

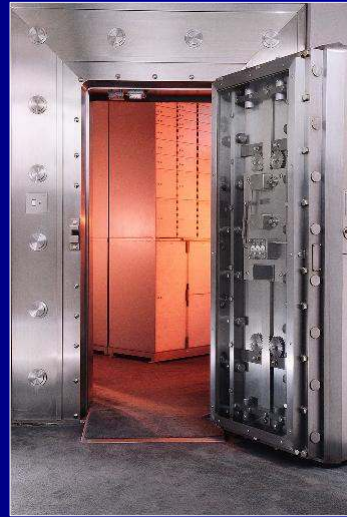
T&IF

Christianity & Economics 3

Money & Banking

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Money and Banking

- Violations of the PoPR in the money system.
- In order to check where things went wrong, it is necessary to explain:
 - ... what money is.
 - ... how the money & banking system developed over time.
- More technical talk.

Money as Precious Metal (PM) Coin (1)

- What is Money?
 - Good which is generally accepted in exchange for all other goods.
- Precious metal (gold and silver) good candidates to qualify as money:
 - Widespread desirability.
 - High value to volume ratio.
 - Infinitely divisible.
 - Highly durable (does not rust).

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Money as PM coin (2)

- Precious metal (PM) gets shaped into coins: gold/silver pieces of standard weight & fineness with elaborate imprinting. **Why?**
 - Why standard weight and fineness?: Relieves traders from having to weigh off PM with every transaction; just count out the coins.
 - Why imprinting/stamping?: Provides some recognition of genuineness; less easy to cheat on the alloy (pure gold/silver too soft for heavy use).

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Potential Violations of PoPR in PM Coin System

- Cheating by private persons: coin clipping and coin debasement. Break the law.
- Cheating by the state (the King): official coin debasement. No breaking of the law. The state (the King) reduces the PM content of coins but maintains the same "One Pound" denomination. Henry VIII.
- How was the King enabled to abuse his power in this way?
 1. Kings had the ancient monopoly right of coin production. No rival private coin production allowed.
 2. Kings enforced the use of their coins as the only allowable "legal tender". Private people denied the right to reject the King's coins.

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T&IF Money as Bank Money: deposits and notes

- In the course of the late Middle Ages, trade intensified.
 - Cumbersome, costly and dangerous to carry large amounts of PM coin around.
 - Baffling variety of different coins circulated side by side.
- Solution: Bank Money
 - Bank deposit (dates from the 1200s; Medieval Trade Fairs; but see New Testament's Parable of Talents).
 - Bank note (intensive use only much later: late 1600s – early 1700s).
 - Standardisation of money unit: banks accept various different coins but issue deposits and notes in standard coin or standard amount of PM

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T&IF Nature of bank notes & deposits

- Bank deposit (or positive deposit account balance): A book-keeping entry in the books of the bank, which acknowledges:
 - ... that the bank owes the holder a certain amount of PM coin.
 - ... that the holder can exchange deposits for PM coin on demand (demand deposit) or after a stipulated time (time deposit).
- Generally: Demand deposits used as money, time deposits used as investment.
- A bank note is the same thing, except that the bank issues a piece of paper (a note) certifying that it owes the holder a certain amount of PM coin redeemable on demand.

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Basics of deposit payment (1)

- Payment with notes is obvious, but deposit payment may need some explanation.
- Main condition: Payor and payee, say John and Mary, must both have a deposit account with a bank.
- Main idea: John pays Mary by ordering the bank to reduce its indebtedness to John and increase its indebtedness to Mary (bank transfer).

Basics of deposit payment (2)

- General principle: Payment between two parties by re-arranging their debt position vis-à-vis a third party (the bank) with which both have a debit/credit relation.
- Principle of deposit payment still the same in modern times. Only the technique of ordering your bank to do a deposit transfer has changed: cheque, credit card, electronic transfers.
- Advantages:
 - No coin needs to be carried around or transported.
 - No coin needs to leave the banking system.
 - Money cannot be stolen (unless the bank is robbed).

T&IF Interbank clearing and off-setting payments (1)

- Complication: What if Mary has an account with a different bank?
 - An interbank debt is created: John's bank needs to pay cash to Mary's bank.
- But there is a strong likelihood of off-setting payments between banks, if there is ..:
 - .. intensive trade between the clients of two banks;
 - .. the clients of two banks are equally poorly, or equally well, diversified over all regions and economic sectors.

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T&IF Interbank clearing and off-setting payments (2)

- Further scope for off-setting payments through clearinghouse facility: multilateral clearing.
- Why banks strive for "neutral interbank clearing":
 - Minimise cost of PM coin transport while still charging fee for effecting (long distance) payment.
 - Minimise loss of PM coin to other banks due to payment traffic (importance will become apparent later).

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Interbank clearing (3)

- Payment with bank note: no interbank clearing because no interbank debt created (debt of the *same* bank is transferred from payor to payee).

Full Reserve Banking (1)

- Aspects of Full Reserve Banking:
 - Banks issue deposits *only to actual depositors, i.e. people who bring PM coin (cash) to the banks.*
 - Deposit-issuing banks function merely as "houses of safekeeping" for people's cash.
- Result: Banks do not issue more deposits than they have cash in their vaults.
 - Deposits are fully backed by cash: *full reserve banking.*
 - The issue of monetary deposits has no influence on total quantity of money in circulation: as much money is put in circulation as is taken out of circulation.
- Same applies to Bank Notes.

Full Reserve Banking (2)

- Full reserve banks typically paid no interest on monetary deposits but charged fee for service.
- Banks typically provided both payment services (issued monetary deposits and traded in bills) and financial intermediation (lending and borrowing).

Fractional Reserve Banking (1)

- Because of superior payment convenience of deposits, people come to hold only a small % of their money in cash: banks hold large amounts of idle cash in their vaults.
- Banks started to issue more deposits than they had cash in reserve: "fractional reserve banking" (FracResBanking).
 - Deposits still fully convertible into cash but no longer fully backed by cash.
 - People still accept partially backed deposits, because of the payment convenience + deposits started to earn interest.
- Cash reserves still necessary:
 - To pay out cash on demand to deposit holders.
 - To pay out cash to other banks in case of adverse interbank clearing.
- Same applies to bank notes.

Fractional Reserve Banking (2)

- FracResBanks issue deposits/notes not only to cash depositors but also to borrowers and asset sellers:
 - FracResBanks pay their borrowers and sellers with their own IOUs (deposits & notes) rather than cash (PM coin).
 - FracResBanks can thus **CREATE MONEY** "out of nothing".
 - Not quite "out of nothing", but "out of risk acceptance".
 - Bank money creation inherently risky: FracResBanks cannot meet their obligations if all their deposit/note holders turn up to exchange deposits/notes for cash.

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Fractional Reserve Banking (3)

- Bank money creation and risk acceptance go hand-in-hand: seems entirely justified.
 - Advantage of money creation counter-balanced by risk acceptance.
- Is FracResBanking inherently fraudulent or a violation of PoPR?
 - Not if bank owners face the full risk.
- During 1300s to late 1700s, FracResBanks did face the full risk:
 - They were still full-liability partnerships.
 - There was no central bank to bail them out with easy cash.

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Fractional Reserve Banking (4)

- Early FracResBanks (1300s to late 1700s) limited their risk:
 - by not providing many outright loans with long maturity,
 - by lending mostly in the form of buying short-term (three months at the most) trade bills,
 - by buying only trade bills which were relatively safe and liquid (easily and quickly sold for cash without much value loss).
- Reason for importance of trade bills (until late 1800s): capital needs of non-corporate business consisted mainly of short-term working capital (wages, raw material) rather than long-term fixed capital (equipment, machinery, etc.).

Fractional Reserve Banking (5)

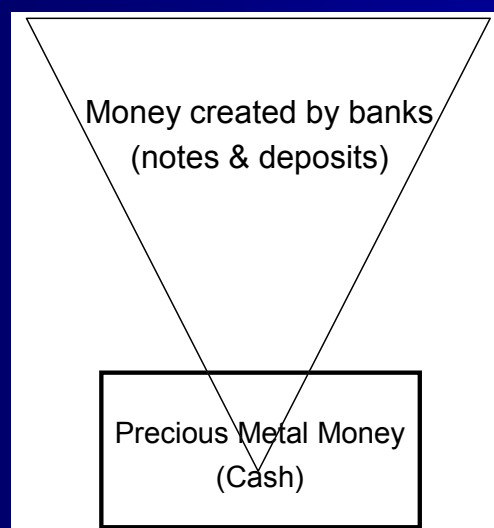
- During 1300s to late 1600s, there were better built-in brakes on bank money creation.
- General principle:
 - Cash is the life blood of FracResBanks; banks need cash to support their outstanding notes and deposits:
 - Finance cash withdrawals: % of deposits/notes is taken up in cash.
 - Finance adverse interbank clearing positions: % of deposits is used to pay clients of other banks.
 - Scarcity of cash limits the ability of FracResBanks to create deposit/note money.
- When cash consists of PM coin, it is inherently scarce.

Fractional Reserve Banking (6)

- Wider advantages of FracResBanking for the economy:
 - Trade and growth stimulated: money stock expands more easily, quickly and cheaply with "the needs of trade".
- Disadvantage/risk that goes with it:
 - Temptation for banks to overissue money to insufficiently creditworthy borrowers.
 - When confidence breaks: large money contraction when banks become large net sellers of bills.
 - Risk of run on banks.

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Inverted Pyramid of FracResBanking



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Definitive and derivative money

- Cash (PM coin) is the original money: *definitive* money.
- Bank money (notes and coin) is the *derivative* money:
 - It derives its general acceptability from being convertible into cash.
 - In itself, it is just a bookkeeping entry or a piece of paper.

Gold Standard (1)

- NOW the problems start (early 1800s): FracResBanks obtain guaranteed risk protection.
 - Risk protection 1: Banks could become limited liability corporations (initially only the central bank, but later all banks): violation of PoPR.
 - Risk protection 2: Central bank obtains the power to protect banks by providing cash which is easily and quickly created: violation of PoPR.
- How can central banks do this? Where is the violation of PoPR in this?

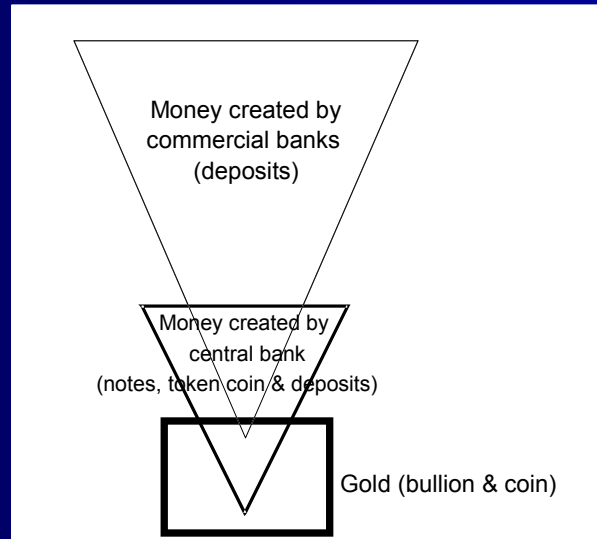
Gold Standard (2)

- How does the central bank obtain the power to protect private banks with easily available cash?
- Basically: because the state grants it certain privileges:
- 1. Monopoly of note issue.
 - Commercial banks allowed to issue only deposits.
 - Central bank issues deposits only to private commercial banks and the government.
 - Violation of PoPR: freedom to issue any IOU one wants.

Gold Standard (3)

- 2. Legal-tender status for central-bank money (notes and deposits)
 - Previously only PM was legal tender, definitive money; now, for the first time, bank money is legal tender.
 - Violation of PoPR: the freedom to accept or reject any type of money one wants.
- Result of Privileges 1 and 2:
 - Central-bank money (as legal tender) can function as cash reserves for commercial banks against their deposit issue
 - Central bank can create cash reserves "out of nothing" (like any FracResBank creates bank money) » cash reserves less scarce.
- Double inverted pyramid.

T&IF Inverted Pyramid of FracResBanking: CB-money as cash reserve



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T&IF Gold Standard (4)

- The central bank acquires the power to create legal tender (definitive money) which
 - ...
 - can function as cash reserve for banks.
 - Normal cash needs for untroubled banks.
 - Emergency cash needs for troubled banks: Lender of Last Resort (big banks cannot be allowed to fail).
 - **Systematic Risk Protection: Stimulates irresponsible bank behaviour (moral hazard)**
 - can finance government spending.
 - **Stimulates irresponsible government behaviour: no hard budget constraint.**
- Still: convertibility of notes into gold limits this power to some extent.

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Gold Standard (5)

- But the central bank also acquires a measure of control over commercial banks (cash reserve requirements, etc) to limit their deposit issue: protect its gold reserves against losses to public and foreign banks.
- The system collapsed after WW1, when governments borrowed too much money from the central bank (too much central bank money creation) to finance war. The central bank could then no longer honour its commitment to convert notes into gold.

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Fiat Money (1)

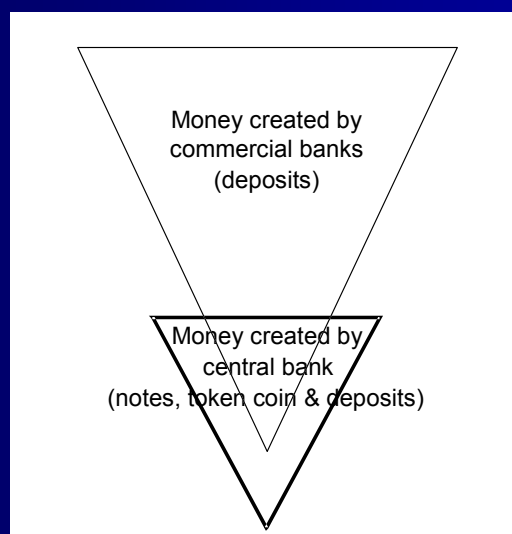
- Basically the same as the Gold Standard system, except that central-bank money is no longer convertible into gold.
- Fiat money: ***In***convertible central-bank money which is legal tender.
 - A debt which is not a debt; no obligation to redeem.
- Result: Central bank acquires the power of risk-free money creation ("the printing press").
 - Money creation and risk acceptance no longer go together for the central bank.

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Fiat Money (2)

- Use of that power: Even greater ability to provide risk protection for commercial banks and finance for government.
- Violation of PoPR (2) even more serious
- Even more (irresponsible) power given to:
 - Commercial banks
 - Government

Inverted Pyramid of FracResBanking: Inconvertible Fiat Money



Fiat Money (3)

- However: Commercial banks also NEED more protection
 - they take more risks (e.g. providing long-term loans to more capital intensive corporations); moral hazard
- Commercial banks (and the state) can more easily provide the economy with all the money it needs to finance growth in capital and in consumer spending power.
 - Further artificial stimulant of economic growth.
 - Inherent instability (big topic: must be left).

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