

2.3.3 Long-run AS

a) *Different shapes of the long-run AS curve:*

- *Keynesian*
- *Classical*

b) *Factors influencing long-run AS:*

- *Technological advances*
- *Changes in relative productivity*
- *Changes in education and skills*
- *Changes in government regulations*
- *Demographic changes and migration*
- *Competition policy*

- Long-run aggregate supply: The maximum output of an economy when it is using all its factors of production efficiently
- Classical LRAS:
 - In the long-run, it's assumed that an economy will move towards equilibrium where all resources are being used to full capacity (so the economy is at full productive potential. Eventually the spare capacity will disappear because the price will change to an equilibrium.
 - RGDP is determined by the supply side factors
 - Interference means markets won't clear
 - SRAS is based on the costs of production while LRAS is based on the quality and quantity of the factors of production
 - Wages are flexible in the long term but fixed in the short term
 - Unemployment can persist in the short term
 - In the Long run an increase in AD will only lead to inflation
- Fall in AD on a classical LRAS:
 - A fall in price and output in the short term
 - However, wage demands fall in the long term and SRAS shifts outwards to be at equilibrium on the LRAS at full output
- Increase in AD on a classical LRAS:
 - An increase in price and output in the short term
 - However, costs increase as staff work overtime so wages increase as workers have more bargaining power so the SRAS shifts inwards
- Classical LRAS curve shape: a vertical line as an increase in price won't cause an increase in output because the economy is running at full capacity, so it can't create any more output
- Keynesian LRAS:
 - Market failure means markets won't clear, for example trade unions resist wage reductions
 - Unemployment persists in the long term as wages are sticky downwards
 - AS is determined by the amount of spare capacity
 - The best solution is to increase AD to reach full capacity
 - Long run equilibrium can be at any level so the economy is not self healing
- Keynesian LRAS curve:

- At low levels of output, AS is completely elastic (horizontal)- so there is spare capacity in the economy, so output can increase without a rise in the price level as there is not much pressure of the factors of production so prices don't change
- When the curve begins to slope upwards this shows the economy is experiencing problems with supply, which are causing increases in costs.
- The curve becomes vertical when the economy is at full capacity (Y_f) – aggregate supply is completely inelastic. All resources are being used to their maximum potential and output can't increase any more
- Keynesian role of governments:
 - Belief in active government demand side policies
 - Debt will be paid off when the economy improves
- LRAS is determined by the factors of production- the only way to produce beyond the maximum capacity is to increase the quality and quantity of the factors of production
- Factors influencing long-run AS:
 - Technological advances: it can reduce costs for a broad range of firms
 - Changes in relative productivity: If there is an improvement in the division and workflow become more efficient, then the AS shifts to the right
 - Changes in education and skills: If people are well educated aggregate supply increases as individuals are more productive, so maximum output increases
 - Changes in government regulations: if the government makes new laws making it easier to set up businesses, then AS increases which is sometimes called a cut in red tape or bureaucracy. Some regulation add to firms' costs (a decrease in AS)
 - Demographic changes and migration: Demographics changes have a direct impact on supply, skills and the cost of labour and therefore an impact on AS. Migration has a demographic effect as many migrants are of working age or student so in the short run AS increases but if they become dependent in their old age AS may stagnate
 - Competition policy: if firms are force to compete instead of as a monopoly, they have to cut prices or improve their quality. Effective policing of competition makes AS increase
 - Changes in the tax and benefit system: A cut in taxes on firms may increase AS. A cut in benefits may increase productivity as people don't want to lose their jobs
 - A supply of new resources: increases an economy's capacity
 - Improvements in healthcare: if the health of workers improves, they will retire later so the productivity and size of the labour force increases
 - Increasing factor mobility: it is easier to move factor of production from one production process into another