The Central Bank as a Clearinghouse

- Banks form the basis of the payment system
  - If Person A wants to pay Person B, one way to do that is to have Person A's bank pay Person B's bank with reserves
    - But this is suboptimal - payments are now constrained by the amount of reserves a bank has
  - Instead, the correspondent banking system is used
    - When Person A wants to pay Person B, they give a check to Person B (the check allows Person B to withdraw a certain amount of money from Person A's account)
    - If Person B deposits that check with his own bank, Person A's bank must pay Person B's bank some reserves but will be free of some of its liability to Person A (now Person B is responsible to pay Person B)
      - In this case, the reserve constraint is still the same
    - In reality, many checks are being deposited both ways, so much of the reserve exchanges cancel out, leaving only a small payment that actually needs to be made
      - This significantly reduces the reserve constraint
    - Instead of making a payment, they could swap IOUs (e.g. Bank A owes Bank B)
      - This is essentially like Bank B having a deposit in Bank A
      - When, in the future, Bank B needs to owe Bank A, this debt can be cancelled out
    - The other way to do this is also with a swap of IOUs
      - Bank A has a deposit in Bank B, so this deposit can be cancelled out when Bank A needs to pay Bank B
    - When a country bank is paying an urban bank (which is more powerful), the second method is used
- A clearinghouse is a group of member banks that are at approximately the same level in the hierarchy
  - The clearinghouse keeps reserves in gold and issues clearinghouse certificates to its member banks (keeping deposits for each member bank)
  - When any member bank needs to pay any other member bank, they pay the clearinghouse which then pays the other bank
    - This can lead to additional netting as all transactions are being done through the clearinghouse
  - If a member bank cannot pay, they can borrow from another member bank
    - If the member bank is insolvent (not just illiquid) they must default and will be kicked out of the clearinghouse
      - Their debts will be covered by all the other banks in the clearinghouse

    - Members of the clearinghouse are more elastic because they are backed by all the other member banks
- A central bank essentially acts like a clearinghouse
    - When a bank can't pay another bank, the central bank gives a "discount loan" to that bank

Federal Funds, Final Settlement

- The Fed Funds market is the overnight interbank lending market
- This allows banks with a surplus or deficit at the end of the day to zero out their surplus or deficit
    - Because a bank with a surplus can lend to a bank with a deficit at some rate
    - A Fed Fund is typically a promise to pay reserves tomorrow morning