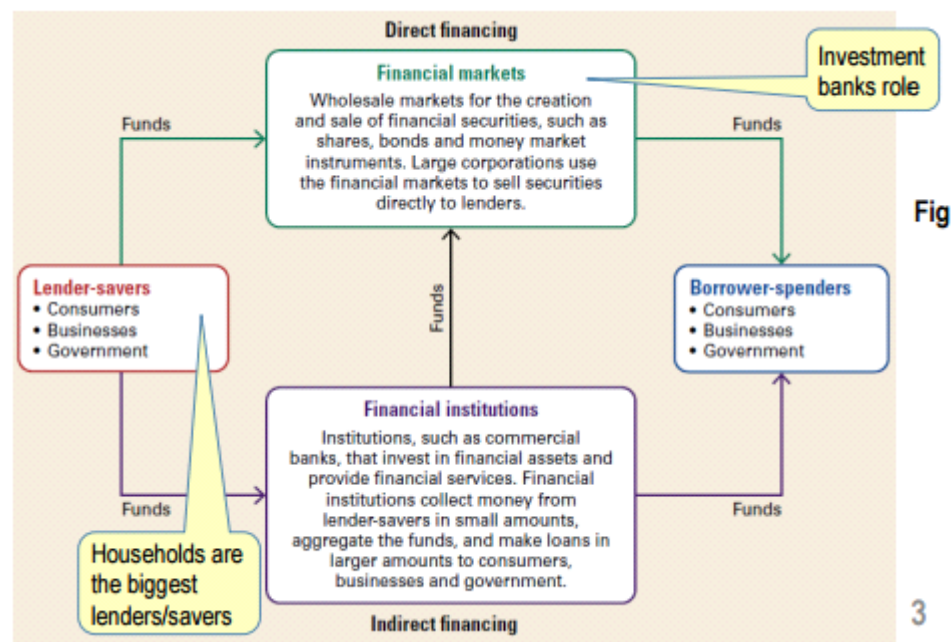


# The Financial System

Friday, 12 February 2016 1:50 PM

## What is the financial system and what is its primary role?

- It is a marketplace and a home for financial institutions (middleman between lenders and savers/borrowers eg. Banks).
- The financial system transfers purchasing power now to be used at a later date. These can only occur in a stable financial system without lots of fluctuations.



- Companies rather borrow money that have a share capital raising because interest expenses are tax deductible. Borrowing is cheaper than equity due to the risk of losing capital if a company goes into liquidation.

## Direct financing:

**Underwriting** - when an investment bank guarantees the company will sell its shares and takes the risk (price risk) away from the company and onto themselves. The bank also buys and floats the new shares. The investment bank keeps the shares that aren't sold regardless of price. Investment banks gamble that the market will pay more than what the set price is for each share - set price = what underwriter paid for shares. Underwriters spread is the underwriters compensation.

## Types of financial markets:

**Primary market** - where a security is traded for the first time (IPO). The issuing of new shares is also traded here.

**Secondary market** - where owners of securities can resell.

**Marketability** - a security can be easily sold and turned into cash

**Liquidity** - an asset that can be turned into cash without a loss of value

**Brokers** - market specialists who are middlemen in buying and selling securities, they earn a

spread called brokerage.

**Dealers** - they make markets for securities and take allocation in shares to enhance liquidity.

**Money market** - short term <1 year

- Treasury notes
- Bank certificates
- Bank bills
- Short term securities

**Capital market** - long term >1 year

- Treasury notes
- Corporate bonds
- Government bonds
- Corporate equity
- Home loans (mortgage secured)

**Exchange and over the counter:**

**Exchange** - ASX or NYSE, is a central trading location and only brokers can use the exchange.

**OTC Markets** - Foreign exchange markets, transactions are done over the telephone or through electronic trading platforms.

### Financial institutions and Indirect financing

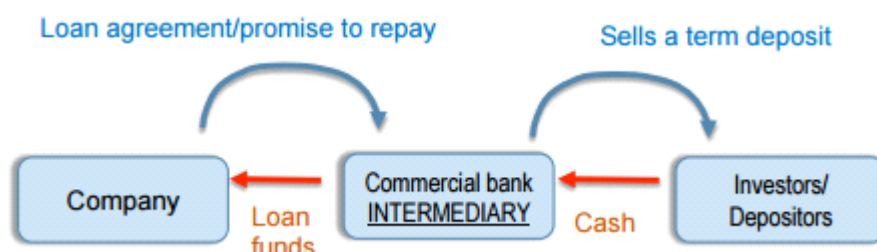
**Financial institutions:**

- **Commercial banks** - The big 4
- **Insurance companies** - Allianz, NRMA
- **Super funds** - BT, industry super
- **Investment funds** - Hedge funds
- **Finance companies** - fund risky businesses

**Policing**

- ASIC look over the general public - are companies playing by the rules
- APRA look over banks and credit unions
- Reserve bank looks over everyone. Look over integrity of the payment system.

**Indirect financing** - accessing finance through an intermediary



### Determinants of interest rate levels

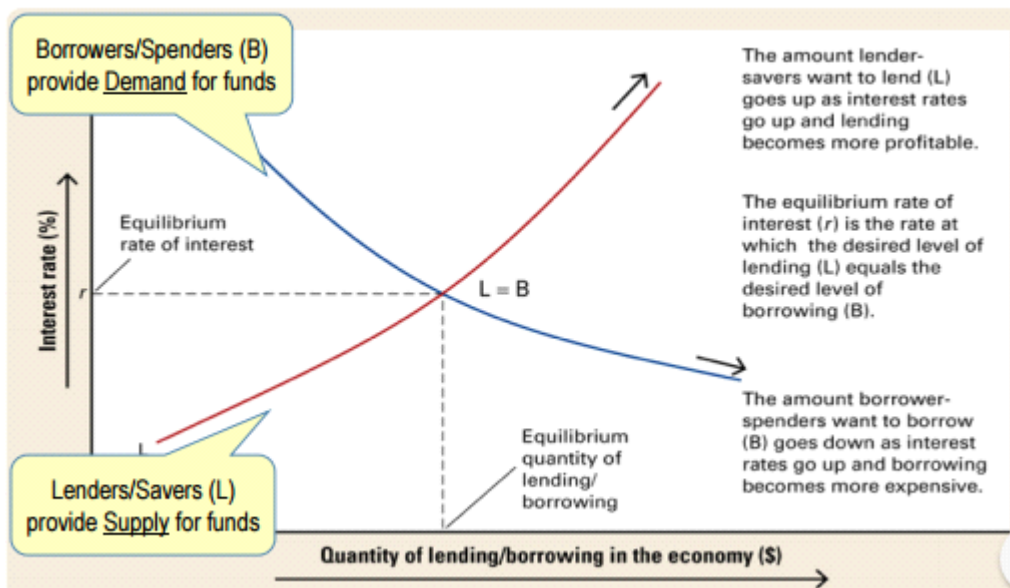
**The real rate of interest**

**Definition** - the rate that would exist in the absence of inflation. The nominal rate of interest is the market rate of interest and accounts for inflation. The difference between market rate and real rate is inflation

**Return on investment** - when a company's return on investment exceeds the cost of the

investment, value is added.

**Time preference** - positive time preference is consumption, negative time preference is saving.



**Fisher Equation** - determines the relationship between the real rate of interest ( $R$ ), the nominal rate of interest ( $i$ ) and the rate of inflation ( $\Delta p_e$ )

Simple formula -  $R = i - \Delta p_e$

Full formula -  $r = (1+i)/(1+\Delta p_e) - 1$

### TTP's

Q1. Suppose you borrow \$500 from your friend, agreeing to pay him back the \$500 plus 7% nominal interest in 1 months' time. Assume inflation over the life of the contract is expected to be 4.25%

Q2.

- A) Real interest =  $(1+0.07)/(1+0.0425)-1 = 0.0264 = 2.64\%$
- B) Inflation increases to 5.25% or decreases to 3.25%
- C) Inflation increase = 1.66% inflation decrease = 3.63%

Theory behind Fisher equation

- Fisher equation shows you real return on purchasing power

**NOMINAL IS THE INTEREST BEFORE INFLATION**  
**REAL IS AFTER INFLATION**

