Lecture 5: Banking Innovation in Europe and America

- Limitation of Medieval Banking
- Dutch Banking System
- Fractional reserve system of Swedish Banks
- Creation of Central Bank
- The Evolution of Banking in England and America

Banking developments after Medici

- Banking developments after Medici
  - The Italian banking system as the model for those North European nations to achieve the greatest commercial success.
  - Afterwards the Dutch and the English, the Swedes, in Amsterdam, London and Stockholm, places of next decisive wave of financial innovation
  - In 17C banking developments The seventeenth century saw the foundation of three distinctly novel institutions that, in their different ways, were intended to serve a public as well as a private financial function.

The Amsterdam Exchange Bank (*Wisselbank*)

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  - set up in I609 to resolve the practical problems created for merchants by the circulation of multiple currencies in the United Provinces, where there were no fewer than fourteen different mints and copious quantities of foreign coins.
  - By allowing merchants to set up accounts denominated in a standardized currency, the Exchange Bank pioneered the system of cheques and is direct debits or transfers that we take for granted today.

The Amsterdam Exchange Bank (*Wisselbank*)

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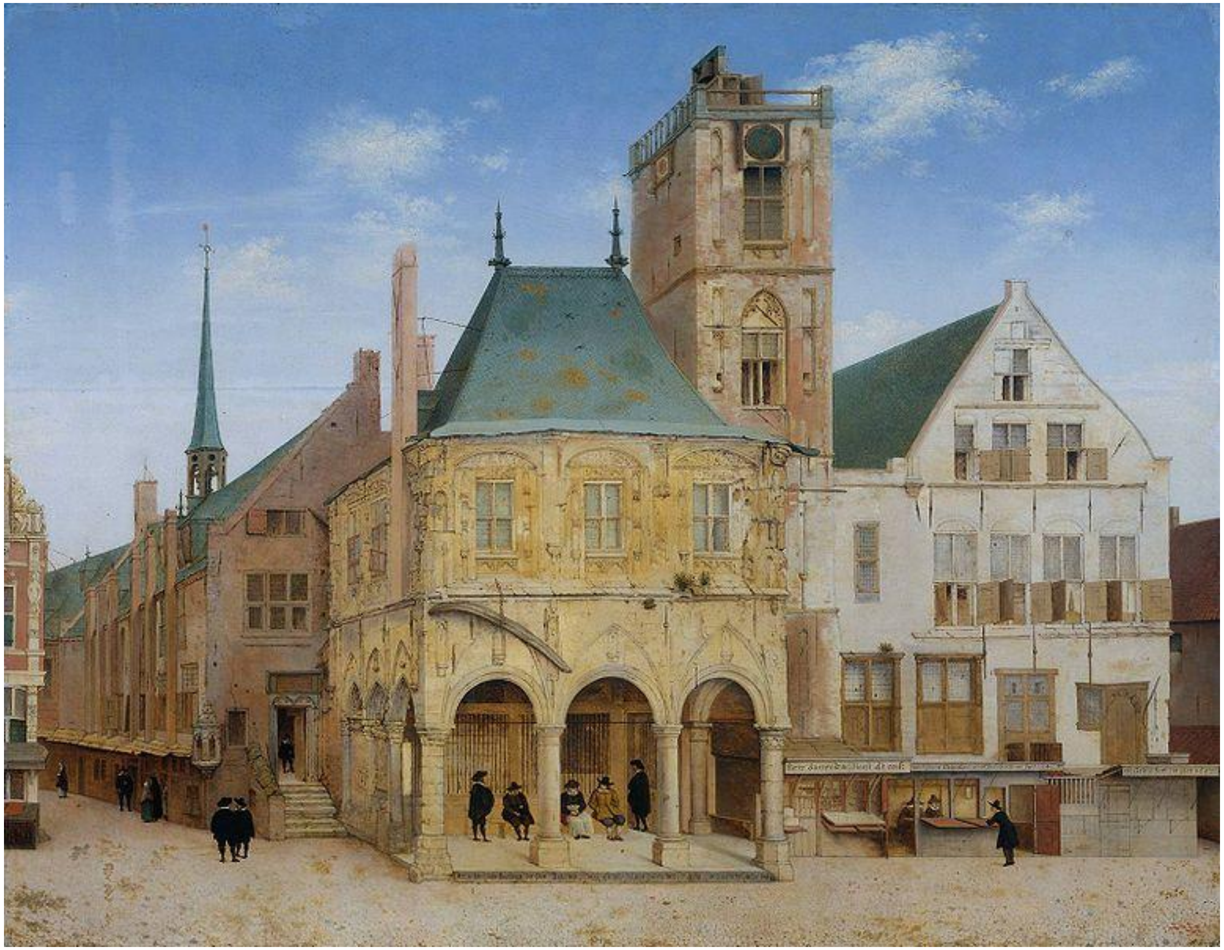
  - This allowed more and more commercial transactions to take place without the need for the sums involved to materialize in actual coins.
  - One merchant could make a payment to another simply A " by arranging for his account at the bank to be debited and the counterparty's account to be credited.

The Amsterdam Exchange Bank



The Amsterdam Exchange Bank (*Wisselbank*)

- The Amsterdam Exchange Bank (*Wisselbank*)
  - maintained close to a 100 per cent ratio between its deposits and its reserves, a limitation of this system
  - As late as 1760, when its deposits stood at just under I9 million florins, its metallic reserve was over 16 million. A run was therefore a virtual impossibility, since it had enough cash on hand to satisfy nearly all of its depositors if, for some reason, they all wanted to liquidate their deposits at once.
  - This made the bank secure, no doubt, but it prevented it performing what would now be seen as the defining characteristic of a bank, credit creation.

Fractional reserve system of Swedish Banks

- Stockholms Banco
  - Half a century later, in 1657 broken through limitation of 100 percent reserve.
  - performed the same functions as the Dutch *Wissellbank*, the Banco was also designed to be a *Lanebank*, meaning that it engaged in lending as well as facilitating commercial payments.
  - Since depositors were highly unlikely to ask en masse for their money, only a fraction of their money needed to be kept in the bank’s reserve at any given time.

Fractional reserve system of Swedish Banks

- the Stockholms Banco in 1657
  - By lending amounts in excess of its metallic reserve, it essentially introduced fractional reserve banking, exploiting the fact that money left on deposit could profitably be lent out to borrowers.
  - The liabilities of the bank thus became its deposits (on which it paid interest) plus its capital; its assets became its loans (on which it could collect interest) plus its reserves.

Stockholms Banco

- The founding ofStockholms Banco
  - The bank was granted by King Charles X Gustav to create an exchange bank and a loans bank.
- The bank itself was no great innovation as it was simply an imitation of the large and successful banks in Amsterdam and Hamburg that had been founded earlier in the 17th century, but it was hoped that the bank would help to stabilize Sweden's currency.

Creation of Central Bank

- the creation of the Bank of England in 1694.
  - The third great innovation of 17C,
  - Designed primarily to assist the government with war finance (by converting a portion of the government's debt into shares in the bank),
  - the Bank was endowed with distinctive privileges. From 1709 it was the only bank allowed to operate on a joint-stock basis; and from I742.

Creation of Central Bank

- the creation of the Bank of England in 1694.
  - It established a partial monopoly on the issue of banknotes, a distinctive form of promissory note that did not bear interest, designed to facilitate payments without the need for both parties in a transaction to have current accounts.

The Bank of England

The main Bank of England façade, c. 1980

The three banking innovations

- The three banking innovations throughout the Western world
  - a) cashless intra-bank and inter-bank transactions
  - b) fractional reserve banking and
  - c) central bank monopolies on note issue,
  - the very nature of money evolved in a profoundly important way.
  - No longer was money to be understood, as the Spaniards had understood it in the sixteenth century, as precious metal that had been dug up, melted down and minted into coins.

The three banking innovations

  - Now money represented the sum total of specific liabilities (deposits and reserves) incurred by banks.
- Credit was, quite simply, the total of banks' assets (loans).
  - Some of this money might indeed still consist of precious metal, though a rising proportion of that would be held in the central bank's vault

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The banking, credit and money

- The three banking innovation
  - established the notion of credit , most of it would be made up of those banknotes and token coins recognized as legal tender along with the invisible money that existed only in deposit account statements, which essentially replaced money.
  - Financial innovation had taken the inert silver of Potosi and turned it into the basis for a modern monetary system, with relationships between debtors and creditors brokered or ‘intermediated’ by increasingly numerous institutions called banks.

Modern banking or modern monetary system

- Modern banking, brought about by financial innovations
  - the basis for a modern monetary system is relationships between debtors and creditors brokered or ‘intermediated’ by increasingly numerous institutions called banks.
  - Safe-keeping, payment or bill clearing, or other financial services for a fee, Bill discounting, Taking deposits and Making loans
  - Fractional reserve system
  - Central Bank

Modern banking or modern monetary system

- Money represents the sum total of specific liabilities (deposits and reserves) incurred by banks, designated by M0, M1, M2, M3, etc.
  - which can be equated with the sum total of bank assets (loans), credits (of bank customers) and other assets , which may include precious metal, real estates, financial assets or deposits at other banks, currency.
  - But most of bank assets would be made up of those banknotes and token coins recognized as legal tender along with the invisible money.

The core function of modern banking institutions

- The core function of modern banking institutions
  - information gathering and risk management.
  - Their source of profits lay in maximizing the difference between the costs of their liabilities and the earnings on their assets, without reducing reserves to such an extent that the bank became vulnerable to a liquidity crisis or a run - a crisis of confidence in a bank’s ability to satisfy depositors, which leads to escalating withdrawals and ultimately bankruptcy: literally the breaking of the bank.

The Evolution of Banking

- The financial revolution in 17C
  - preceded the industrial revolution, in 18C to 19C, and rapid economic growth that began in Britain in the late 18C and then spread to Western Europe and Europe’s off-shoots of large-scale settlement in North America and Australia.
  - Financial historians disagree as to how far the growth of banking after the seventeenth century can be credited with the acceleration

The Evolution of Banking

- The financial revolution in 17C
  - the decisive breakthroughs in textile manufacturing and iron production, which were the spearheads of the industrial revolution, did not rely very heavily on banks for their financing.
  - But banks played a more important role in continental European industrialization than they did in England’s.

The Evolution of Banking

- The financial revolution in 17C
  - It seems plausible that the two processes were interdependent and self-reinforcing, rather than a simplistic causal relationship between the two.
  - That is, more sophisticated financial institutions caused growth or growth spurred on financial development, etc.

The Evolution took different forms: England

- English banking
  - English banks evolved to merchant banking, and, for regulatory reasons, in this period were nearly all private partnerships.
  - like Barings, who specialized in trans-Atlantic merchant banking. Others specialized in the business of the landowning elite, the so-called ‘country banks’, whose rise and fall closely followed the rise and fall of British agriculture.

The Evolution took different forms: England

- English banking
  - Gradually, by a protracted process of trial and error, the Bank of England developed public functions, in return for the reaffirmation of its monopoly on note issue in 1826, establishing branches in the provinces and gradually taking over the country banks' note-issuing business.
  - Increasingly, the Bank also came to play a pivotal role in inter-bank transactions.

The Evolution took different forms: U.S.

- The banking evolution in the United States
  - Free banking system
    - there the aversion of legislators to the idea of over-mighty financiers twice aborted an embryonic central bank (the first and second Banks of the United States), so that legislation was not passed to create the Federal Reserve System until 1913.
    - Up until that point, the US was essentially engaged in a natural experiment with wholly free banking.

Free banking system

- *Free banking*:
  - Free banking refers to a monetary arrangement in which banks are subject to no special regulations beyond those applicable to most enterprises, and in which they also are free to issue their own paper currency (banknotes).
- The Money Supply in Free banking
  - Market forces control the supply of total quantity of banknotes and deposits that can be supported by any given stock of cash reserves, where such reserves consist either of a scarce commodity (such as gold) or of an artificially limited stock of "fiat" money issued by a central bank.

Free banking system

- No Role of Central Bank
  - In the strictest versions of free banking, however, there either is no role at all for a central bank, or the supply of central bank money is supposed to be permanently "frozen."
  - There is, therefore, no agency capable of serving as a "lender of last resort" in the usually understood sense of the term. Nor is there any government insurance of banknotes or bank deposit accounts.

The Evolution took different forms: U.S.

- Banking regulation in America
  - The 1864 National Bank Act had significantly reduced the barriers to setting up a privately owned bank, and capital requirements were low by European standards.
  - Also there were obstacles to setting up banks across state lines.
  - The combined effect of these rules was a surge in the number of national and state-chartered banks during the late nineteenth and early twentieth centuries, from fewer than 12,000 in 1899 to more than 30,000 at the peak in 1922.

The Evolution took different forms: U.S.

- Banking instability
  - Large numbers of undercapitalized banks were at recipe for financial instability, and panics were a regular feature of American economic life, most spectacularly in the Great Depression, when a major banking crisis was exacerbated rather than mitigated by a monetary authority that had been operational for little more than fifteen years.
- The introduction of deposit insurance
  - The deposit insurance in 1933 did much to reduce the vulnerability of American banks to runs.

The Evolution took different forms: U.S.

- Banking instability
  - However, the banking sector remained highly fragmented until 1976.
  - It was not until 1993, after the Savings and Loans crisis that the number of national banks fell below 3,600 for the first time in nearly a century.

The Evolution of Gold Standard

- Keynes' attack on Gold Standard in 1924
  - the gold standard as a 'barbarous relic'.
  - But the liberation of bank-created money from a precious metal anchor happened slowly.
- The advantages of gold standard :
  - Exchange rate stability: predictable pricing in trade and reduced transaction costs, the long-run stability of prices acted as an anchor for inflation expectations.
  - may also have reduced the costs of borrowing by committing governments to pursue prudent fiscal and monetary policies.

The Evolution of Gold Standard

- Difficulty of pegging currencies to a single commodity based standard
  - policymakers are then forced to choose between free capital movements and an independent national monetary policy. They cannot have both.
  - A currency peg can mean higher volatility in short-term interest rates, as the central bank seeks to keep the price of its money steady in terms of the peg.