IGCSE ECONOMICS • EXERCISE SHEET

# 2.7 Price elasticity of supply (PES)

Name: ____________ Class: ________ Date: __________ **Total: 17 marks**

**KEY WORDS** time 时间 • price elasticity of supply 供给价格弹性 • spare capacity 闲置产能 • stocks 库存 • good 物品

## Objective

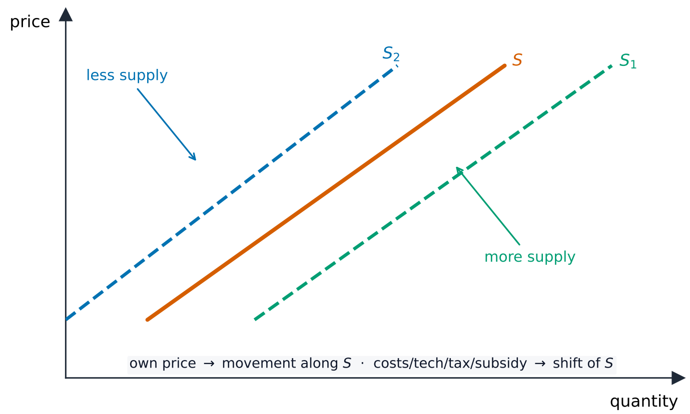
Build the skills to answer exam questions on **price elasticity of supply 供给价格弹性** (PES) — its formula, **elastic and inelastic** supply, and the determinants.

**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*

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

- **Worked:** price +10%, quantity supplied +30% → PES $= \frac{30}{10} = 3$ → **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]



## 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 ÷ % 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 → so if the price rises, farmers cannot quickly grow more this season → the quantity supplied responds little → 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 → so when the price rises they raise output quickly → supply is elastic. A farm crop takes a whole season to grow and cannot be stored long → output cannot rise quickly → supply is inelastic → so the manufactured good's supply responds more to price.