Week 2: A Modern Financial System

- Financial system: Range of financial institutions, instruments and markets facilitating flow of funds between lenders/savers (fund providers) & borrowers (fund users)
  - Overseen by central bank (RBA)
  - Supervised by prudential regulator (APRA)

- Financial institutions: Establishments that conduct financial transactions (e.g.: Deposits, loans, investments)

	Depository Financial Institutions	Investment Banks & Merchant Banks	Contractual Savings Institutions	Finance companies & General Financiers	Unit trusts
Funding source(s)	Obtain large % of funds from depositors' savings	Obtain funds from: advisory fees/dividends/ Interest/investments/ tradings	Steady inflow of funds + long-term liabilities, don't usually experience liquidity problems	Borrow funds direct from markets	Raise funds by selling units to public; investors purchase units
Purpose	Loans to borrowers (household, business)	OBS advisory services to corporate & government clients (e.g.: mergers/ acquisitions, finance & risk management)	Offer financial contracts (e.g.: Insurance, Super)	• Loans and lease finance to customers • No pre-requisite of credibility → Anyone can borrow → Higher risk of borrowing → Higher interest rates	Formed under trust deed, controlled and managed by trustee
Examples	ANZ Group Ltd, Macquarie Bank, DBS Bank Ltd	Macquarie Bank, UBS, Goldman Sachs	AIA Australia Ltd, Allianz Australia Life Insurance Ltd	Australian Credit & Finance	Equity, Property, fixed interest

- Financial markets: Markets which people trade financial securities
  - Equities
  - Currencies
  - Bonds

Week 6: Capital Budgeting 1

- Capital budgeting helps managers decide which projects the corporation should undertake
- 5 methods covered in this course

(1) Net Present Value (NPV)

- $NPV = C_0 + \sum_{t=1}^{T} \frac{CF_t}{(1+r)^t}$
- C_0 is negative
- NPV > 0 ⇒ Accept project
- NPV < 0 ⇒ Reject project
- The higher the NPV the better
- R reflects opportunity cost of capital (what shareholders can expect to earn on other investments with equivalent risk)

(2) Internal Rate of Return (IRR)

- Discount rate at which NPV=0
- IRR > Cost of capital ⇒ Accept project
- IRR < Cost of capital ⇒ Reject project
- Works for stand-alone project if all projects' negative cash flows precede positive cash flows
- Likely to have more than 1 answer ⇒ Decreased reliability
- Can be nonexistent
- Considers time value of money and risk
- Modified IRR: Only one change in sign of cash flow over project life
  - Step 1: Discount negative future c/f back to present using discount rate
  - Add to C_0

(3) Payback

- No. of years it takes before cumulative forecasted c/f = initial outlay
- $Payback\ period = No.of\ years\ before\ full\ recovery + \frac{Uncovered\ costs\ @\ start\ of\ year}{CF\ during\ year}$
- Payback < Maximum allowable payback ⇒ Accept project
- Payback > Maximum allowable payback ⇒ Reject project
- Ignores CF after payback
- Ignores time value of money
- Simple to interpret

(4) Book rate of return

- Average book income divided by average book value over project life
- Simple to calculate and understand
- Book income contains non-CF

(5) Profitability Index (PI)

- Cost-benefit ratio equal to NPV of an investment divided by initial cost

- $PI = \frac{NPV}{Investment\ cost}$
- Arbitrary – Can have many choices and makes it difficult to narrow down
- Considers time value of money
- Simple to understand