

2.7 Price elasticity of supply (PES)

Name: _____ Class: _____ Date: _____

Total: 15 marks

Objective

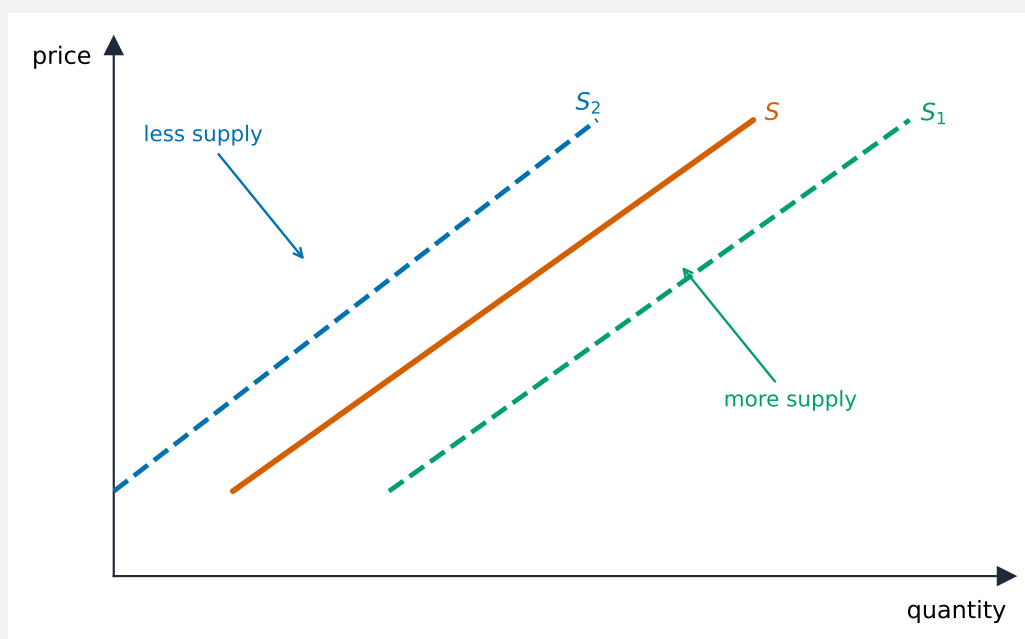
Build the skills to answer exam questions on **price elasticity of supply** 供给价格弹性 (PES) —its formula, **elastic and inelastic** supply, and the determinants.

You must be able to:

- calculate and interpret PES
- classify supply as elastic or inelastic
- explain the determinants of PES (time, spare capacity, stocks)

1 Worked examples

■ Measuring PES



PES measures how strongly quantity supplied responds to price

$$PES = \frac{\% \text{ change in quantity supplied}}{\% \text{ change in price}}$$

- **Worked:** price +10%, quantity supplied +30% → $PES = \frac{30}{10} = 3 \rightarrow$ **elastic** (>1).

- **More elastic supply when:** more **time** 时间, **spare capacity** 闲置产能, **stocks** 库存, easily switched factors.
- Farm goods often have **inelastic** supply in the short run (crops take a season to grow).

Answer shapes: K + App + An + Ev (a justified judgement, for discuss questions).

2 Practice

2.1 Define *price elasticity of supply (PES)*. [2]

2.2 Price rises by 20% and quantity supplied rises by 10%. Calculate the PES and classify the supply. [2]

2.3 State two factors that make supply more elastic. [2]

3 Exam-style questions

3.1 Supply is most likely to be price **inelastic** when: [1]

- **A** the firm has spare capacity
- **B** the good can be stored as stock
- **C** the good takes a long time to produce
- **D** factors move easily into the industry

3.2 Explain why the supply of fresh vegetables is often price inelastic in the short run. [4]

3.3 Analyse why the supply of a manufactured good is usually more elastic than the supply of a farm crop. [6]

4 Go further

You are now ready for the real exam questions on this subtopic. Open the **2.7 Price elasticity of supply (PES)** past-paper sheet in the Library, or try these in **Practice mode**:

- 0455/12 N25 —Q7 (PES)
- 0455/11 J25 —Q8 (elasticity of supply)
- 0455/12 J25 —Q8 (determinants of PES)

Solutions

IGCSE Economics answers are marked by **level of response**: award **K** knowledge, **App** application, **An** analysis and **Ev** a justified judgement.

2.1 a measure of how much the quantity supplied responds to a change in price (% change in quantity supplied $\div$ % change in price) (2 for a clear definition; 1 for a partial idea).

2.2 $PES = \frac{10}{20} = 0.5$; less than 1, so supply is **inelastic** (2; award 1 for a correct value with no classification).

2.3 any two of: more time; spare capacity; stocks held; easily switched factors (1 + 1).

3.1 C. A long production time makes supply slow to respond, so it is inelastic.

3.2 [4] K 1 + An up to 3 —fresh vegetables take a growing season to produce and cannot be stored long $\rightarrow$ so if the price rises, farmers cannot quickly grow more this season $\rightarrow$ the quantity supplied responds little $\rightarrow$ supply is inelastic in the short run.

3.3 [6] K/App/An —a manufactured good can be made faster: firms can add shifts, use spare capacity, or draw on stocks $\rightarrow$ so when the price rises they raise output quickly $\rightarrow$ supply is elastic. A farm crop takes a whole season to grow and cannot be stored long $\rightarrow$ output cannot rise quickly $\rightarrow$ supply is inelastic $\rightarrow$ so the manufactured good's supply responds more to price.