the Banking School

- *Under the gold standard,* banks and the money supply are purely passive elements
- Business cycles from waves of speculation due to overoptimism
- Prices rose first, dragging up the money supply; then fell, dragging it down
- Mill's squaring of the circle: includes "creditworthiness" in the money supply
  - An increase in notes or deposits from loans to a person is precisely conterbalanced by a decline in that person's creditworthiness

Free Banking?

Bank of England Central

- For the banking school as a central supplier of money
- For the currency school as the key operator in implementing the currency principle

Free Banking

- Core idea: free entry into banking would regulate the currency automatically
  - Banking school version: James William Gilbart (1794-1863)
  - Currency school version: Henry Brooke Parnell
- Later discussion of free banking along similar lines
- The key issue is still the difference between banking-school and currency-school views of money and banking

Smith's Matrix

	Free Banking	Central Banking
Currency School	Henry Parnell Henri Cernuschi Otto Hübner Ludwig von Mises	MacCulloch G. W. Norman Loyd Knies
Banking School	James Wilson J. W. Gilbart Henry MacLeod Jean Courcelle-Seneuil Michel Chevalier Adolf Wagner Leopold Lasker	Thomas Tooke John Fullarton J. E. Cairnes

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8. Peel's Act and Monetary Orthodoxy

The Theoretical Victory of the Currency School

- Reform pushed through by Peel's Bank Act of 1844
- Embodied the currency principle
- Note issue monopoly by the BoE: only issued against full cover
- Reform prepared by the Bank of England
- Act passed 19 July 1844, its provisions extended to Scotland and Ireland next year

Reality of the Reform

Details of the Reform

- BoE split in issue and banking department
- Issue department: in charge of banknotes, additional notes above £14 million only allowed if fully covered by gold
- Banking department: in charge of banking, deposits. No regulations

The Practical Victory of the Banking School

- The Act only regulated the note issue, BoE free to expand deposits
- No one questioned the regalian right over currency – *laissez faire* in money production never considered

Banking and the Boom of the 1840s

Bank of England Deposit Expansion

- The Bank of England immediately started expanding the deposit side
- End of 1844, total discounts £2.1 million and total bank credit £21.8 million
- End of February 1846, total discounts at £13.1 million and total credit at £35.8 million
- Reason: Bank lowered the discount rate to 2.5 percent, below the market rate of interest – and kept it there

Credit Expansion and Boom

- Bank deposits grew from £12.2 million to £24.9 million 1844-46
- Stimulated huge railroad boom: £180 million of construction planned 1845-46, double the total of previous decade
- Boom continued: discount rate raised, but consistently kept under market rate of interest

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Crash and Suspension

Crisis

- Banking system in deep trouble by April 1847
- Financial panic April-May, eased pressure on BoE
- New credit expansion from July
- New crisis September-October, bankruptcies
- Banks runs spread through the provinces, banks started to contract credit sharply

Bank of England Surrenders

- BoE reserves down to 14 percent of deposits
- Asked the government to suspend Peel's Act
- Government agreed 25 October

The Orthodoxy: Lender of Last Resort

New System Accepted

- Suspension of Peel's Act in a crisis came to be expected, happened again and again
  - At first, resulted in debates and investigations (1847 and 56)
  - Then, became routine (1866 and later)
- Great Britain on the gold standard, but business cycles and banking crises continued
  - In a crisis, the gold standard was suspended, Great Britain went temporarily off gold
  - Currency school economists defended the system set up in 1844 (e.g., Torrens) – despite clearly being at odds with their stated goals

Walter Bagehot and the New Orthodoxy

- Classic *Lombard Street* 1873
- In a crisis: suspend Peel's Act to prevent external drain;
- alleviate internal drain by lending freely, albeit at penalty rates, to all banks/merchants of good reputation/credit
- The doctrine of the central bank as *lender of last resort* cemented into place

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