

AS Micro Revision: The Importance of Elasticity of Supply

Price elasticity of supply measures the relationship between *change in quantity supplied and a change in price*.

- When $P_{es} > 1$, then supply is price elastic
- When $P_{es} < 1$, then supply is price inelastic
- When $P_{es} = 0$, supply is perfectly inelastic
- When $P_{es} = \text{infinity}$, supply is perfectly elastic following a change in demand

Factors determining elasticity of supply

1. **Spare production capacity** – high P_{es} when businesses or the economy has plenty of spare capacity (also known as ‘productive slack’) e.g. when a business or economy is coming out of recession
2. **Stocks of finished products and components** – high level of stocks (inventories) means that supply can quickly be adjusted to meet changes in demand – this is important in commodity markets
3. **The ease and cost of factor substitution** - if both capital and labour resources are occupationally mobile then the elasticity of supply for a product is high because capital and labour can be swapped with little loss of efficiency or productivity
4. **Time period involved in the production process** – P_{es} is higher the longer the time period that a firm is allowed to adjust its production levels. In some agricultural markets, momentary supply is fixed and is determined mainly by planting decisions made months before, and climatic conditions that affect production yield.

Areas of the AS and the A2 economics syllabus where price elasticity of supply is important

- **Housing supply** – inelastic supply of new housing in response to rising demand – pushes up property prices with consequences for housing wealth, affordability etc
- **Oil industry** – can OPEC and non-OPEC countries step up crude oil output as global demand expands?
- **Trade:** I.e. the ability of a nation’s export industries to respond to depreciation in the exchange rate if export demand grows – important for countries using the exchange rate as an instrument of macro policy
- **Commodity prices:** Inelastic supply of many hard and soft commodities – making prices more volatile – especially in markets where there is strong speculative activity - link to global food price inflation
- **Labour market:** Elasticity of supply of labour is a factor explaining wage differentials – i.e. migrant workers can help to relieve shortages of labour and improve the elasticity of supply
- **Macroeconomics and the output gap:** The changing elasticity of SRAS at different points of the economic cycle
- **Elasticity of supply of renewable sources of energy** as demand increases e.g. bio-fuels, solar power
- **Quasi public goods** – i.e. public goods such as the airwaves, motorways, beaches etc which become crowded and congested – causing the marginal cost of supplying to an extra user to rise
- **Government intervention in a market** – if you are answering questions on maximum and minimum prices or indirect taxes and subsidies, you can always make a useful analytical point about the importance of price elasticity of supply in affecting the results of any such market intervention.

Here is a mnemonic is for factors affecting price elasticity of supply

BRITS

1. **Barriers to entry** – e.g. Patents or high cost of advertising could make it hard for new firms to enter the market
2. **Raw materials** – If raw materials are readily available, it will be relatively easy to expand production
3. **Inventory** – Businesses with plenty of stock can increase supply easily.
4. **Time** – Many agricultural products take time to make so supply is fixed in the short term.
5. **Spare Capacity** – If businesses are not running to full capacity they are more able to increase supply. The supply of goods and services is often most elastic in a recession when there is plenty of spare labour and capital resource

Examples of some price elasticity of supply diagrams

