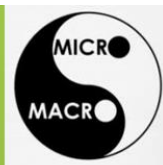


Week 7 – Aggregate Demand and Aggregate Supply

Learning Objectives of L7



To know the stages of a typical business cycle

To understand the **basic AD/AS model** (*focus of this lecture*):

- i) **aggregate demand** (AD) curve;
- ii) **aggregate supply** (AS) curve (SRAS, LRAS);
- iii) **macroeconomic "equilibrium"**, and the effects of changes in AD and AS;
- iv) and describe the **state of an economy** (i.e. downswing, recession, upswing, boom) in the basic AD/AS model.

- *Students must know L7 is important to understand how monetary and fiscal policies (L8, L9) link to the AD/AS model – which helps students prepare for the final exam.*

- Students must understand the components of AD and AS, and the economic reasons why these curves could shift.

Definitions

AD/AS Model: A model that explains short term fluctuations in real GDP and the price level

AD Curve: A curve that shows the relationship between the price level and the quantity of real GDP demanded by HH, F and G

Business Cycle: Alternating periods of expansion and contraction relative to the trend rate of economic growth

Capital: Manufactured goods used to produce other goods

Human Capital: The accumulated knowledge and skills workers acquire from education or training or real life experiences

Labour Productivity: The quantity of G&S that can be produced by one worker per hour of work. Measured in output/hour and depends on quantity of capital and technological change

Long Run Economic Growth: The process by which rising productivity increases the average SOL and productive capacity of the economy

Potential GDP: Level of real GDP attained when all firms are producing at normal capacity

SRAS Curve: A curve showing the relationship in the short-run between the PL and the quantity of real GDP supplied by firms

Stagflation: A combination of inflation and recession, usually resulting from a supply side shock

Aggregate Demand (AD)

$$- \text{GDP (Y)} = C + I + G + (X - M)$$

Downward Sloping

- If 3-year contract is made on steel when housing prices are low, then if demand (and thus price) for houses increases, housing firms make more profit as the price of steel is fixed (contracts)
1. Firms are often slow to adjust wages
 - Rise in PL will increase profitability of hiring more workers and producing more output (real wages have fallen – decrease the cost of inputs)
 2. Menu costs can make some prices sticky
 - If the price level suddenly increase, firms may want to increase their prices but the costs of doing so (printing new catalogues, changing electronic databases etc.) may make it not worthwhile
 - Sales increase because good is now cheaper in real terms, which increases production
- The process of moving back to potential GDP is an automatic mechanism because it occurs without any actions from the government

Factors Influencing		
An increase in:	Shifts SRAS curve:	Because:
The expected price level	Left (decrease)	Costs of producing output rise
The expected price of an important natural resource (supply shock)	Left (decrease)	Costs of producing output rise
Workers and firms adjusting to having previously underestimated the PL	Left (decrease)	Workers and firms increase wages and prices
The labour force/capital stock/resources	Right (increase)	More output can be produced at every price level
Technological change/productivity	Right (increase)	Firms can produce more output with the same amount of inputs at every price level

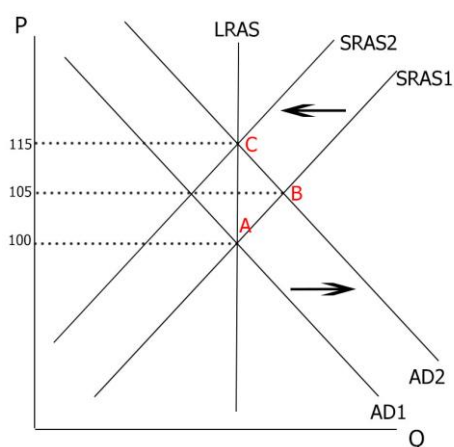
Long Run Aggregate Supply (LRAS)

- Tends to shift to the right each year, due to:
 - Increase in resources (migrant workers, mineral discoveries etc.)
 - Increase in the quantity of machinery and equipment used in production
 - Development of new technology or more productive ways of using resources
- Increase in labour productivity (output per worker) is the key to rising living standards of the long run
 - Increase in productivity leads to an increase in EG and incomes, which increases C and thus AD

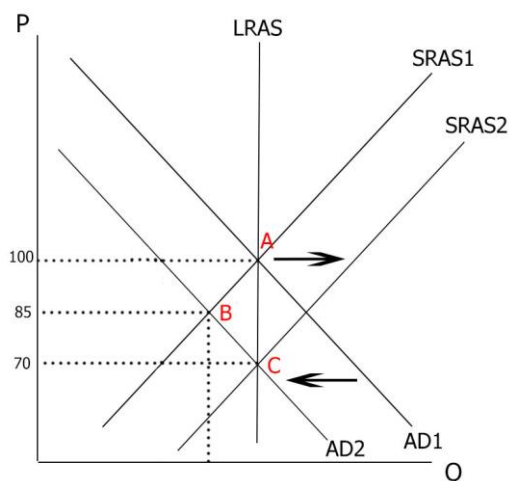
- As AD increases, more workers are required and employment increases for the economy as a whole

Factors Influencing		
Anything that affects the LRAS will also affect the SRAS		
An increase in:	Shifts SRAS curve:	Because:
The labour force/capital stock/resources	Right (increase)	More output can be produced at every price level
Technological change/productivity	Right (increase)	Firms can produce more output with the same amount of inputs at every price level

Movements in AD/AS Diagram



- Economy is in equilibrium point at A
- Increase in AD causes the economy to operate at beyond capacity (unemployment rate below the natural rate, people working overtime – overworked)
- In early to mid-2000s, this was due to huge increases in net X (growing Asian economies)
- Power of workers is high – can push for higher wages (demand for wages increases)
- Price expectations rise
- SRAS shifts to the left – new equilibrium with higher wages and a higher PL



Decrease in AD from AD1-AD2 (decrease in one of the components of AD)

- At B, operating below potential – high unemployment and rising
- Workers will be willing to accept a lower real wage
- SRAS will increase to SRAS2 because of reduced costs of production