More on macroeconomic theory and policy

Aggregate demand (AD) and aggregate supply (AS)

• **Assumptions of AD-AS model**
  – prices, wages and interest rates variable
  – level of income determined by interaction of $AD$ and $AS$

• Comparison with microeconomic demand and supply
  – now dealing with general price level ($P$) and total production or income ($Y$)

• Comparison with Keynesian models
Graphical illustration:

- Aggregate demand and aggregate supply

Aggregate demand curve \((AD)\)

- Slope (why \(AD\) curve slopes downward, i.e., why negative, inverse relationship between \(P\) & \(Y\)?)
  - wealth effect (real balance effect)
  - interest rate effect
  - international trade effect
Why the aggregate demand curve slopes downward

- Position (what can cause the AD curve to shift?)
  - all non-price determinants of C, I, G, X and Z
  - change in autonomous C
  - change in I
  - change in G
  - change in (X – Z)
  - examples on pp 158-159
Aggregate supply curve (AS)

- **Slope of AS curve**
  - *short run*: upward (positive) slope
  - *long run*: vertical

- **Upward slope of short-run AS curve**
  - if $P$ changes, real wage changes; therefore employment and production change

- **Position of AS curve**
  - determined by prices and productivity of factors of production and other inputs in the production process
  - examples on pp 160-161
Changes in aggregate demand \((AD)\)

- **Increase in \(AD\)**
  - illustrated by rightward shift of \(AD\) curve
  - \(Y\) increases
  - \(P\) increases
  - trade-off situation

**Graphical illustration**

*Expansionary monetary and fiscal policy in the AD-AS framework*
• **Decrease in AD**
  – illustrated by leftward shift of AD curve
  – $Y$ decreases
  – $P$ decreases
  – Again a trade-off situation

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**Changes in short run aggregate supply (AS)**

• **Decrease in AS**
  – illustrated by leftward (upward) shift of AS curve
  – $Y$ decreases
  – $P$ increases
  – stagflation
• Graphical illustration:

![Graphical illustration](image)

An increase in the price of imported oil in the AD-AS framework

- **Increase in AS**
  - illustrated by rightward (downward) shift of *AS* curve
  - *Y* increases
  - *P* decreases
  - ideal situation
• Graphical illustration:

An increase in productivity without any increase in remuneration

Monetary transmission mechanism

• How do changes in the monetary sector affect the rest of the economy?

• Essentially, how do changes in interest rates affect the economy?

• Inverse relationship between interest rates and investment spending

• $\Delta i \rightarrow \Delta I \rightarrow \Delta A \rightarrow \Delta Y$
• **Keynesian model**: change in interest rate changes investment spending and therefore aggregate spending and total production and income.

• **AD-AS model**: AS also plays role

  \[ \Delta i \rightarrow \Delta I \rightarrow \Delta A \rightarrow \Delta AD \rightarrow \Delta Y \]

  \[ \Delta P \]

  • AS determines split between \( \Delta Y \) and \( \Delta P \)

• **Graphical illustration:**

  ![Diagram](image)
Expanded transmission mechanism

• Interest rates do not affect the economy only via investment

• Transmission mechanism has various channels
  – interest rate channel
  – exchange rate channel
  – asset price channel
  – credit channel

• Expectations also very important

• See Figure

• Complex transmission mechanism

• Outcome uncertain
Monetary and fiscal policy

- **Expansionary monetary policy** – decrease repo rate
- **Restrictive monetary policy** – increase repo rate
- **Expansionary fiscal policy** – increase $G$, reduce $t$
- **Restrictive fiscal policy** – decrease $G$, increase $t$

• **Policy lags**
  - **recognition lag**: same for monetary and fiscal policy
  - **decision lag**: long for fiscal policy, short for monetary policy
  - **implementation lag**: long for fiscal policy, short for monetary policy
  - **impact lag**: longer for monetary policy than for fiscal policy

• **Relative effectiveness**
  - fiscal policy for stimulation
  - monetary policy for contraction
Schools of economic thought: overview

- **Classical economics**
  - Say’s law: supply creates its own demand
  - emphasis on supply

- **Keynes**
  - Great Depression
  - focus on aggregate demand

- **Monetarists**
  - inflation
  - focus on quantity of money

- **Supply-side economists**
  - stagflation
  - emphasis on supply side

- **New classical economists**
  - rational expectations
• **Post Keynesian economists**  
  – go back to Keynes

• **New Keynesian economists**  
  – elements of new classical school and Keynesian school

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**Monetarism**

• Milton Friedman

• **Classical dichotomy**  
  – separation of monetary sector and real sector

• **Believe in**  
  – inherent stability of free-market system  
  – minimum government participation in the economy  
  – inflation is caused by excessive increases in the quantity of money (quantity theory of money)
• **Quantity theory of money**
  – $MV = PY$
  – change in $P$ caused by change in $M$
  – based on certain assumptions

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**Supply-side economics**

• Emphasis on supply side (Reaganomics, Thatcherism)
• Favour market forces; oppose government intervention
• Cut government spending
• Privatisation
• Deregulation
• Lower tax rates
New classical economics

• Robert Lucas
• Importance of microeconomic foundations
• Rational expectations
• Markets always clear
• Oppose government intervention

New Keynesian economics

• Microeconomic foundations important
• Many accept rational expectations
• Emphasise market imperfections
• Favour policy intervention