

Production, productivity and business costs

Edexcel IGCSE Economics 4EC1 sections 1.2.1-1.2.3 full package

1. Topic 4 at a glance

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4EC1 topic 4: spec sections 1.2.1 to 1.2.3 - production (three rows), productivity and division of labour (four rows) and business costs, revenues and profit (three rows).

Must-know: land, labour, capital, enterprise; primary to secondary to tertiary as economies develop; productivity 8 to 10 items per worker-hour is +25 percent; $TR = PQ$ with AR $P = 70 - Q/2$ and MR $70 - Q$; the cost table with MC 5-4-3-2-3-4-5-6-7, AVC min 3.4, ATC min 5.43; six internal, four external economies; four diseconomies.

2. Production

Production

Factors of production: land, labour, capital, enterprise. Sectors: primary (extraction), secondary (manufacturing), tertiary (services).

Development shifts employment and output from primary through secondary to tertiary - developed economies are service-dominated, and deindustrialisation is the same shift seen from the losing side.

3. Productivity and division of labour

Productivity and division of labour

Productivity is output per unit of input: 8 to 10 items per worker-hour is $(10-8)/8 \times 100 = 25$ percent. Raise it by land (fertiliser, drainage, irrigation, reclamation), labour (education, training, migration) and capital (more of it, better technology).

Division of labour: each worker specialises in one task. Gains: speed, no switching time, cheap training. Costs: boredom and turnover, narrow skills, one hold-up stops the line.

4. Costs, revenues and profit

Costs, revenues and profit

$TR = P \times Q$; $AR = TR/Q$; $MR = \Delta TR / \Delta Q$ - on AR $P = 70 - Q/2$, MR is $70 - Q$, $TR(40) = 2000$ and TR peaks 2450 at $Q = 70$. The table: TFC 12, TVC 5 to 39, MC 5-4-3-2-3-4-5-6-7, AVC min 3.4 ($Q=5$), ATC min 5.43 ($Q=7$); profit = $TR - TC$.

Economies of scale: internal (purchasing, marketing, technical, financial, managerial, risk bearing) and external (skilled labour, infrastructure, suppliers, similar firms).

Diseconomies: bureaucracy, communication, control, distance. LRAC: falling, minimum (most efficient point), rising.

Check yourself

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The four factors; the three sectors and the development shift.

Productivity with the 25 percent calculation and its factors by land, labour, capital; division of labour both ways.

TR/AR/MR; the cost table's minima; profit; the six-four-four scale lists with the LRAC diagram.