

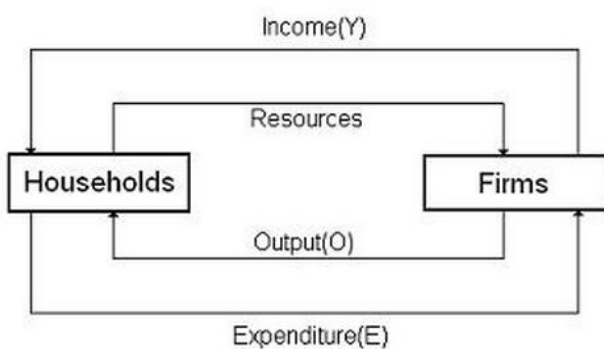
## 1. EXPENDITURE METHOD

- Assumes there are four groups in the economy
  - Households (consumption expenditure)
  - Firms (Investment)
  - Government (Govt purchases)
  - Foreign sector (Net exports)
- Sum of these four groups equal total GDP – creates the national income accounting model

$$Y = C + I + G + NX$$

## 2. INCOME METHOD (distribution of income through an economy) d

- GDP = Labour income + Capital income
  - Labour income = Wages, salaries, incomes of self employed
  - Capital income = Payment to owners of physical and intangible capital
- Represented by a simple circular flow diagram



### SUMMARY OF THE 3 FORMS OF MEASURING GDP (IPAD SOLD)

- Value added:** Sum of value of each firm
- Expenditure approach:** Expenditure spent  
(Summarized by national income accounting model)
- Income approach:** Distribution/sum of income earned for good/service in an economy

Two important aspects for measuring GDP:

### 1. Measuring GDP over time

- Must account for inflation or deflation
- Nominal: GDP that hasn't been adjusted for price change
- Real: GDP that has been adjusted for price change

$$Real\ GDP = Current\ year\ quantity \times Base\ year\ price$$

### 2. GDP is different from measuring economic wellbeing:

Does not include:

- Leisure time
- Non-market activities (Housework/voluntary work)
- Underground economy (Legal – babysitting, illegal – drug dealing etc.)
- Environmental quality/resource depletion
  - Increased production = higher GDP but can = lower environmental wellbeing (pollution etc.)
  - Exploitation of minerals (oil) – 1 barrel sold = higher GDP but also 1 less barrel too sell in the future finite resource
- Does not include the quality of life

- Low crime rates, limited traffic congestion etc. not considered for GDP
- Does not take into account poverty/income inequality
  - Aus: High GDP but 10% of population living in poverty

### What is the consumer price index and inflation?

- Why do we study prices in macroeconomics?
  - Economy is affected by changes in price (inflation/deflation)
  - Tells us how much things cost
  - Need to maintain a 'real' currency value
- The CPI is a measure of the 'cost of living' based on prices in a period for a typical basket of goods and services

$$CPI = \frac{\text{Current price for a basket of goods}}{\text{Base year price for a basket of goods}}$$

Item	QTY (B1)	PR (B1)	COST (B1)	PR (B2)	COST (B2)
Rent 2 bedroom apartment	1	\$500	\$500	\$630	\$630
Hamburger	60	\$2	\$120	\$2.50	\$150
Movie ticket	10	\$6	\$60	\$7	\$70
Total			\$680		\$850

$$CPI = \frac{850}{680}$$

Therefore, CPI = 1.25x for second basket of goods.

- Inflation is the increase in the price for goods and services over a given period of time

$$\text{Inflation for year 2} = \frac{CPI_{\text{year2}} - CPI_{\text{year1}}}{CPI_{\text{year1}}} \times 100$$

### Measurement of the consumer price index:

- A CPI can be used to adjust nominal (eliminates the effect of price change)
- E.G. Income ↑ 10% VS inflation 25% - Worse off as inflation > income
- Can be used to convert real quantities to nominal quantities (Indexing)
  - E.g. WA paid pensioners \$1000 in 2005. What should these pensioners be paid in 2016? – Depends on inflation
    - CPI = \$1.00 in 2005 and \$1.20 in 2016. Inflation equals \$1.20-\$1.00/\$1.00 x 100 = 20%
    - Pensioners should be paid 20% higher
- Does CPI measure true inflation?
  - No, only estimates, due too:
    - Quality adjustment bias: Price ↑ can be associated with quality

### Investment and capital formation:

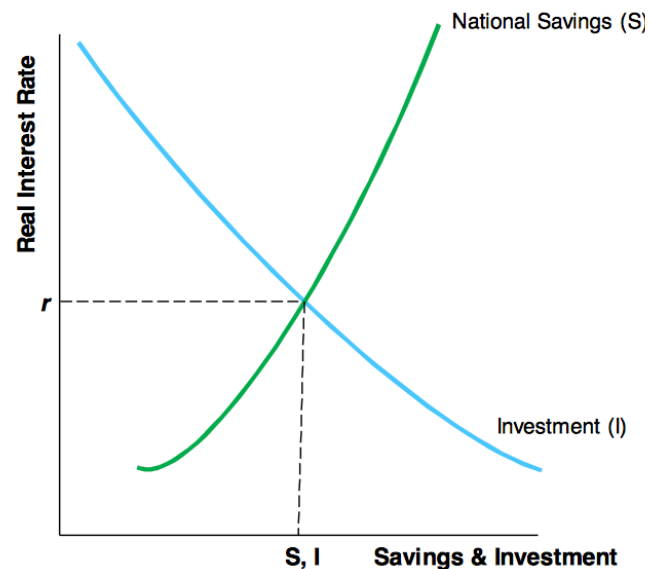
- Investment: Creation of new capital goods and housing
  - Critical to increase productivity + living standards

- Usually takes place via financial markets (people borrow too invest)
- Decision to invest: Cost benefit principle
  - 'Is expected costs less then expected benefit'

IF GIVEN A QUESTION ON COST BENEFIT (LAWNMOWER EXAMPLE) ALWAYS DIVIDE INTO BENEFITS AND COST SECTION THEN WEIGH THEM AGAINST EACH OTHER.

### **Saving investment and the financial market:**

- Equilibrium: National saving = national investment
  - Shows level of saving/investment @ particular times in the economy
  - Saving: Upward sloping – higher interest rate = more benefit in saving
  - Investment: Downwards sloping – Higher interest rate increases cost of borrowing – decreases firm's willingness to invest.
- Firms invest by:
  - Borrowing in the financial market
  - Using own accumulated profits
- If  $S > I$ ?
  - Excess supply of saving
  - Real interest rate would adjust and decrease so  $S = I$ 
    - Change in interest rate: Movement along the curve
    - Changes in anything else: Curve shifts
      - New technology: Investment shifts right – increase demand



### Topic 3

### **The perfectly competitive market for labour and labour market trends:**

- Assumes that firms and workers are wage takers
  - Cannot affect the price of labour (wage rate)
- Quantity of labour: Amount of labour firms use
  - Usually measured by # of workers/hours worked

### 5 key labour market trends for Australia:

1. Since the 1970's Australia has enjoyed substantial real growth earnings. (2012 1.79x better than 1969)
2. Since the 1970's real wage growth has slowed (particularly for men)
  - Introduction of women to the workforce
  - Economic prosperity slowing (after mining boom)
3. Increase in economic inequality from top to bottom earners