ECOS2002: Final Exam Notes
Chapter 2: Intro

2.1 Aggregate output
- Measured through GDP
  - Value of final G&S produced in economy during period (not intermediate) (final goods method) – revenue from sales
  - Sum of value added in economy during period (value of production minus intermediate good for all firms)
  - Sum of incomes in economy during period (wages + profit + indirect taxes and subsidies – govt. income)
- Nominal GDP: sum of quantities (final good) x current prices
  - Increases over times as price and production increases over time
- Real GDP: x constant prices
- GDP Growth: $\frac{Y_t - Y_{t-1}}{Y_{t-1}}$ (expansion and recessions)

2.2 Unemployment
- Labour force (L)= employed (N) + une (U)
- Une rate (u)= U/L
  - 2012 example: 0.63 / 0.63+11.5 = 5.2%
- Participation rate = L / pop. Working age
  - 65% for Australia

2.3 Inflation
- Sustained rise in general level of prices (vs. deflation with neg. inflation rate)

2.3.1 GDP Deflator
- Average price of outputs
  - Base Year = 100 (x100)
  - $ = nominal number
  - $$P_t = \frac{nominal\ GDP_t}{real\ GDP_t} = \frac{\$Y_t}{Y_t}$$
- Rate of inflation: rate of change in GDP deflator
  - $$\frac{(P_t - P_{t-1})}{P_{t-1}}$$
- Nominal GDP = GDP deflator x rGDP ($P_t Y_t$)

2.3.2 CPI
- Average price of consumption (cost of living)

Chapter 3: SR - Goods Market

3.1 Composition of Australian GDP
- C: G&S purchased by consumers
- I: (fixed investment) – purchase of capital goods (non-reside
  - Inventory investment: production minus sales
- G: G&S purchased by governments (not transfers)
- M: purchase of foreign G&S by Australians

Table 3.1 The composition of Australian GDP, 2011

|	Chain volume measures	Billions of dollars	Per cent of GDP
GDP (Y)		1335	100
1 Consumption (C)		747	56.0
2 Investment (I)		314	23.5
	Nonresidential	243	18.2
	Residential	71	5.3
3 Government spending (G)		321	24.1
4 Net exports		−49	−3.7
	Exports (X)	255	19.1
	Imports (IM)	−304	−22.8
5 Inventory investment		4	0.3

- X: purchase of Australian G&S by foreigners
  - Net Exports: trade balance, surplus or deficit

3.2 Demand for goods
- Therefore $Z \equiv C+I+G+X-M$ (note assume closed economy)

3.2.1 Consumption
- $C = C(Y_D)$
  - Disposable income: once consumers pay income tax and receive transfer payments ($Y_D \equiv Y - T$)
- $C = c_0 + c_1(Y - T)$ - specific form
  - MPC: c_1 tells marginal effect of increase in income on consumption ($0<c_1<1$)
  - c_0 accounts for spending given no income

Consumption function
$C = c_0 + c_1 Y_D$
slope = c_1
Consumption, C
c_0
Disposable Income, Y_D
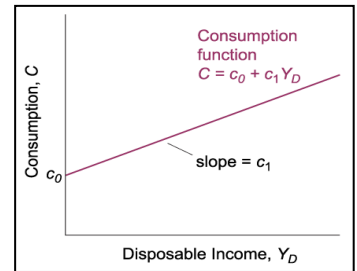
3.2.2 Investment
- Assume exogenous ($I = \bar{I}$)

3.2.3 Govt. spending
- Assume exogenous ($G - T$) – fiscal policy

3.3 Equilibrium
- Production = demand (Y=Z) – assuming no inventory
  - Note: production = income (Y represents production and income is included)
  - Therefore $Y = c_0 + c_1(Y - T) + \bar{I} + \bar{G}$
- Multiplier: >1
- Autonomous spending: demand for goods that doesn't depend on income

$$(1-c_1)Y = c_0 + \bar{I} + \bar{G} - c_1 T$$
$$Y = \frac{1}{1-c_1}[c_0 + \bar{I} + \bar{G} - c_1 T]$$

3.3.1 Graph
- Increase in Auto. spending – Govt. increase spending, firms increase production, incomes increase, increase consumption and again firm increases production
- Output increases over time – adjustment depends on how often firms revise production schedules (dynamics of adjustment)

Demand, (Z), Production (Y)
45°
Income, Y
ZZ'
ZZ
$1 billion
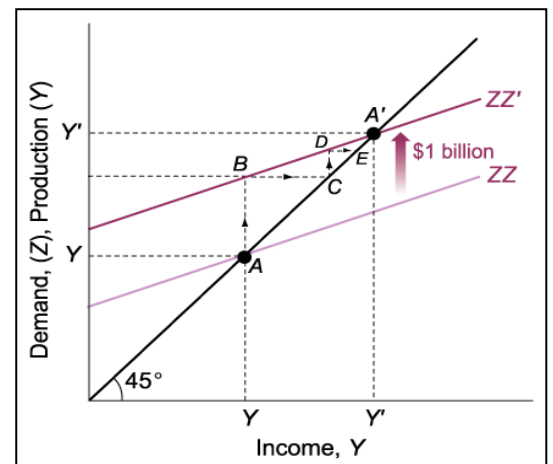
3.4 IS alternative
- Private saving by consumers and public saving by government (surplus or deficit)
  - $S \equiv Y_D - C$
    $S \equiv Y - T - C$

    $Y = C + I + G$

    $Y - T - C = I + G - T$

    $S = I + G - T$

    $I = S + (T - G)$

Chapter 4: SR - Financial Market

4.1 Demand for money
- Money: Currency and current account deposits
  - M1: Currency + current account deposit
  - M3: currency + term deposits

Interest rate, i
i
$M^{d'}$ (for $\$Y' > \$Y$)
M^d (for nominal income $\$Y$)
M M'
Money, M