Chapter 5 – spending and output in the short run

5.1 An introduction to the Keynesian model

- **Stabilization policies:** government policies that are used to affect planned aggregate expenditure, with the objective of eliminating output gaps.
- **KEY ASSUMPTION of Keynesian model:** firms do not respond to every change in demand for their products by changing price. Typically set price for period and meet demand at that price.
- **Menu costs:** cost of changing prices

5.2 Aggregate expenditure

- **Planned aggregate expenditure (PAE):** total planned spending on final goods and services.
  - Consumption (C)
  - Investment (I)
  - Government purchases (G) – note does not include transfer payments
  - Net exports (NX)
- AE = C+I+G+NX
- Aggregate expenditure does not always equal planned spending
- **Disposable income:** aggregate income less net taxes
- **CONSUMPTION FUNCTION:** relationship between consumption spending and its determinants, in particular disposable (after tax) income

$$\boldsymbol{C^d = \overline{C} + c(Y - T)}$$

- $\boldsymbol{\overline{C}}$ is the exogenous variable (a variable whose value is determined from outside of the model)
- **Wealth effect:** Tendency of changes in asset prices to affect households' wealth and thus their spending on consumption goods.
- **Marginal propensity to consumer** (**MPC**): The parameter c, the amount by which consumption rises when disposable income rises by one dollar.

5.3 Planned aggregate expenditure and output

- **Exogenous expenditure:** the portion of planned aggregate expenditure that in independent of output
- **Induced expenditure:** the potion of planned aggregate expenditure that depends on output.

5.4 Short-run equilibrium output

- **Short-run equilibrium output: Y=PAE**
  - The level of output that prevails during the period in which prices are predetermined.
- **Injections:** all sources of exogenous expenditure in the economy
- **Withdrawals:** that part of income not used for consumption purposes
- **Circular flow of income:** the economy's national income, which can be equivalently, measured using the production, expenditure or income approaches.
- **Disequilibrium:** when planned aggregate expenditure differs from output, or equivalently when planned injections differ from withdrawals.
- **45-degree diagram:** a diagrammatic representation of the economy over the short run (the period in which prices do not adjust in response to demand), enabling the identification of the equilibrium level of GDP.

5.5 Consumption and investment in the two-sector model

- **Two sector model:** simplified model of the economy in which there are only households and firms. $\boldsymbol{C = \overline{C} + cY}$, $\quad \boldsymbol{S = -\overline{C} + (1 - c)Y}$
- **real interest rate:** percentage increase in the real purchasing power of a financial asset
- **Entrepreneurs' expectation:** expectations held by decision makers in firms about the future profitability of proposed investment projects.

5.6 The 45-degree diagram

- Special significance – marks the economy's equilibrium given the current spending plans of households and firms.

5.7 Withdrawals and injection

- Economy will be in equilibrium when savings equals investment.

5.8 Equilibrium and disequilibrium

- **The paradox of thrift: an exogenous increase in savings leads to a lower level of equilibrium GDP.**
  - An attempt by the community to increase its saving will fail
  - The economy, overall, will be worse off as a result of that attempt

5.9 The four-sector model

- **PAE=$\boldsymbol{C^d + I^p + G + X}$**
- **Net taxes: T=$\boldsymbol{\overline{T} + tY}$**
- **Consumption depends on after tax income so: $\boldsymbol{C^d = \overline{C} - c\overline{T} + c(1-t)Y}$**
- Imports are proportional to after tax income
- Planned investment, government spending and exports are all assumed to be exogenous

$$\begin{aligned} PAE &= C^d + I^p + G + X \\ &= \bar{C} - c\bar{T} + I^p + G + X + c(1-t)Y \end{aligned}$$

- **Equilibrium in the four-sector economy –** occurs when the spending plans of households, firms, the government and the foreign sector coincide with the economy's level of GDP. Alternatively equilibrium is where the total level of withdrawals in the economy (savings taxation and imports) equal total planned injections (planned investment, government spending and exports)

5.11 The multiplier

- **Income expenditure multiplier:** the effect of a one unit increase in exogenous expenditure on short run equilibrium output; for example, a multiplier of 5 means that a 10 unit decrease in exogenous expenditure reduce short run equilibrium output by 50 units.

5.12 Stabilising planned spending: the role of fiscal and monetary policies

- **Expansionary policy:** government policy actions intended to increase planned spending and output
- **Contractionary policies:** government policy actions designed to reduce planned spending and output