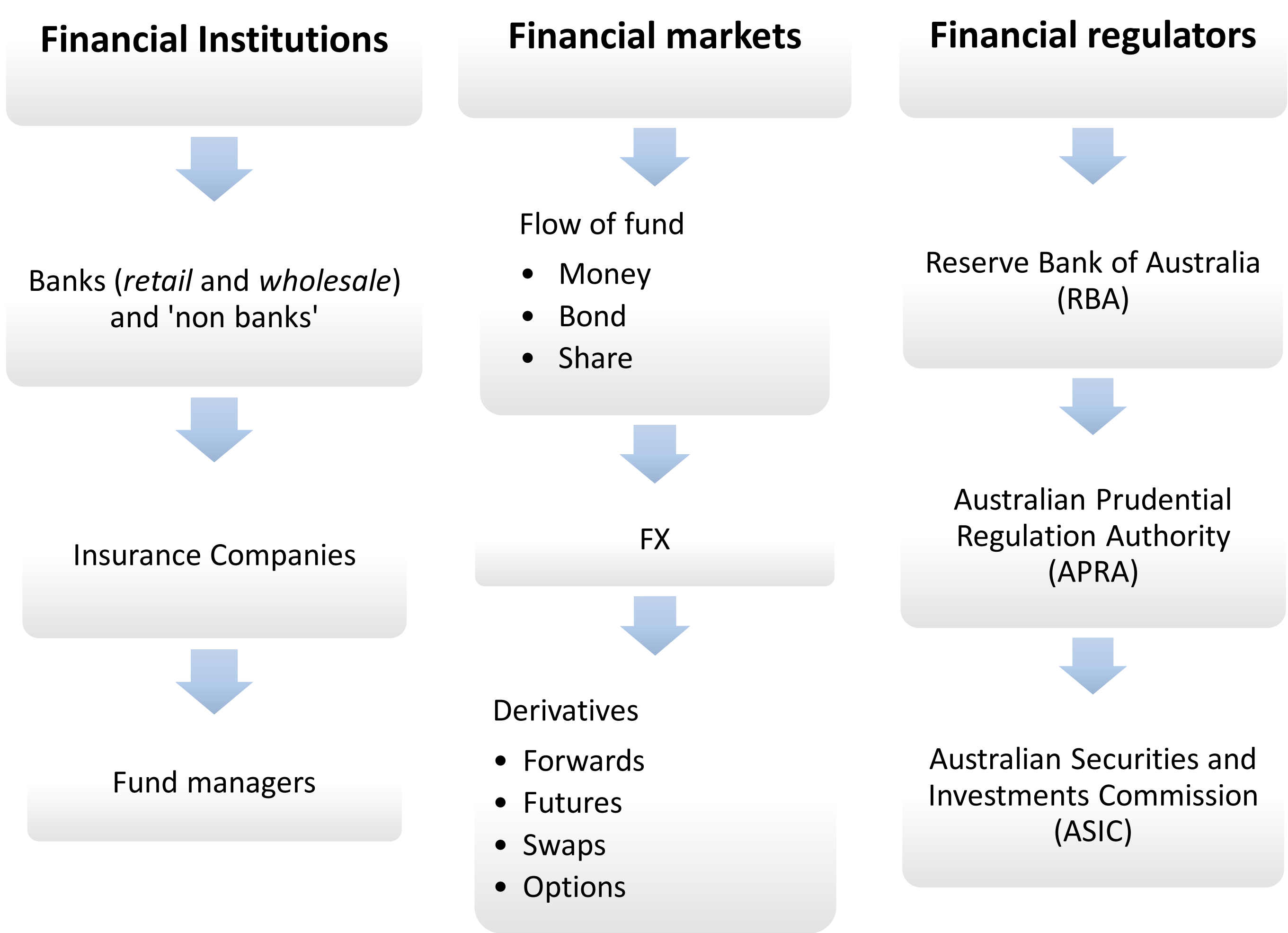
Topic 1: Introduction to the Financial System

Definition of a financial system:

A financial system consists of **financial institutions, markets** and **instruments** that together provide financial services for the economy.

Structure of the financial system



1. Financial Institutions
   Three main forms:
   i. **Banks**
      - An authorised deposit-taking institution (ADI), whether or not the ADI calls itself a bank.
      - Authorised by APRA
      - Most accept deposits, make loans and provide payment services for:
        - households, small bizs, organisations (retail customers) and/or
        - large companies and organisations (wholesale customers)
      - Some ADIs focus on retail banking eg. building societies whilst others on providing specialist services to wholesale customers
        - but these services are also provided by 'investment' or 'merchant' banks some of which are not ADIs

   Non-Banks
   Two types:

- Merchant Banks
  - Non-ADI financial institutions that mainly provide direct financing services to wholesale customers
- Mortgage originators
  - Non-bank lenders who fund loans from proceeds of mortgage-backed securities sold to investors
  - Global market for mortgage-backed securities collapsed as part of GFC, denying funds to this group of lenders → unable to lend → their share of the housing-loan market taken over by big 4 banks

These institutions are referred to as 'shadow banks' in the US. They had contributed to the financial crisis in the US due to their size and their activities were not strictly overseen by financial regulators.

ii. **Insurance companies**
- Divided into life, general and medical insurers

iii. **Fund managers**
- Financial institutions that contribute to direct financing by arranging the collective-investment of investors' funds in return for fees
  - **super funds** pool mostly compulsory conts of workers and arrange the investment of duns
  - **public unit trusts** are voluntary investment vehicles where investors buy 'units' in the funds

2. Financial Markets

i. **Flow of funds**

The following three markets contribute to the flow-of-funds function

1. The **money market** arranges trading in short-term debt securities that are known as 'discount securities'[1]
2. The **bond market** trades long-term debt securities that make regular interest payments and then repay their face value
3. The **share market** arranges trading in shares, which are perpetual equity securities

ii. **Foreign exchange market**
- Enables transactions to be made in different currencies because it arranges trading in foreign currencies

iii. **Derivatives market**
- The market for derivative trade contracts that can be used to manage forms of financial risk (hedging) and for speculation

3. Financial Regulators

i. **RBA**
- Main role: operation and stability of the banking system and influence monetary variables to manage performance of the economy
- Their five main functions
  1. **The implementation of monetary policy**
     - the RBA influences short-term interest rates (cash rate) to contribute to the Government's objectives for inflation, unemployment and economic wellbeing
  2. **The issue of notes and coins**
  3. **Banker to the Commonwealth Government**
  4. **The stability of the financial system**
     - the RBA works with other regulators and global agencies eg. IMF to avoid financial crisis, and monitors data to help identify threats to stability
  5. **The regulation of the payment system**

[1] Discount securities: short-term securities that raise proceeds that are less than their FV; repaid in less than a year; borrower only makes one payment which is the FV on maturity

– through its Payments System Board, the RBA is responsible for ensuring the payments system is safe and efficient

ii. **APRA**
- Prudential regulator of financial institutions (ADIs, insurance companies and superannuation fund trustees)
- Reviews the financial viability of individual financial institutions to ensure the institution is able to meet its obligations to its customers

iii. **ASIC**
- Enforces company and financial services laws to protect customers, investors and creditors

iv. **Australian Treasury**
- Not a regulator but as the gov's main economic department, but it influences the framework for regulation

v. **Council of Financial Regulators**
- Consists of the above 4 which meets regularly to contribute to the efficiency and effectiveness of financial regulation and ensure financial stability

<u>The Functions of the Financial System</u>

The major tasks served by the financial system are:	⇨ the settlement of transactions
	⇨ the flow-of-funds
	⇨ risk management
	⇨ to overcome information asymmetry
	⇨ to resolve incentive problems
	⇨ to pool funds

1. <u>The Settlement Function</u>
    - The arrangements that can be used to settle commercial transactions
    - Settlement occurs when a buyer exchanges money for a purchased item
    - Money includes:
        - cash
        - a range of electronic methods (through payment orders) for transferring payment to the seller
    - **The payments system performs the settlement function**

<u>Overview of the payment system</u>
- A **transaction** is an agreement between a buyer and seller to exchange an item (or service) for payment
- Most consumer transactions are settled immediately ie. Cash
- Whereas transactions in the **financial markets** are made in two stages:
    1. <u>Agreement</u> – made between the buyer and seller that specifies the terms of the trade ie. price and amount of the traded item
    2. <u>Settlement</u> – occurs a specified no. of days later when payment is made and ownership of the asset transferred

- Most transactions are b/w households and bizs (or b/w bizs) and they are settled mainly with payment orders that require a processing system to complete the movement of funds from buyer to seller
- **Payment orders**: are instructions to an ADI to pay the stated amount to the nominated party
- Where the drawer and recipient of a payment order use **different ADIs**, a system is required for the drawer's ADI to pay the funds to the recipient's ADI
- ADIs settle the payment orders of their depositors with other ADIs by requesting the RBA to use funds ADIs hold in **exchange settle accounts** (ESAs)
    - o **ESA:** the funds that financial institutions hold with the RBA to settle the payments they make to each other and with the RBA.
      The benefits of ESAs are:
        - ✓ they enable ADIs to provide **payment services** to their customers
        - ✓ they are **safe**
        - ✓ the RBA pays **interest** on the end-of-day balance (0.25bps below cash rate)
        - X but the accounts cannot be overdrawn
- Transfers are handled by the RBA's Information and Transfer System **(RITS).** There are two steps in the processing of **interbank payment orders**:
    1. <u>Clearing</u> – where the ADIs agree on their payment obligations to be settled using ES funds
    2. <u>Settlement</u> – the actual transfer of ES funds from the paying to the receiving ADIs
- <u>Settlement systems</u>
  Two types:
    1. **Retail system**
        - Cleared through *deferred net settlement* (DNS) system
        - Retail payment orders are **net cleared** and **settled as a batch** periodically and at 9am next business day
        - Main transactions: direct entries, debit & credit cards, cheques
        - Mainly individual and normal business payments
    2. **Wholesale system**
        - Cleared through *real-time gross settlement* system
        - Individual payments settled immediately upon clearing
        - Instructions are received from the debt market's clearinghouse (Austraclear) and FX market (SWIFT)
        - Mainly financial market transactions (between ADIs) and transfers between ADIs and the RBA

2. <u>The Flow of Funds Function</u>
    - The supply of funds for a period usually on the basis that the users compensate the suppliers for the use of their funds
    - Funds are supplied by surplus units mostly as bank deposits and superannuation contributions
        - they require compensation for forgoing the immediate use of the funds and for the risk the funds will not be returned
    - The deficit units that require funds include households (for housing loans), businesses and the government
    - The funds are supplied either:
        1. <u>Directly</u>
            - Deficit units raise funds directly from surplus units through the issue of **securities** in the **financial markets**
            - Securities are contracts issued by deficit units to raise funds - they specify the promised payments by the deficit unit and can be traded in the financial markets
        2. <u>Indirectly</u>
            - Where funds are supplied as **deposits** to **financial institutions** (intermediaries) which in turn supply funds as loans to deficit units

3. <u>The Risk-transfer Function</u>
    - **Risk** is the possibility that returns will be lower than expected, which includes the possibility of a loss

- **default risk** is the chance that financial obligations will not be met
- **market risk** is the possibility of loss arising from an unexpected movement in a market variable (such as interest rates, exchange rates or share prices)

- Risk-transfer contracts provide ways to manage risk exposures arranged through trading in **derivatives**
- Derivatives: contracts whose value is linked to the value of another financial instrument, market variable or index

4. Overcoming information asymmetry
   - Information asymmetry arises when one party to a potential contract has an **information advantage** over the other party
   - Problems can arise:
     - Loans are made that should not have been made (if both parties had equal information)
     - Loans are not made that should have been made (if both parties had equal information)
   - So the flow-of-funds will work better when steps are taken to overcome information asymmetry (people more willing to supply funds)
   - The risks of information asymmetry can be addressed by:
     1. Restricting participation in the market to **professional traders** who understand the risks (assumed that both have equal info)
     2. Through **financial regulations** that require the more informed party to provide certain info to the less informed supplier of funds (usually retail investors)
        Eg. ASIC requires companies to issue prospectus when raising capital through equity issue

5. Overcoming incentive problems
   - Financial contracting is influenced by the incentives faced by the parties involved
   - This can be a problem if incentives motivate bad behaviour, such as
     - the Wall Street banks that knowingly sold defective financial instruments (that contributed to the GFC), motivated by an annual bonus based on sales
     - a financial advisor who receives commissions from suppliers of investment products and directs clients to products which pay the advisor the highest commission
   - **Moral hazard** is a situation where the 'self interest' of a party in a financial arrangement is in conflict with moral or ethical values
   - The system needs to ensure these incentives are removed or overcome
     - one approach is where financial institutions have a **fiduciary duty** to their customers
     - another is to require **ethical behaviour**

6. Pooling of funds
   - Usually deficit units are seeking large amounts that will take a long period to repay, whereas surplus units normally wants to supply small amounts for short periods ∴ *incompatible wants (**a mismatch**)*
   - If financial contracting was confined to parties that had a coincidence of wants, meaning deficit units require an amount for a period that matched the requirements of a surplus unit, affecting the **flow of funds.**
   - This can be overcome by the pooling of funds, such as
     - a bank that accepts many small deposits and makes fewer large value loans
     - a deficit unit who issues many securities to many investors to raise a very large amount of funds
   - eg. Company wants to raise $25 mil – it is easier to sell 25 mil. Shares at $1 each rather than finding one investor who would invest $25 mil.