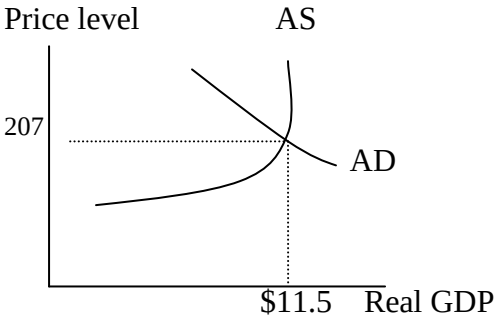
Study Guide

Chapter 8: Aggregate Demand and Aggregate Supply

- Aggregate demand (AD) – total demand for goods and services in an entire economy at each price level.
- Aggregate supply (AS) – total quantity of final goods and services that firms supply at each price level.
- Macroeconomic equilibrium occurs where the aggregate quantity demanded equals the aggregate quantity supplied. In other words, macroeconomic equilibrium established where the aggregate demand curve meets the aggregate supply curve. For example, the macroeconomic equilibrium in 2007 were equilibrium real GDP $11.5 trillion and equilibrium price level (CPI) 207.3. (Note: an economy's actual real GDP is its equilibrium real GDP)



1. Aggregate Demand (aggregate expenditure = C + I + G + NX)

Aggregate demand curve slope downward because

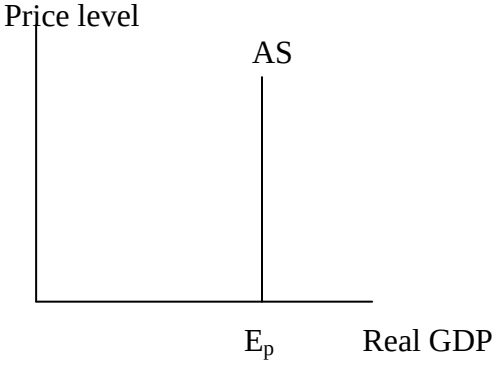
(1) interest rate effect

(2) wealth effect

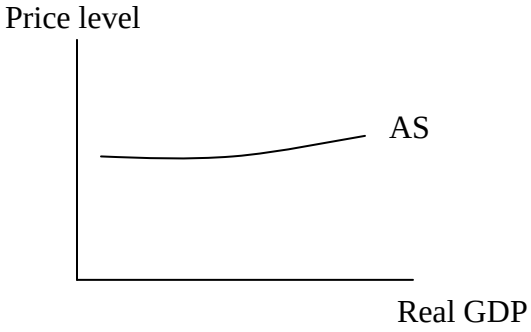
(3) international trade effect

2. Aggregate Supply (AS)

- In the long run, AS is vertical because the total amount of final goods and services that a country can produce depends on the availability of resources. When an economy uses all the resources and uses them efficiently to produce the maximum outputs, the output is call **potential output**. When a country produces at the potential output, it would employ all of the workers (with a normal unemployment 5.5%). Thus potential output is also called **full employment output**.
- Classical economists believe that an economy would tend to produce at its potential output level. Thus if the unemployment rate is higher than 5.5%, it would only be temporary. AS is always vertical to classical economists. E_p is potential output.

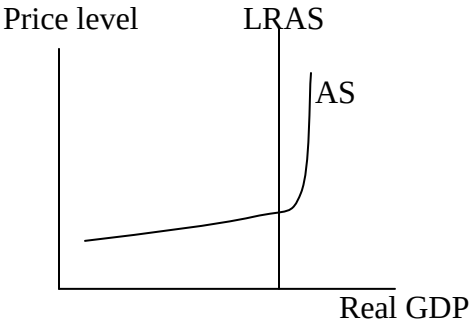


- Classical theory failed to explain why high unemployment lasted so long during Great Depression. A new explanation was called for. There came Keynes Theory.
- Economist John Maynard Keynes explained that if there were high unemployment, labor cost would be low. Thus firms would be willing to produce more goods without charging higher prices. As a result, AS curve is flat.



- After decades of economic research, nowadays mainstream economists believe there are two AS curves:

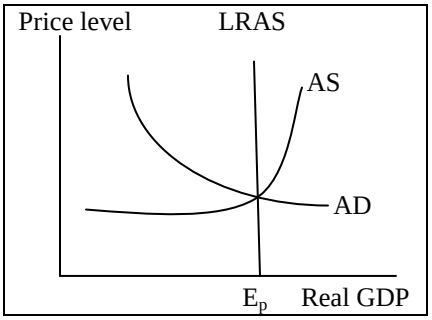
(1) **long run AS curve** (LRAS) is vertical as what classical economists describe;
(2) **short run AS curve** (AS) consists of three sections:
when unemployment is very high, AS is flat as what Keynes believes;
when unemployment is low, AS curves upward;
when resources are fully employed, demand for more goods would cause only prices to rise.



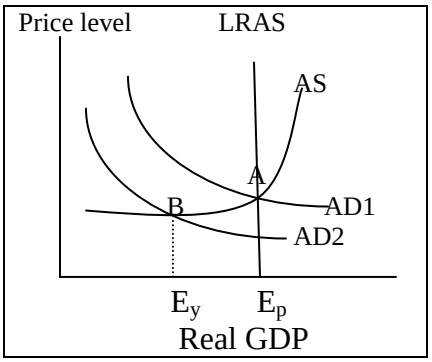
<u>3. Changes in aggregate demand and aggregate supply</u>

- Since AD consists of consumption, investment, government spending and net export, increase in any one of these components would lead to a increase in AD, and the AD curve would shift to the right;
  Any decrease in those components would cause AD to decline, and the AD curve would shift to the left.
- Since the availability of resources determines AS, any increase in land, labor, capital, or improvement in technology would lead to an increase in AS. And the AS curve would shift to the right. Vice versa. In addition, if workers expect price level will go up, they would negotiate for higher wages. Since this will add to the production cost, firms will produce less. Thus real GDP drops.

4. Macroeconomic Equilibrium

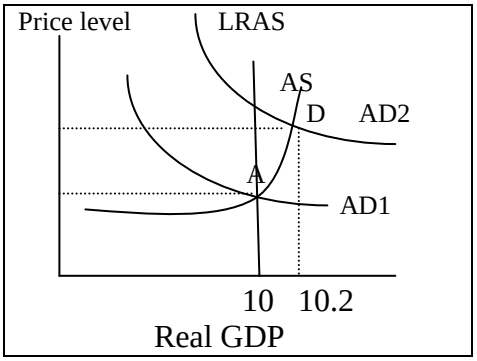


Case 1. Full Employment
Description:
This economy is operating at its potential.
Actual GDP (E_y) equals to Potential GDP (E_p).
GDP gap = $E_p - E_y = 0$
Unemployment rate is about 5.5%.
Inflation rate is expected around 2-3%.

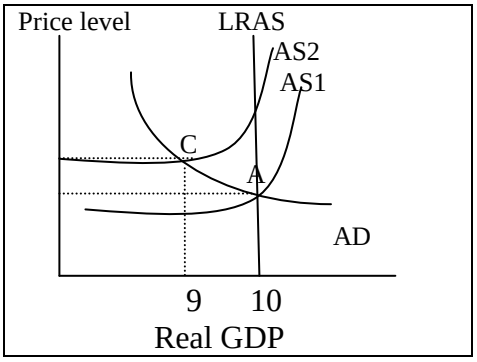


Case 2. Recession

If AD drops, the economy would move from A to B.
Description:
This economy is operating below its potential.
Actual GDP (E_y) is less than Potential GDP (E_p).
GDP gap > 0
Unemployment rate is higher than 5.5%.
Inflation rate is less than 0%.



Case 3. Overheat
If AD increases fast, the economy would move from A to D.
Description:
This economy is operating above potential.
Actual GDP (E_y) is higher than Potential GDP (E_p).
GDP gap < 0
Unemployment rate is below 5.5%
Inflation rate is higher than 3%.



Case 4. Stagflation

If AS decreases, the economy would move from A to C
Description:
This economy is operating below its potential.
Actual GDP (E_y) is less than Potential GDP (E_p).
GDP gap > 0
Unemployment rate is higher than 5.5%.
Inflation rate is higher than 3%.

Case 5. Steady Growth
If the economy operates at the full employment level year by year, the long run AS would increase because of the additional new capital produced each year.
Description:
GDP growth rate is about 2-3%.
Inflation rate is about 2-3%.
Unemployment rate is about 5.5%.