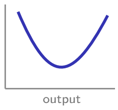
The Microeconomy

A-Level Economics ▪ Topic 7

A-Level Economics



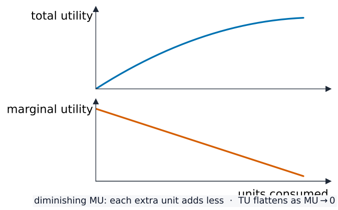
What we will cover

1. Utility & consumer choice
2. Efficiency & market failure
3. Costs & economies of scale
4. Revenue & profit
5. Market structures
6. Growth & objectives of firms

consumers maximise utility

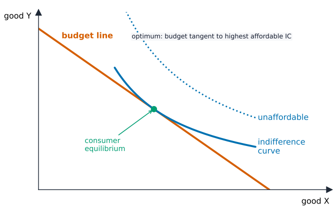
1 Consumer choice

Utility and consumer choice



- **total utility** 总效用 is the satisfaction from all the units consumed.
- **marginal utility** 边际效用 is the extra satisfaction from one more unit.

Indifference curves and budget lines



Consumer equilibrium 消费者均衡: the budget line touches the highest **indifference curve** 无差异曲线. A price fall has a **substitution effect** 替代效应 & **income effect** 收入效应; a rare **Giffen good** 吉芬品 even slopes upward.

2 Efficiency

Efficiency and market failure

productive 生产效率 – lowest cost

allocative 配置效率 – $P = MC$, what people want

dynamic 动态效率 – improves over time

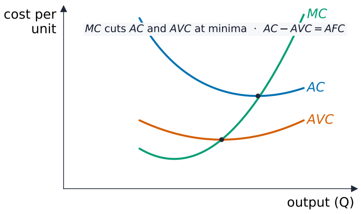
Pareto 帕累托最优 – no gai without a loss

Externalities create market failure

Market failure 市场失灵 (inefficiency) from monopoly power, **externalities** 外部性, public goods, information failure & factor immobility.

3 Costs, revenue and profit

Costs in the short run

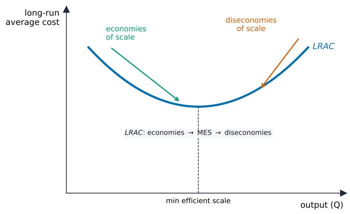


Total cost 总成本 = **fixed** 固定成本 + **variable** 可变成本.

- $AC = TC/Q$; $MC = \Delta TC/\Delta Q$
- **diminishing returns** 边际报酬递减 make MC rise

MC cuts AC at its lowest point.

Economies of scale



In the long run all factors vary, so we look at **returns to scale** 规模报酬.

- **economies of scale** 规模经济 – LRAC falls (bulk, big machines)
- **diseconomies** 规模不经济 – LRAC rises (poor control)

Revenue and profit

normal 正常利润
just enough to stay – a cost

supernormal 超常利润
profit above normal

subnormal 次正常利润
below normal – may leave

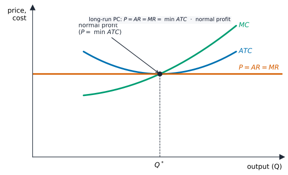
A firm maximises profit at the output where $MR = MC$. (Revenue $TR = P \times Q$; $MR = \Delta TR/\Delta Q$.)

4 Market structures

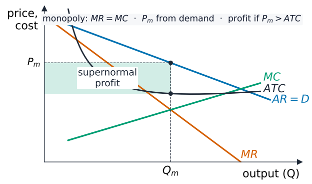
The four market structures

- **perfect competition** 完全竞争 – many **price takers** 价格接受者; normal profit
- **monopolistic competition** 垄断竞争 – **differentiation** 产品差异化
- **oligopoly** 寡头垄断 – a few; may form a **cartel** 卡特尔
- **monopoly** 垄断 – one; supernormal profit

Perfect competition vs monopoly



*normal **profit** 利润, efficient*



supernormal profit, dearer

Both produce where $MC = MR$, but a **monopoly** 垄断 then charges the higher **price** 价格 buyers will pay.

5 Firms

Growth and price discrimination

horizontal 横向一体化	**vertical** 纵向一体化	**conglomerate** 混合一体化
same stage	different stage	different industry

Price discrimination 价格歧视: charge groups different prices for the same good – needs market power, different elasticities & no resale.

Objectives of firms

profit max	**revenue max**	**sales max**	**satisficing**
利润最大化	收益最大化	销售最大化	满意化
$MR = MC$	$MR = 0$	most at normal profit	good enough

Divorce of ownership from control 所有权与控制权分离 creates the **principal-agent problem** 委托代理问题: managers may not chase the owners' profit.

6 Recap

Worked example – average and marginal cost

10 units cost £500 in total; 11 units cost £540. Find AC at 10 units and the MC of the 11th.

- $\text{AC} = \dfrac{\text{TC}}{Q} = \dfrac{500}{10} = £50$
- $\text{MC} = \Delta\text{TC} = 540 - 500 = £40$ (the cost of one more unit).
- MC $<$ AC, so the 11th unit is cheaper than the current average.
- $\Rightarrow$ it pulls the average down: AC at 11 is $540/11 = £49.09$.

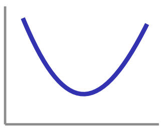
MC below AC drags AC down; MC above AC pushes it up. So MC always cuts AC at its minimum – that is the whole reason the curves are drawn that way.

Topic 7 – key takeaways

1. **Consumer** — diminishing utility; equi-marginal spending
2. **Costs** — U-shaped AC; economies then diseconomies
3. **Profit** — max at $MR = MC$; normal vs supernormal
4. **Structures** — perfect competition to monopoly

Check yourself

1. At what output is profit maximised?
2. Allocative efficiency needs price equals what?
3. How many firms in a monopoly?
4. A car maker buying a tyre maker is which integration?



Answers **1.** where $MR = MC$ **2.** marginal cost **3.** one **4.** vertical