AGGREGATE SUPPLY

The aggregate supply curve shows the relationship between the aggregate price level and the quantity of aggregate output.

AGGREGATE SUPPLY CURVE

Aggregate Supply is the amount of real GDP that will be made available by sellers at various price levels.

Aggregate Supply looks different in the Long Run and the Short Run:
- In the Long Run, classical economists assume the economy operates at full employment (maximum output), independent of the price level.
- In the Short Run, businesses will increase supply if the price level increases.
POSITIVE RELATIONSHIP

There is a positive relationship in the short run between price level and the quantity of aggregate output supplied.

THE AGGREGATE SUPPLY CURVES

The Slope of the Short-Run Aggregate Supply (SAS) Curve

The SAS curve is upward sloping because of:

- Auction markets
  - Prices are determined by demand and supply and supply curves are upward sloping
- Posted price markets
  - Also called quantity-adjusting markets, markets in which firms respond to changes in demand by changing production instead of changing their prices
  - Firms tend to increase their markup when demand increases

SHIFTS IN THE SAS CURVE

- Shifts in the SAS are caused by changes in:
  - Input prices
  - Productivity
  - Import prices
  - Expectations and sales taxes
- When production costs increase, the SAS curve shifts up
- In general, \%\Delta in price level = \%\Delta in wages + \%\Delta in productivity
THE LONG-RUN AGGREGATE SUPPLY CURVE

- The long-run aggregate supply (LAS) curve shows the long-run relationship between output and the price level.
- The position of the LAS curve depends on potential output, which is the amount of goods and services an economy can produce when both capital and labor are fully employed.
- The LAS curve is vertical because potential output is unaffected by the price level.

THE LAS CURVE

Potential output is assumed to be in the middle of a range bounded by high and low levels of potential output:

- When resources are over-utilized (point C), factor prices may be bid up and the SAS shifts up.
- When resources are under-utilized (point F), factor prices may decrease and SAS shifts down.

Determining potential output is important as it represents the maximum output the economy can achieve with available technology given a full labor force. It adjusts according to changes in technology and the capital stock.
SHIFTS IN THE LAS CURVE

<table>
<thead>
<tr>
<th>Price level</th>
<th>LAS₀</th>
<th>LAS₁</th>
<th>LAS₂</th>
</tr>
</thead>
</table>

Increases in the LAS are caused by increases in:
- Capital
- Resources
- Growth-compatible institutions
- Technology
- Entrepreneurship

Real output

LRAS

The long-run aggregate supply curve shows the relationship between the aggregate price level and the quantity of aggregate output supplied that would exist if all prices, including nominal wages, were fully flexible.

Do you remember the debate between Classical and Keynesian?

A RANGE FOR POTENTIAL OUTPUT AND THE LAS CURVE

The position of the long-run aggregate supply curve is determined by potential output.

Potential output – the amount of goods and services an economy can produce when both labor and capital are fully employed.

Was this in your textbook?
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AGGREGATE DEMAND POLICY

- A primary reason for government policy makers' interest in the AS/AD model is that monetary or fiscal policy shifts the AD curve.
- Monetary policy involves the Federal Reserve changing the money supply and interest rates.
- Fiscal policy is the deliberate change in either government spending or taxes to stimulate or slow down the economy.

APPLICATION: EXPANSIONARY FISCAL POLICY IN THE AD/AS MODEL

- If the economy is at point A, there is a recessionary gap equal to $Y_0 - Y_p$.
- The appropriate fiscal policy is to increase government spending and/or decrease taxes.
- AD shifts to the right, and output increases to potential output $Y_p$; and prices increase to $P_1$.

APPLICATION: CONTRACTIONARY FISCAL POLICY IN THE AD/AS MODEL

- If the economy is at point B, there is an inflationary gap $Y_p - Y_0$.
- The appropriate fiscal policy is to decrease government spending and/or increase taxes.
- AD shifts to the left, output returns to potential output $Y_p$; and inflation is prevented.
LIMITATIONS OF THE AS/AD MODEL

- The AS/AD model assumes away many possible feedback effects that can significantly affect the macroeconomy and lead to quite different conclusions.
- Implementing fiscal policy through changing taxes and government spending is a slow legislative process.
  - There is no guarantee that government will do what economists say is necessary.

LIMITATIONS OF THE AS/AD MODEL

- Potential output (the level of output that the economy is capable of producing without generating inflation) is difficult to estimate.
  - We do have ways to get a rough idea of where it is.
- There are many other possible interrelationships in the economy that the model does not take into account.
- The aggregate economy can become dynamically unstable, so a shock can set in motion changes that will not automatically be self-correcting.

LIMITATIONS OF THE AS/AD MODEL

- There are two ways to think about the effectiveness of fiscal policy: in the model and in reality.
  - The effectiveness of fiscal policy depends on the government's ability to perceive and to react appropriately to a problem.
- Countercyclical fiscal policy is fiscal policy in which the government offsets any change in aggregate expenditures that would create a business cycle.
- Fine-tuning is used to describe such fiscal policy designed to keep the economy always at its target or potential level of income.
Chapter 9: Aggregate Supply

CHAPTER SUMMARY

- The key idea of the Keynesian AS/AD model is that in the short run the economy can deviate from potential output.
- The AS/AD model consists of the aggregate demand curve, the short-run aggregate supply curve, and the long-run aggregate supply curve.
- Short-run equilibrium is where the SAS and AD curves intersect. Long-run equilibrium is where the AD and LAS curves intersect.
- Aggregate demand management policy attempts to influence the level of output in the economy.

CHAPTER SUMMARY

- Fiscal policy works by providing a deliberate counterclockwise to offset unexpected shocks to the economy.
- Macroeconomic policy is difficult to conduct because:
  - Implementing fiscal policy is a slow process.
  - We don’t really know where potential output is.
  - There are interrelationships not included in the model.
  - The economy can become dynamically unstable.