

# THE FINANCIAL SYSTEM

## LECTURE 1 (FLOW OF FUNDS):

### INTRODUCTION:

**Surplus unit** – person or company with more money than they need at the present time

**Deficit unit** – requires funds to make a purchase

2 Methods by which the flow of funds function is performed:

#### 1. Direct financing

- Surplus units pay for securities issued by deficit units
- Invest in securities *e.g.* bonds
- If cannot make repayment = lost funds

#### 2. Indirect financing

- Financial institutions raise funds from surplus units and supply funds to deficit units
- 3<sup>rd</sup> party involved
- Lender receives more security as bank will go after other assets if not repaid

**Mismatch** between surplus and deficit units:

Table 1.1 The mismatch between the preferences of surplus and deficit units

Contractual preference	Surplus units	Deficit units
1 Return on (and cost of) funds	As high as possible	As low as possible
2 Length of contract	Flexible and short	Inflexible and long
3 Risk exposure	Varies, but many are risk-averse	Risk taker
4 Amount of funds	Usually small	Usually large

### RISK:

**Risk** – chance that expected return will not be achieved

1. **Default risk** – chance that financial obligations will not be met
2. **Market risk** – chance of loss arising from movements in market variable *e.g.* interest rates, exchange rates

**Risk transfer** – use of contracts to manage risk exposure *e.g.* fixed interest rate = minimises market risk. Borrower gives up chance that interest rate may fall

### INFORMATION ASYMMETRY:

**Information asymmetry** – arises when one party to a potential contract is better informed than the other party *e.g.* borrower knows more about his capacity to make repayment than the lender does

**Problems** that arise:

1. Loans are made that should not be made
2. Loans are not made that should be made

**Overcome** in a number of ways:

1. Including provisions in contracts that encourage truthful information disclosure

- Restricting participation in market to professional traders that are well informed about risk and potential returns
- Financial regulations that require the more informed party to provide the relevant information *e.g. Prospectus at IPO*

### INCENTIVE PROBLEMS:

**Incentive problem** – arise when the terms of a financial agreement provide one party with an incentive to act irresponsibly

**Moral hazard** – situation where the self-interest of a party in a financial agreement come into conflict with moral/ethical values

*e.g. a financial advisor receives secret commissions for the investment in particular products*

#### Goldman Sachs Example:

- Played on information asymmetry
- Sold securities with prior knowledge they would fail
- Hedge fund made \$1 billion profit on bets that securities would fail (incentive problem)
- GS earned fee income from both investors and the hedge fund (moral hazard)

### POOLING:

**Pooling of funds** – process of combining small amounts from many suppliers for lending or investment purposes

- Enhances the flow of funds

### FORMS OF FINANCING:

- Debt
- Equity

#### Debt financing:

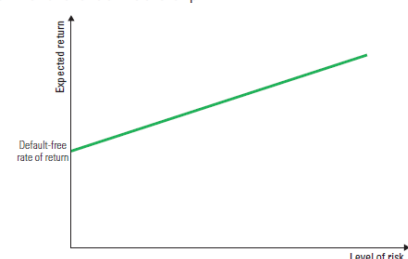
- Generally facilitated through a bank loan
- Interest paid (fixed or floating)
- Repayments
- Security agreements

#### Interest rates:

- Return to the supplier of funds
- Cost of debt to borrower
- Fixed rate = applies for full term of loan
- Floating = change during loan's term
- Can be viewed as a **default risk free rate plus a risk premium**

$$R = r_{\text{default free}} + r_{\text{risk premium}}$$

Figure 1.3 The risk and return relationship



#### Equity financing:

- Funds invested in a firm by its owners
- Raised through issuing ord. shares

#### Shareholder return:

- Profit (dividend PMT)
- Retained earnings (reinvestment =  $\wedge$  share price)

- Referred to as **risk capital** as dividends can only be paid from retained earnings which are **residual** after a company has met its financial obligations

Comparison between debt and equity:

- Debt is cheaper especially in after tax terms = ∴ higher returns on assets
- Encourages **leverage**
- However since debt payments are commitments, too much debt = bankruptcy

	<b>Advantages</b>	<b>Disadvantages</b>
<b>Debt</b>	<ul style="list-style-type: none"> <li>• Lower cost, partly because interest payments are tax deductible</li> <li>• Leverage can increase return on equity</li> </ul>	<ul style="list-style-type: none"> <li>• Risk of insolvency               <ul style="list-style-type: none"> <li>• Funding risk</li> </ul> </li> <li>• Potential loss of secured assets</li> <li>• Forced asset sales may not achieve fair values</li> </ul>
<b>Equity</b>	<ul style="list-style-type: none"> <li>• Does not require repayment</li> <li>• Not obligated to pay dividends</li> <li>• Lowers risk of insolvency</li> </ul>	<ul style="list-style-type: none"> <li>• More expensive</li> </ul>

#### TWO BASIC PRINCIPALS OF FINANCE:

1. Risk and return trade off
2. Time value of money

#### THE GFC:

- Collapse of the flow of funds throughout the US and global financial markets
- At root = incentive problems with lenders In the US housing market
- Crisis became global when banks became reluctant to lend

#### FINANCIAL INSTITUTIONS:

1. Banks and other Authorised Deposit-taking Institutions (ADI's)
2. Insurance companies
3. Fund managers

#### BANKING SERVICES:

1. Accept deposits, make loans and provide payment services for households (retail banking) or businesses (wholesale banking)
2. Issuing securities and risk-transfer instruments and providing financial advice to large companies (investment banking services)

#### FINANCING MARKETS:

1. Money market – trading short term discount securities
2. Bond market – long term securities
3. Share market – trading in corporate securities

#### FINANCIAL SYSTEM STABILITY:

### Main responsibilities:

1. Conduct of monetary policy
2. Overseeing the stability of financial system
3. Regulation of the payments system
4. Note issue
5. Being the Commonwealth Government's banker

### LECTURE 2 (SETTLEMENT):

- Performed by payment system
- Existed for long time
- Evolved from barter (exchange of an item for another), precious metal, coins and notes, payment orders

### EXCHANGE SETTLEMENT ACCOUNTS:

**ESAs** – accounts that ADIs have with the RBA to settle the payments they make to each other and with the RBA

#### Condition:

- Can not be overdrawn

#### Benefits:

1. That the RBA **transfers funds** into and out of them as required by the ADI
2. **Pays interest** on the balance at 25bps below the cash rate

### RETAIL PAYMENTS SYSTEM:

- Comprises notes, coins and payment orders that are used to settle transactions
- Main retail payment orders:
  1. Direct entries
  2. Debit and credit cards
  3. Cheques
- Each must be **authorised** and **verified**

### PAYMENT ORDERS:

**Direct Entries** – pre-authorised and verified bulk payment orders

- Cheapest
- Direct credits = inflow
- Direct debits = outflow
- Most popular form

**Debit cards** – issued by ADIs to their depositors to enable them access to their funds and to settle transactions

- May charge per transactions
- ATMs, EFTPOS

**Credit cards** – issued by credit card companies in association with ADI

- Transaction >> deposited by merchant >> merchant paid by card company's bank >> customer billed monthly
- Pays interest for length of time left unpaid