

The financial System – 25556

Lecture One – Introduction to the Financial System

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

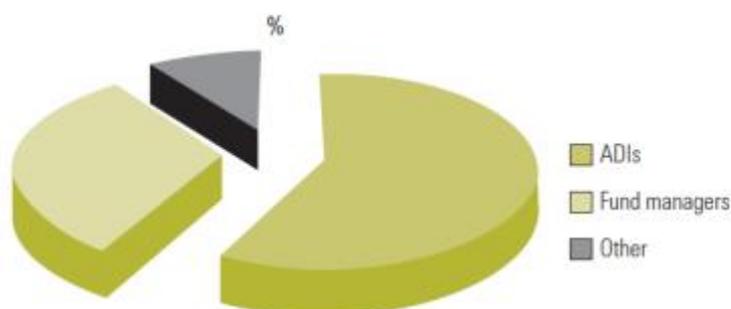
- This system provides a number of financial functions.
- These functions help us (as businesses and individuals) in our everyday life.

Australia's financial institutions

The main forms are;

1. Banks (ADIs)
2. Insurance companies
3. Fund managers (superannuation funds)

Figure 1.4 Assets of financial institutions, September 2013

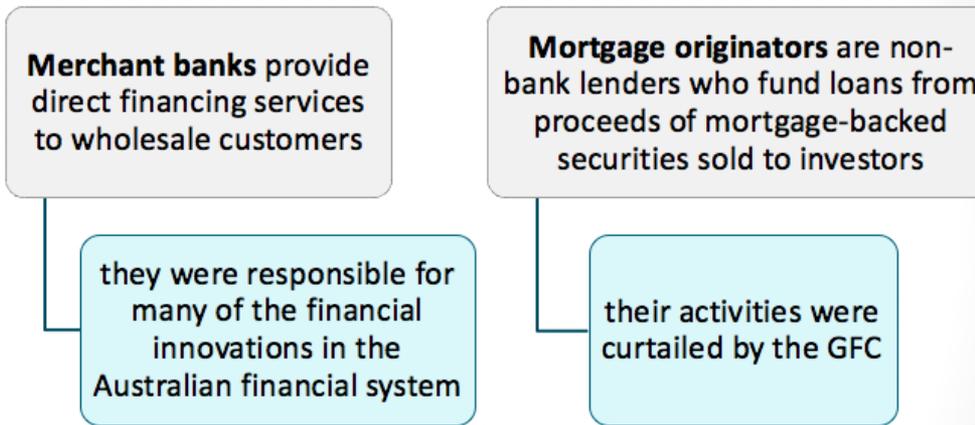


Source: RBA, Statistics, Table B1, www.rba.gov.au/statistics/tables/index.html# - Assets of Financial Institutions B1.

Banks – ADIs

- Most accept deposits, make loans and provide payment services for:
 - † households, small businesses and organisations (**retail customers**) and/or
 - † large companies and organisations (**wholesale customers**)
- Australia's four major banks provide both retail and wholesale banking services
- The 'majors' or 'big four' are ANZ, Commonwealth Bank, National Australia Bank and Westpac
- Some ADIs concentrate on **retail banking**
 - ⇒ the 'regional' banks, credit unions and building societies
- Some ADIs provide **specialist services to wholesale customers**
 - ⇒ but these services are also provided by institutions known as 'investment' or 'merchant' banks some of which are not ADIs

Non-banks



- These institutions are now referred to as **'shadow banks'** in the USA

- Mortgage originators – specialise in making loans – undercut the banks.
- Get their funds directly from financial markets.

1. Financial Functions (6 functions)

The major functions served (performed) by a financial system are;

- To arrange the settlement of commercial transactions
- To promote the flow of funds
- Risk management – for the participants in the financial system
- To overcome information asymmetry
- To resolve incentive problems
- To promote the pooling of funds

1.1 The Settlement Function

Definition- The arrangements that can be used to settle commercial transactions.

- Most basic of the financial functions
- The facilitation of the conduct of commercial transactions.

Settlement occurs when a buyer exchanges money for the purchased item (Change in ownership).

Money – The instruments that can be used as a means of exchange;

- Cash
- Range of electronic methods (through payment orders) for transferring payment to the seller.

Overview of the payments system

- The payments system performs the settlement function.

Transaction – is an agreement between a buyer and a seller to exchange an item (or service) for payment.

- Most consumer transactions are settled immediately (Buying shoes)

Transactions in the **financial markets** are made in two stages;

Financial markets – Arrangements for trading financial securities.

Two stages;

1. An agreement is made between the buyer and seller that specifies the terms of the trade.
2. Settlement occurs a specified number of days later when payment is made and ownership of the asset is transferred.

Payment Orders

Most transactions are between households and businesses, or between B2B, and many are settled with payment orders.

Payment Orders – are instructions to an ADI (authorised deposit-taking institution) to pay the stated amount to the nominated party.

Note; When the drawer and recipient of a payment order use different ADI's (banks), a system is required for the drawer's ADI to pay the funds to the recipients ADI.

➤ Interbank payment orders

Interbank payment orders (are for the retail process), require;

1. Clearing – where the ADIs agree on their payment obligations (amounts) to be settled using ES Funds.
2. Settlement – the actual transfer of ES funds from the paying to the receiving ADI.

Note; The actual transfer is done by the Reserve Bank's Information and Transfer System (RITS).

ES Funds – Exchange settlement funds.

Exchange Settlement Accounts

ESAs are funds that financial institutions hold with the RBA to settle the payments they make to each other and with the RBA.

That is, each bank has a separate ES account and it is kept by the RBA.

➤ Benefits of ESAs

- They enable ADIs to provide payment services to their customers.
- They are safe
- The RBA pays interest on the end of day balance.

However, the accounts cannot be overdrawn.

Settlement Systems (2)

There are two long-standing settlement systems;

1. The 'wholesale system'
2. The 'retail system'.

The wholesale system

This system uses 'real-time' gross settlement.

The real-time gross settlement strengthens the stability of the financial system because it – eliminates settlement risk for the large amount of payments it settles.

- It does this because settlement is immediate (i.e. in real time) once a payment is cleared. Also, once settled, payments cannot be reversed.
- The individual settlement of payments immediately upon clearing.
- These transactions are single individual payments for very large amounts.
- Instructions are received from the debt market's clearinghouse (Austraclear) and FX market (SWIFT).

Austraclear – The company that serves as the clearinghouse for Australia's major security markets.

Clearinghouse – An organisation that keeps a record of issued securities and their owners, and clears trades that results in a change of ownership.

SWIFT- A co-operative organisation (the Society for Worldwide Interbank Financial Telecommunication) that operates a network for the exchange of payment and other financial messages between financial institutions.

The Retail System

This system uses 'deferred net settlement' (DNS).

The retail payment system settles the vast majority of payment orders, even though their total value is much smaller than the total value of wholesale payments.

The main retail payment instruments are direct entries (payment orders that automatically debit charges to an account, or credit payments to an account), payment cards (debit and credit cards), and cheques, which are cleared and settled through the DNS system.

Retail payment orders require authorisation by the payer.

Retail payment orders – are net cleared and settled as a batch periodically at 9am the next business day.

DNS system has 2 elements;

1. Net clearing
2. Subsequent settlement of net amounts at 9am the next business day.

Net clearing – the process of deducting payments from receipts when settling obligations between two parties.

Benefits of DNS – the main benefits of DNS are that it handles very large numbers of payment orders that are deposited each day and it does so by net clearing to reduce the amount of funds that have to be paid by ADIs to settle their customers' payment instructions.

1.2 Flow of funds function

Definition- The supply of funds for a period usually on the basis that the users compensate the suppliers for the use of their funds.

The use of funds has a price to the borrower, that is, the rate of interest when the funds are supplied as a loan.

Surplus Units – Supply funds mostly as bank deposits and superannuation contributions.

- Surplus units require compensation for forgoing the immediate use of the funds and for the risk that the funds will not be returned. Compensation is usually in terms of interest.

Deficit Units – Require funds/Borrowers of funds.

- They include households (for housing loans), businesses and the government.

The funds are supplied either;

1. Directly
2. Indirectly

1. Directly (direct financing) – Arrangements that enable deficit units to raise funds from surplus units.

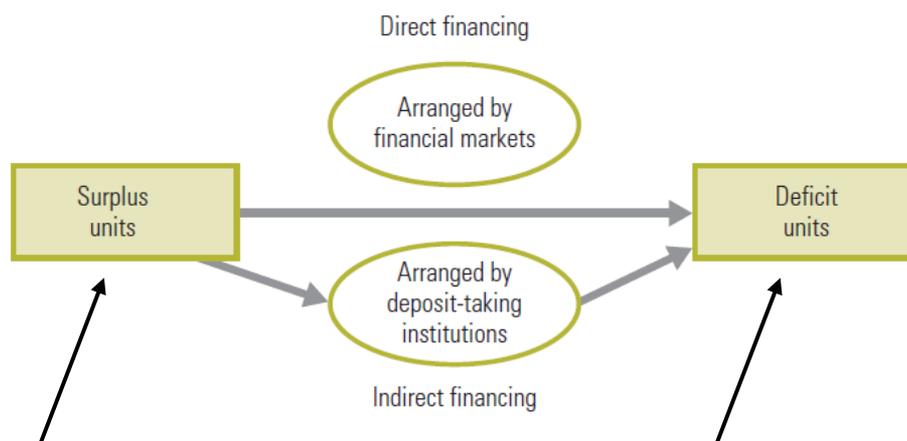
- Deficit units raise funds directly from surplus units through the issue of securities in the financial markets.

Securities- 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. They are liabilities to the issuer and assets to the owners.

2. Indirectly (Indirect financing) – where funds are supplied as deposits to financial institutions, which in turn supply funds as loans to deficit units.

It is called indirect financing because the financial institutions act as the intermediary.

Figure 1.1 The flow of funds



Eg; Depositors , Investors

Eg; Companies, Borrowers

Deposit-taking institutions – Financial institutions that accept deposits and make loans.

1.3 Risk-Transfer Function

This function is to provide instruments for managing risk.

Risk- is the possibility that returns will be lower than expected, which includes the possibility of a loss.

Two main categories of risk;

1. Default risk
2. Market risk

1. **Default risk** – is the chance that financial obligations will not be met (Eg, lenders cannot pay back).
2. **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).

The risk-transfer function is so named because risk cannot be made to disappear by the financial system.

- The risk one trader faces can be eliminated for that trader only by exchanging it (with another trader) for another risk and thus the risk is transferred.

Risk-transfer contracts provide ways to manage risk exposure. This is arranged through trading in derivatives.

Derivatives – Contracts whose value is linked to the value of another financial instrument, market variable or index. Instruments designed to enable risk transfer.

- Each trader is managing its risk by exchanging it for another risk. This process can be arranged through trading in derivatives.

Main feature of derivatives – they provide financial protection against adverse future changes in a variable or should specified adverse future events occur.

Risk-transfer- an example

A variable interest rate borrower faces the risk of an unexpected increase in interest rates

A derivative contract can be used to fix their future rate, (through an offsetting payment) but this means the borrower gives up the chance to benefit from an unexpected fall in interest rates

Such contracts will be used by borrowers that are more concerned about a higher rate than missing out on a lower rate

Derivative contracts take away some uncertainty.

However, they lose the potential of being able to benefit from a lower interest rate.

1.4 Overcoming information asymmetry

Information Asymmetry – A situation where one party to a potential contract has an information advantage over the other party.

This is likely to result in financial agreements that are not mutually beneficial at the expense of the uninformed party.

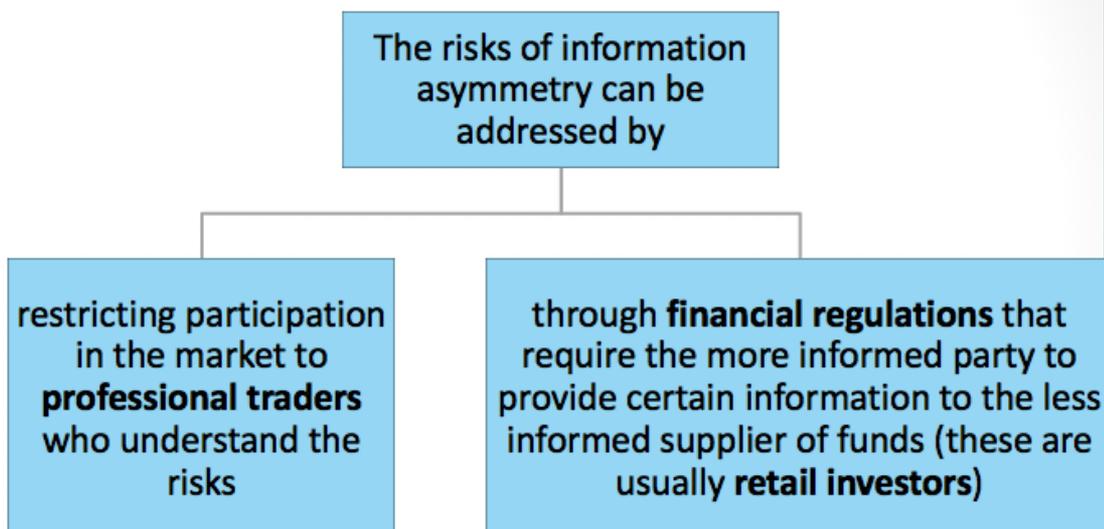
For example, a potential borrower knows more about their capacity to repay than the lender does

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

Ways of Overcoming information asymmetry



Professional traders – financial institutions that trade in financial markets and are presumed to be well informed.

Retail investors – individual investors who invest on their own behalf.

1.5 Overcoming Incentive Problems

Financial contracting is influenced by the incentives faced by the parties involved.

Incentives are sometimes good as they motivate good behaviour (i.e. to work harder).

It 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.

Incentive problems usually arise on;

- commission based work
- bonuses
- benchmarks that need to be reached.

Moral Hazard

Moral Hazard – is a situation where the ‘self-interest’ of a party in a financial arrangement is in conflict with moral or ethical values.

That is, a contracting party has an incentive not to behave responsibly.

The financial 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.

