



Edexcel A - A Level Economics

Theme 3 – Business behaviour and the labour market

3.4 Market structures Revision Notes

Contents

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- [3.4.1 Efficiency](#)
- [3.4.2 Perfect competition](#)
- [3.4.3 Monopolistic competition](#)
- [3.4.4 Oligopoly](#)
- [3.4.5 Monopoly](#)
- [3.4.6 Monopsony](#)
- [3.4.7 Contestability](#)


3.4.1 Efficiency

Types of efficiencies

Efficiency is all about how well we use our scarce resources (like time, money, labour) to get the best possible results. Economists use different types of efficiency to judge how well the market is doing this.

Allocative Efficiency

Allocative efficiency happens when we're using our resources to produce the *right things*; the goods and services people actually want. It's achieved when $P = MC$ (Price = Marginal Cost) or when AR (**Average revenue**) = MC .


 Example: If it costs £2 to make a sandwich and people are willing to pay exactly £2 for it, then the value to society equals the cost - allocative efficiency.

This means we're not overproducing or underproducing.

Productive Efficiency

Productive efficiency is all about making things in the *cheapest way possible*. It's when goods are produced at the **lowest point on the Average Cost (AC) curve**, where $MC = AC$.

This means a firm is using the fewest resources to make the most output and there is no wastage of scarce resources.

 Example: If a bakery can bake 100 cupcakes at the lowest average cost of £1 per cupcake, they're being productively efficient. But if they bake the same number at £1.50 each, they're wasting money (and cupcakes).




3.4.1 Efficiency

Types of efficiencies

Dynamic Efficiency


This is about *efficiency over time*. It's not just about doing things well now but also *investing* in better ways of doing things in the future. Think research, innovation, and new tech.

 Example: A phone company reinvests profits to develop a new, faster processor. That's dynamic efficiency in action.

Markets that encourage competition and allow firms to make supernormal profits often promote dynamic efficiency, because firms have both the **means** and the **motivation** to keep improving.

X-Inefficiency

X-inefficiency is when a firm gets lazy and doesn't cut costs the way it could. Maybe it has no competition, or it's just poorly managed. This is a type of *productive inefficiency*.

 Example: Let's say a company could make 150 laptops at £7.50 each but instead makes them for £8.50. That extra £1 is money wasted; they're X-inefficient.

It's like a student who could easily finish an assignment in 2 hours but takes 4 hours because they keep scrolling TikTok, not using time (or resources) efficiently.

3.4.1 Efficiency

Types of efficiencies

⚡ In summary:

Type	What it means	When it happens
Allocative Efficiency	Making the stuff people want	$P = MC$
Productive Efficiency	Making stuff at the lowest cost	$MC = AC$ (bottom of AC curve)
Dynamic Efficiency	Getting better over time through innovation	In competitive markets with investment
X-Inefficiency	Wasting resources by being lazy or uncompetitive	Firms not producing on AC curve



3.4.1 Efficiency

Efficiency/inefficiency in different market structures

Understanding *market structures* helps us figure out how efficiently firms are using resources, how much competition there is, and who's winning, consumers or producers.

What is a Market Structure?

A **market structure** refers to the setup in a particular market. It tells us how many sellers and buyers there are, what kind of products are being sold, and how easy it is to join or leave the market.

Key characteristics of a market structure include:

- **Barriers to entry/exit** – Is it easy or hard for new firms to enter the market? High start-up costs, regulations, or branding can make it difficult.
- **Type of product** – Are firms selling identical products (**homogenous**) like wheat, or different ones (**differentiated**) like clothing or coffee?
- **Number of buyers** – Are there a few or millions of people buying the product?
- **Number and size of firms** – Is the market dominated by one or two giants, or lots of small players?
- **Level of competition** – How fierce is the rivalry between firms?

3.4.1 Efficiency

Efficiency/inefficiency in different market structures

Market Structures: From Perfect to Imperfect

We usually group market structures into two main categories:

Perfect Competition

This is the economist's dream market:

- Many buyers and sellers
- Homogenous (identical) products
- No barriers to entry or exit
- Firms are **price takers** – they can't set their own price
- Super efficient – **allocatively and productively efficient** in the long run

Example: Farmers selling wheat in a global market

Imperfect Competition

These markets are a bit messier and less efficient. They include:

Monopolistic Competition

- Many sellers, but products are **differentiated** (e.g. cafés, hairdressers)
- Some price-setting power
- Low barriers to entry
- Not fully efficient, but competition still pushes prices and quality



3.4.1 Efficiency

Efficiency/inefficiency in different market structures

Oligopoly

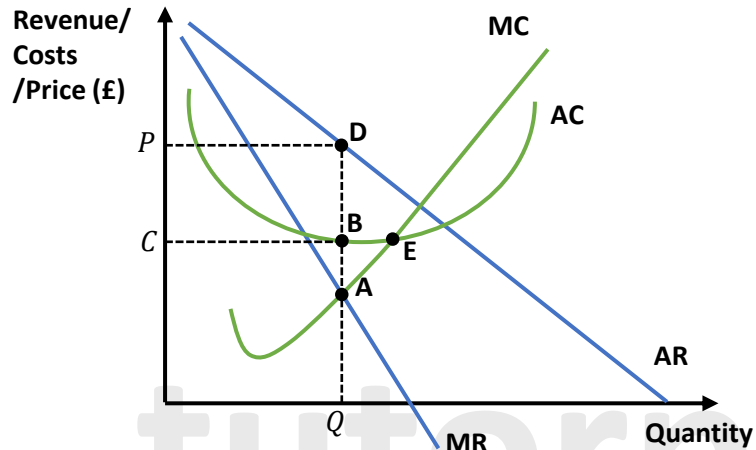
- A few large firms dominate the market (e.g. airlines, supermarkets)
- Products may be similar or different
- **High barriers to entry** and strategic behaviour (like price wars or collusion)
- Efficiency depends on the level of competition within the oligopoly

Monopoly

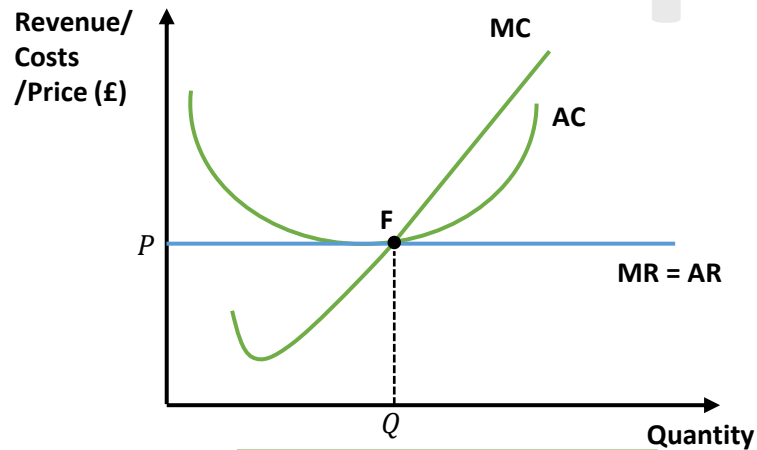
- A single firm dominates (or is the only one)
- **High barriers to entry**, so little threat from new firms
- Can set prices well above marginal cost
- Often **inefficient** – prices are high, output is low
- But may be **dynamically efficient** if profits are reinvested in innovation

3.4.1 Efficiency

Efficiency/inefficiency in different market structures



Imperfect competition



Perfect competition

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3.4.1 Efficiency

Efficiency/inefficiency in different market structures

🏠 Imperfectly Competitive Market – What the Diagram Tells Us

Imagine big coffee chains, they've got power, brand loyalty, and set their own prices. This is an **imperfect market** (like monopoly or oligopoly).

- These firms still aim for **profit maximisation**, so they also produce where **MC = MR** (we'll call this point A).
- However, they are **not productively efficient**, because **AC > MC**, meaning they're not producing at the lowest average cost. The most efficient point would be where **MC = AC** (point E).
- They are also **not allocatively efficient**, because **price (P or AR) > MC**, which means they're underproducing from society's point of view. Allocative efficiency would happen if **AR = MC**.
- But, since they make **supernormal profit** (extra money after covering all costs), they can reinvest in new tech, cool marketing, or better service, so they're more likely to be **dynamically efficient**.

🌿 Perfectly Competitive Market – What the Diagram Shows

In a perfectly competitive market, think farmers at a fruit market, everyone's selling identical apples, no one can control the price, and buyers have tons of choice.

- **Profit maximisation** happens where **marginal cost (MC) = marginal revenue (MR)**, this is where the firm is making as much profit as it can without losing customers. (Let's call this point F on the graph).
- The firm is **productively efficient** at this point too because **MC = average cost (AC)**, it's producing at the lowest possible cost per unit.
- It's also **allocatively efficient**, where **price (P) = MC**, which means society is getting the exact amount of the good that it wants.
- But... firms in perfect competition usually only make **normal profit** (just enough to stay in business), so there's not much left for investing in new tech or better products. That's why **dynamic efficiency** is unlikely.

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3.4.2 Perfect competition

Characteristics of perfect competition

Perfect competition is like the ultimate fair market, no one cheats, everyone's equal, and the rules are super strict! Here's what makes it tick:

1. Loads of Buyers and Sellers

There are so many participants in the market that no single buyer or seller has the power to influence price.

👉 That's why **firms are called price takers**, they just accept the market price.

🛒 **Example:** Think of farmers selling identical tomatoes at a busy market, if one farmer raises their price, people will just buy from the next stall.

2. No Barriers to Entry or Exit

It's easy to join the market (start a business) or leave it, there's no mountain of paperwork, massive start-up cost, or government rules blocking you.

👉 This makes the market **super competitive**.

🧁 **Example:** Anyone can start baking cupcakes at home and begin selling them tomorrow, and they can stop anytime, no strings attached.

3. Perfect Knowledge

Everyone knows everything. Buyers and sellers all have **perfect information**, especially about **prices**.

👉 So if one seller drops their price, **everyone finds out**, and other sellers must do the same.

🔍 **Example:** Online marketplaces where price comparisons are just one Google search away.

4. Identical Products (Homogeneous Goods)

All products are exactly the same, no branding, no added features.

👉 So, if one seller increases their price even a little, customers will go elsewhere immediately.

🛒 **Example:** A litre of bottled water with no label, sold by dozens of vendors, it's all the same, so price is everything.

🧠 Because of this, **demand is perfectly price elastic**, meaning customers respond dramatically to price changes, even a 1p increase could lose you all your customers.

3.4.2 Perfect competition

Profit maximising equilibrium in the short run and long run

🔑 **How do firms maximise profit in perfect competition?**

To **maximise profit**, firms produce at the output level where:

👉 **Marginal Cost (MC) = Marginal Revenue (MR)**

This is the "sweet spot", the cost of making one more unit is exactly the same as the revenue earned from selling it. No money is being lost or left on the table.

🗑️ **Why can't these firms charge more?**

Because they're **price takers**, which means they **have no market power**.

- There are **lots of sellers**, so no single firm can raise prices without losing all its customers.
- The price is set by the **market**, every firm sells at the **same price**.

That price becomes the firm's:

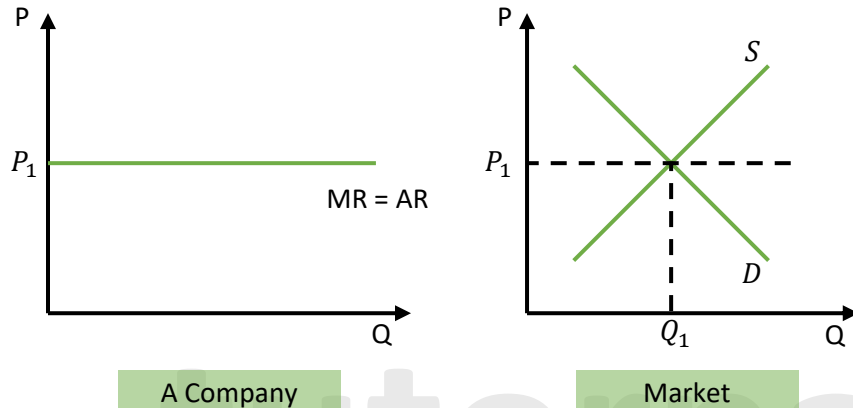
- 📌 **Average Revenue (AR)**
- 📌 **Marginal Revenue (MR)**
- 📌 **Demand (D)**

So essentially:

$$P = AR = MR = D$$

3.4.2 Perfect competition

Profit maximising equilibrium in the short run and long run



 What's happening in the diagrams?

Left: A company

- The company faces a **horizontal demand curve** at price P_1 .
- They accept the market price and choose their quantity where **MC = MR**.

Right: Market

- Price is determined by the **intersection of supply and demand**.
- All firms accept this price (P_1) as the selling price.





3.4.2 Perfect competition

Profit maximising equilibrium in the short run and long run

 What's the difference between the short run and long run?

 In the short run:

- Firms can make **supernormal profit** (more than normal)  or even **losses** .
- This happens because there's **not enough time** for new firms to enter or leave the market.

 In the long run:

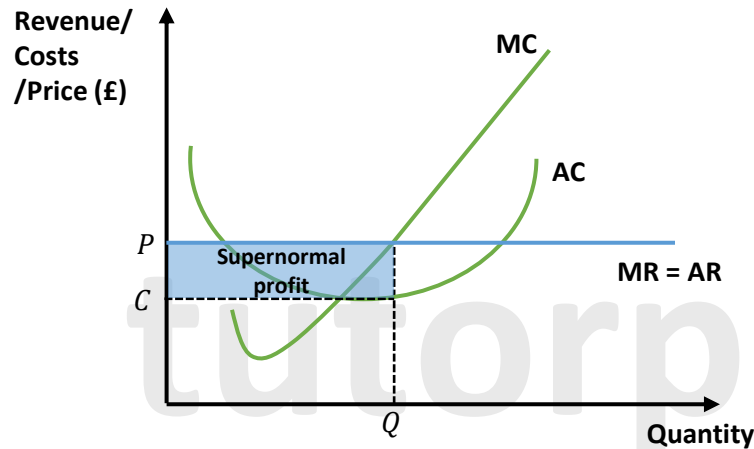
- New firms **enter if profits exist**, or **exit if losses mount**.
- This competition **pushes prices down** (if there were profits) or **reduces supply** (if there were losses).
- Eventually, firms make just **normal profit** (they cover all their costs, including opportunity cost).

3.4.2 Perfect competition

Profit maximising equilibrium in the short run and long run

Short-run Profit Maximisation

In the **short run**, firms in a **perfectly competitive market** can actually make **supernormal profit**.



What's going on in the diagram?

- The horizontal line (P) is the **market price** (and for a perfectly competitive firm, it's also their **AR = MR = D**).
- The firm produces at the point where **MC = MR**, because that's where profits are maximised.

At this output (Q):

- The price (P) is **higher than the average cost (C)**
- That gap between price and cost is **profit per unit**
- Multiply that by the quantity produced (Q), and boom, you've got **supernormal profit**

$$\therefore \text{Supernormal profit} = (P - C) \times Q$$

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3.4.2 Perfect competition

Profit maximising equilibrium in the short run and long run

Short-run Losses in Perfect Competition

Yep, even in **perfect competition**, firms can take a hit and make a **loss** in the short run.

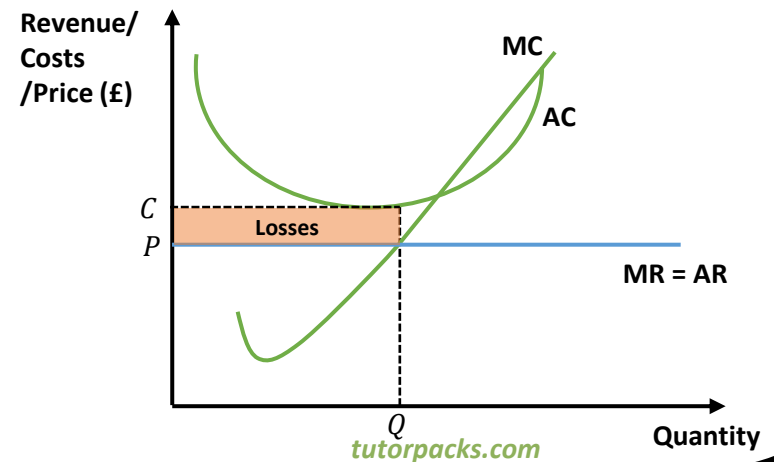
What's going on here?

In this situation, the firm is still producing at the **profit maximisation output**, which is where **MC = MR** (Marginal Cost = Marginal Revenue). That's the rule for maximising profits, or in this case, **minimising losses**.

But here's the twist:

- The price the firm can charge (P) [which is also its **AR (Average Revenue)**] is **less than the AC (Average Cost)** per unit.
- That means each item they sell **doesn't cover its full cost** of production.

Imagine you're selling donuts for £2, but they cost you £3 to make. You're losing £1 on each one, and that adds up fast.



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3.4.2 Perfect competition

Profit maximising equilibrium in the short run and long run

🙄 Why keep producing?

Good question. Even though the firm is making a loss, it might still cover its **variable costs** (like wages or ingredients), just not the **fixed costs** (like rent).

As long as $P > AVC$ (**Average Variable Cost**), it's still better to produce than shut down completely, because you're at least covering something.

📊 How to calculate the loss:

The firm's **total loss** is worked out like this:

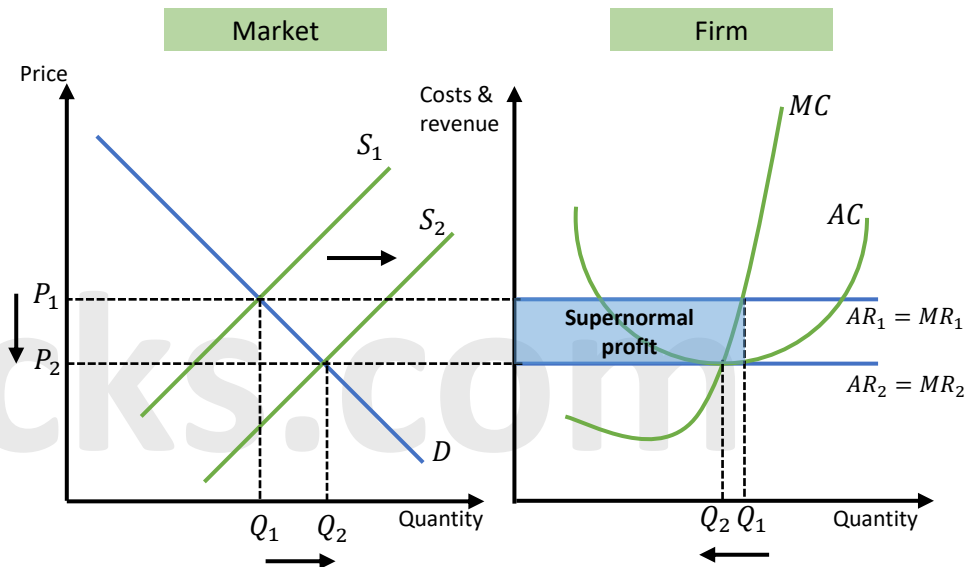
$$(P - C) \times Q$$

💡 Since C is **greater than** P , this will give you a negative number = a **loss**.

3.4.2 Perfect competition

Profit maximising equilibrium in the short run and long run

Let's break down how a perfectly competitive market moves from short-run profits to a long-run balance.



🔑 In the Short Run: Supernormal Profits

In perfect competition, firms can make **supernormal profit**.

- These profits act like a giant magnet 🪄 attracting new firms into the industry.
- Why? Because there are **no barriers to entry** – anyone can join in.



3.4.2 Perfect competition

Profit maximising equilibrium in the short run and long run

What Happens Next?

When new firms enter the market, they increase the **overall market supply**. This causes the **supply curve** (S_1) to shift **to the right** (S_2) in the market diagram.

- As supply increases, prices start to **fall** (from P_1 to P_2).
- This means individual firms **can no longer charge the higher price**, they're now **price takers** at the new market price.

For the Individual Firm:

- The firm's revenue drops to the new price P_2 , and now it's producing at a new quantity Q_2 (smaller than before).
- Its **market share** shrinks because the pie is now divided among more firms.
- At this point, the firm is producing where **average revenue (AR) = average cost (AC)**, meaning it's making just enough to stay in business. That's **normal profit**.

In the Long Run...

In perfect competition, the market always adjusts so that:

- ✓ Firms that were **making a loss** leave the market.
- ✓ Firms that were **making supernormal profit** attract competition until the profit disappears.

Eventually, **all firms in the market earn normal profit**, no more, no less.

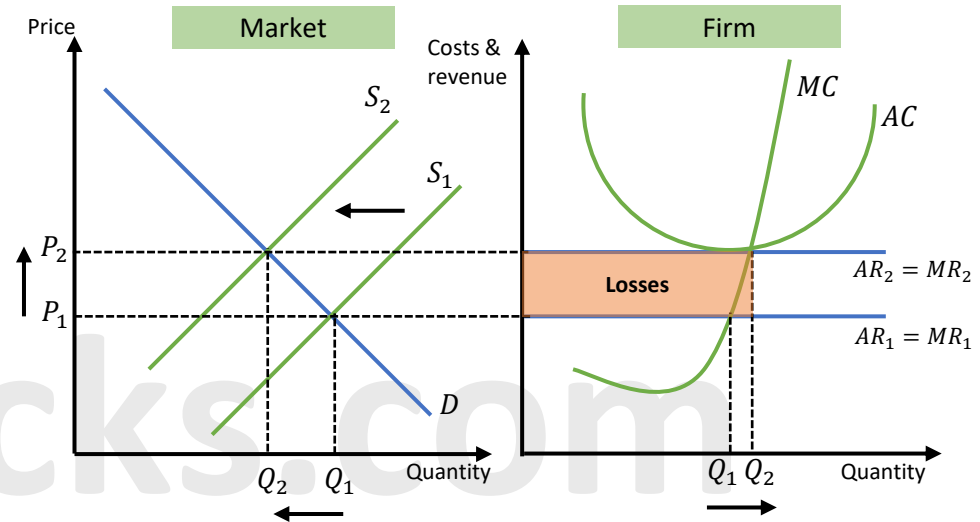
Example

Imagine a bakery that's earning extra profits from selling croissants. Other bakers notice and open next door. Now croissants are everywhere. Prices drop, and our original bakery is no longer rolling in cash, just breaking even. That's normal profit.

3.4.2 Perfect competition

Profit maximising equilibrium in the short run and long run

Let's talk about how a perfectly competitive market moves from short-run losses to a long-run balance.



Sometimes in the short-run, even in perfectly competitive markets, firms might **make a loss**. But economics has a way of balancing things out in the long run.

So, what happens when firms are losing money?

- If a firm's **average cost (AC)** is higher than the **price (P)** it can sell at, it's making a **loss**. This is because it costs more to produce each item than they can sell it for.
- Firms are still producing at the **profit-maximising output**, where **MC = MR**, but they're not covering their full costs.
- This is when the **shut-down rule** comes in. If the price drops below the **average variable cost (AVC)**, the firm should shut down immediately. But if the price is above AVC, it may continue in the short run hoping for better days.

3.4.2 Perfect competition

Profit maximising equilibrium in the short run and long run

Firms Start Exiting...

- Because there's **no barrier to exit** in perfect competition, it's super easy for struggling firms to leave.
- As firms exit, **supply in the market decreases** (S_1 shifts to S_2).
- This **reduces total market output** from Q_1 to Q_2 .
- Fewer firms = lower supply = **higher price** in the industry (P_1 rises to P_2).

What happens to the remaining firms?

- The remaining firms benefit from this higher market price. Their **output increases** (they get a bigger slice of the smaller market pie).
- They now produce at the point where **AR = AC**, which means they are making **normal profit** – just enough to stay in the game, covering all their costs, including opportunity costs.



3.4.2 Perfect competition

Profit maximising equilibrium in the short run and long run

Continue to the next page...

3.4.3 Monopolistic competition

Characteristics of monopolistically competitive markets

Monopolistic competition is a type of market structure that sits somewhere between perfect competition and a monopoly. It's super common in the real world – think coffee shops, nail salons, or small clothing brands. Here's a break down:

1. 👤 Lots of Small Firms and buyers

There are **many small businesses** in the market, and none of them are big enough to dominate. Each one operates **independently**, meaning their decisions don't really affect others. This also means no one seller or buyer has a large price setting power.

🧁 **Example:** Your local bakery doesn't need to worry about how another bakery two blocks away sets its prices – they just focus on their own delicious cupcakes.

2. 🚪 Easy to Enter and Exit

There are **low barriers to entry and exit**, meaning it's fairly simple for new firms to start up or for struggling firms to leave. This keeps competition alive and buzzing.

📁 **Example:** If someone wants to start a small online t-shirt store, they can – without needing millions in capital or government approvals.

3. 🗂️ Slightly Differentiated Products

Products are **not identical** – they're **slightly differentiated**. This means firms try to make their goods or services stand out through branding, style, quality, or customer service.

💇 **Example:** Two hair salons may offer the same service, but one focuses on speed and convenience, while the other is all about a luxurious, pampering experience.

3.4.3 Monopolistic competition

Profit maximising equilibrium in the short run and long run

🚀 In the Short Run: Time to Make Some (Supernormal) Profit!

In **monopolistic competition**, firms aim to **maximise profit** just like everyone else. To do that, they produce at the output level where:

📊 Marginal Cost (MC) = Marginal Revenue (MR)

This is the sweet spot where the cost of making one more unit exactly equals the revenue earned from selling it.

Now, here's the cool bit – because the firm offers a **differentiated product** (something that stands out in some way), it has **some control over price**. This means it's a **price maker**, not a price taker like in perfect competition.

🧁 **Example:** Imagine a cupcake shop that offers gluten-free, unicorn-themed cupcakes. Customers love them, and since no one else sells exactly the same thing, the shop can charge a little more.

As a result, in the short run, the firm can earn **supernormal profit** – which is basically profit above and beyond covering all costs (including opportunity cost).

🕒 In the Long Run: Hello, Normal Profit

But this doesn't last forever. In the long run, things change.

Because it's **easy to enter the market** (low barriers to entry), new firms get attracted by those juicy profits. They jump in and offer their own unicorn cupcakes.

🔄 More firms = more competition = prices fall

👤 Each firm now gets a smaller piece of the pie (market share shrinks)


Eventually, the extra profit disappears, and all the firms are left earning **normal profit**. That's just enough to keep them going – covering all their costs, but nothing extra.

3.4.3 Monopolistic competition

Profit maximising equilibrium in the short run and long run

How Firms Try to Stay Ahead

To keep that edge and stay profitable a bit longer, firms get creative. They try to **differentiate** their product even more:

 **Example:** A barber shop starts offering free coffee, a pool table, and Netflix while you wait – just to stand out and hold onto their customers.

3.4.3 Monopolistic competition

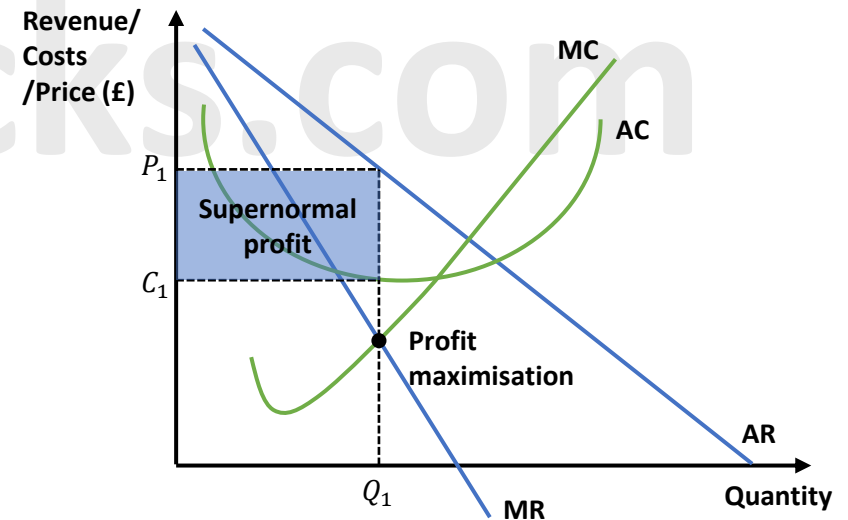
Profit maximising equilibrium in the short run and long run

Short-Run Profit Maximisation in Monopolistic Competition

In the **short run**, firms in **monopolistic competition** can make **supernormal profit**.

Why? Because They're Not Just Selling Any Old Thing

Firms in monopolistic competition sell **differentiated products** – meaning their goods or services have something that sets them apart. It could be branding, quality, customer service, or even location. This gives them **market power**, which means they can charge a price above marginal cost.



3.4.3 Monopolistic competition

Profit maximising equilibrium in the short run and long run

Profit Maximising Point

The magic spot where the firm maximises profit is where:

Marginal Cost (MC) = Marginal Revenue (MR)

At this point:

- The firm is producing Q_1 units
- It's charging a price of P_1
- Its average cost (AC) is C_1

Since $P_1 > C_1$, the firm is making **supernormal profit**, shown by the blue box on the graph.

The Profit Formula:

To calculate the profit:

$$\text{Supernormal profit} = (P_1 - C_1) \times Q_1$$

Think of it like this:

- You sell each item for £10 (P_1),
- It costs you £6 to make (C_1),
- You sell 100 of them (Q_1),
- So, profit = $(£10 - £6) \times 100 = £400$



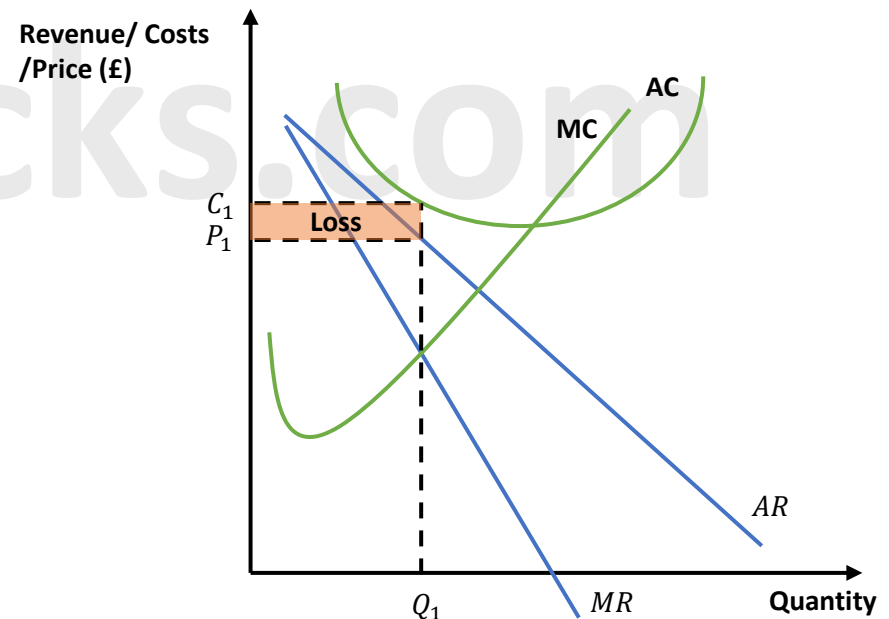
3.4.3 Monopolistic competition

Profit maximising equilibrium in the short run and long run

Short-Run Losses in Monopolistic Competition

Just like businesses can earn profits, they can also make **losses**, especially in the **short run**.

In **monopolistic competition**, where lots of small firms sell slightly different products (like barbershops, cafés, or nail salons), firms sometimes find themselves in a situation where they're not even covering all their costs. That's when we say they're making a **loss**.



3.4.3 Monopolistic competition

Profit maximising equilibrium in the short run and long run

What's Happening on the Diagram?

- The firm is operating at the **profit maximisation level of output**, where:
 - **Marginal Cost (MC) = Marginal Revenue (MR)**
- At this output level (Q_1), the **Average Revenue (AR)** (or the price they're charging, P_1) is **less than** the **Average Cost (AC)**, which is C_1 .

That means:

- The firm isn't making enough per product to cover everything it costs to produce them, hence, it's in the red. 😞

The Loss Formula:

To calculate the loss:

$$\text{Loss} = (P_1 - C_1) \times Q_1$$

Imagine this:

- You charge £4 per unit (P_1)
- It costs you £6 per unit to make (C_1)
- You sell 100 units (Q_1)

$$\text{Loss} = (£4 - £6) \times 100 = \text{-£200}$$

- That's a £200 loss.



3.4.3 Monopolistic competition

Profit maximising equilibrium in the short run and long run

Why Does This Happen?

Firms in monopolistic competition have **some market power** thanks to their **product differentiation** but it doesn't protect them from:

- Falling demand
- Rising costs
- Tough competition

3.4.3 Monopolistic competition

Profit maximising equilibrium in the short run and long run

Moving from Short-Run Profit or Loss to Long-Run Equilibrium

From Supernormal Profit to Normal Profit

- In **monopolistic competition**, if firms are making **supernormal profit** (profit above what's needed to keep them in business) in the **short run**, more firms will want a piece of the pie 🥧
 - These new firms are **incentivised** (motivated) by the juicy profits
 - Because **barriers to entry** are low (it's easy to start selling), new competitors can enter without much hassle
- As more firms enter:
 - There's more competition
 - The market becomes more crowded
 - Prices start to fall 📉
 - Demand for each individual firm drops (since customers have more options)
- Eventually, that **supernormal profit gets eroded** (wiped out) and firms only make **normal profit** – just enough to stay in the game without losing money.



3.4.3 Monopolistic competition

Profit maximising equilibrium in the short run and long run

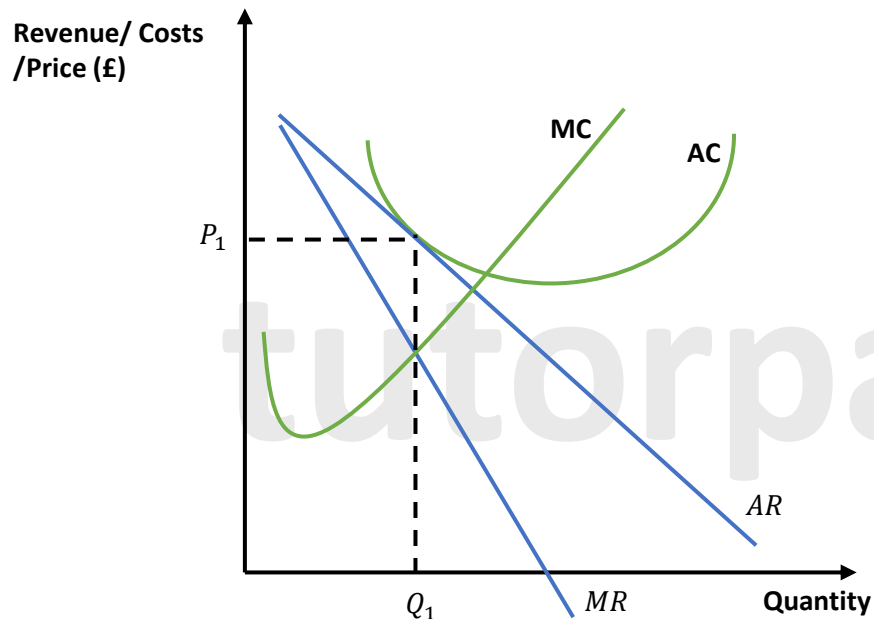
From Losses to Normal Profit

- On the flip side, if firms are making **losses** in the short run (where costs are higher than revenue), not all will stick around 🙋
 - The **shut down rule** says a firm should shut down if it can't even cover its **average variable costs**
 - Because **barriers to exit** are also low, it's easy for struggling firms to leave the market
- When firms exit:
 - Market supply decreases 📉
 - Prices go up as fewer goods are being sold
 - The firms that remain see an increase in demand and revenue
 - Eventually, these firms can cover their costs and move back to making **normal profit**

3.4.3 Monopolistic competition

Profit maximising equilibrium in the short run and long run

Moving from Short-Run Profit or Loss to Long-Run Equilibrium



3.4.3 Monopolistic competition

Profit maximising equilibrium in the short run and long run

Diagram Analysis:

- Initially, a firm produces where **marginal cost = marginal revenue** ($MC = MR$), which is the **profit maximisation point**
- At that point, if **price (P_1)** is equal to **average cost (AC)**, the firm is making **normal profit**
- **In the long run**, monopolistic competition always brings firms back to normal profit because:
 - If firms are **losing money**, they leave the market, shrinking supply and raising prices until losses disappear.
 - If firms are making **supernormal profit**, new competitors join in, increasing supply and lowering prices until extra profit is gone.

3.4.4 Oligopoly

Characteristics of oligopoly

Most markets we shop in every day (like supermarkets, banks, and petrol stations) are **oligopolies**. This means the market is dominated by just a few powerful firms. Let's break down what makes an oligopoly so unique 📌

1. High Barriers to Entry and Exit


Barriers to entry are things that make it hard for new firms to enter a market. In an oligopoly, these barriers are **super high**.

- **Getting in is tough:** A few big companies dominate the market. It takes a lot of **money** to compete. For example, starting a new mobile network or energy company could cost **billions**.
- **Getting out is no fun either:** Firms often face **sunk costs**, expenses they can't get back. Think of a mobile company spending billions on 5G rights. If they quit, that money is gone forever.

2. High Market Concentration

An oligopoly has a **high concentration ratio**, meaning just a few firms hold most of the power.

- This is measured using something like a **5-firm concentration ratio**, which shows how much of the market the top five companies' control.
- The **higher the ratio**, the **more concentrated** the market is.

 **Example:** In the US **smartphone market**, Apple and Samsung together dominate over 80% of sales. The remaining companies fight for the rest.

3.4.4 Oligopoly

Profit maximising equilibrium in the short run and long run

3. Interdependence Between Firms


In an oligopoly, firms **watch each other like hawks** 🦅.

- Every decision (price change, advertising campaign, product launch) affects the others.
- This leads to **strategic thinking** and even **game theory** (a tool used to predict rival behaviour, like a game of chess).
- Think of petrol stations: if one cuts prices, the others usually follow. They're all deeply **interconnected**.

4. Product Differentiation

Even when products look the same, brands **try hard to stand out**. This is called **differentiation**.

- Products are often **branded** so customers feel they're getting something special.
- Even **petrol**, which is pretty much the same everywhere, is branded to seem different (e.g. "Ultimate Clean Fuel!").
- Consumers **believe** these brands are different, and often stay **loyal** to them.

 **Example:** Coke vs Pepsi. Same fizzy drink, different branding, loyal fans.

3.4.4 Oligopoly


N-firm concentration ratio

What is a concentration ratio?


A **concentration ratio** tells us what percentage of total market sales is owned by the largest firms in an industry. It could be a **4-firm**, **10-firm**, or **20-firm** ratio – depending on how many firms we're looking at.

What does the number tell us?

A **5-firm concentration ratio** of **60% or more** suggests that the market is an **oligopoly** – a few big players dominating.

 **Example:** In the UK **soft drinks market**, Coca-Cola, Pepsi, and a few others take up most of the shelf space – a classic oligopoly.


A **1-firm concentration ratio** of **100%** would mean one firm controls the entire market – this is a **pure monopoly**.

 **Example:** If only one company supplied tap water to every household in a country, that's a monopoly.

What counts as a monopoly?

In the UK, the **Competition and Markets Authority (CMA)** says a firm with **more than 25% market share** could be considered a **monopoly**.

This doesn't mean the firm is illegal, but it does mean the government might step in if that firm tries to get even bigger – for example, through a **merger** or **acquisition** that would give it too much power.

 **Example:** If Amazon wanted to buy another major online retailer and that deal pushed its market share above 25%, the CMA might block it to protect competition.

3.4.4 Oligopoly

N-firm concentration ratio

Worked Example:

The table below shows the total revenue earned by various streaming platforms in the UK over a 3-month period. Use this data to calculate the **five-firm concentration ratio (CR5)**.

Streaming Platform	Revenue (£ million)
FlickFlix	210
ShowBox	160
BingeNow	90
StreamIt	120
PixelPlay	70
CineZone	45
WatchMe	25
ChillTV	35
VidRush	20
Others	15
Total	790

3.4.4 Oligopoly

N-firm concentration ratio

Worked Example:

Answer:

Step 1: Identify the top five platforms by revenue

Let's find the five platforms with the highest revenue:

1. **FlickFlix** – £210 million
2. **ShowBox** – £160 million
3. **StreamIt** – £120 million
4. **BingeNow** – £90 million
5. **PixelPlay** – £70 million

Add them up:

$$210 + 160 + 120 + 90 + 70 = 650 \text{ million}$$

Step 2: Work Out the Percentage of Total Sales

To calculate the concentration ratio, we divide the combined revenue of the top five platforms by the total market revenue and multiply by 100:

$$\frac{650}{790} \times 100 = 82.28\%$$

Final Answer:

The **five-firm concentration ratio (CR5)** is **82.28%**.

That means the top 5 streaming platforms take up over **82%** of the market. That's quite a concentrated market, hints at **oligopoly** behaviour. It would be hard for a new streaming platform to enter and compete unless they offer something unique (or have very deep pockets).

Want to imagine it? Out of every £1 spent in streaming platforms, about **82p** goes to one of those top 5 big names.



3.4.4 Oligopoly






Reasons for collusive and non-collusive behaviour

In **oligopoly markets**, only a few firms dominate. Think of the streaming industry, Netflix, Disney+, Amazon Prime, and a few others. Because there are so few players, what one firm does can seriously affect the others.

Collusive Behaviour (They Work Together):

This happens when firms **cooperate** instead of compete. They may secretly agree to **fix prices**, limit supply, or split the market to reduce competition. This kind of behaviour **reduces choice** and **raises prices** for consumers.

Example: Imagine three pizza chains in a town secretly agree to all charge £10 for a margherita pizza. No discounts. No undercutting. That's collusion.

-  Helps them **maximise industry profit**
-  **Reduces uncertainty** (no surprise discounts from competitors)
-  But it's **illegal** in most countries (like the UK)
-  Carries **risks** — one firm might break the deal and cut prices
-  Can be investigated and fined by regulators (like the CMA in the UK)

Non-Collusive Behaviour (They Compete Hard):

Here, firms **compete independently**. They may try to grab more market share through:

- Lower prices
- Better advertising
- More innovative products

Example: Think about Uber vs Bolt, always fighting for customers with promotions and offers. That's non-collusive rivalry.

3.4.4 Oligopoly

Reasons for collusive and non-collusive behaviour

Why Do Firms Collude? (And When It Works Best)

Reason	Why it encourages collusion
Few competitors	Easier to keep track of each other and agree quietly on prices or output.
Weak regulation	If regulators aren't watching closely, firms might take the chance to break the rules.
Similar costs	If all firms face the same costs (e.g. electricity providers using the same infrastructure), they're easier to align.
High barriers to entry	It's hard for new players to join the market, so existing firms feel "safe" colluding.
Similar products & prices	If everyone's offering the same service (like broadband), there's less need to undercut prices.

Final Thought:

Firms in an oligopoly can either **fight each other** or **team up in secret**. When they compete, customers win. When they collude, customers pay more. That's why regulators keep a close eye on industries like airlines, energy, telecoms, and even chocolate makers!

3.4.4 Oligopoly


Types of collusion

Collusion happens when firms in an oligopoly (a market with just a few big players) work together instead of competing. It's like a secret team-up that helps them act like a **monopoly**, meaning they can set prices higher and make life harder for customers.

There are **two main types** of collusion: **overt** and **tacit**.

1 Overt Collusion – The Obvious Kind

This is when companies **explicitly agree** to stop competing and start cooperating. It's **usually illegal**.


Think of it like a group of ice cream trucks all agreeing to charge £4 a scoop, no matter where you go in town 

A cartel is the most extreme version

A **cartel** is a formal group of firms that collude. They make a proper agreement to do things like:

- **Set prices together** (price fixing)
- **Divide up the market** so each business sticks to its own turf

This agreement is often written down in a **formal document**, and there can be **finances** for anyone in the group who breaks the rules.

 Example: A group of tech repair shops could form a cartel and all agree to charge £80 for screen repairs, even if one of them would normally do it for £50.

3.4.4 Oligopoly

Types of collusion

😞 Why Do Cartels Break?

Here's the juicy bit , **cartels are hard to maintain.**

Firms get tempted to **cheat** and secretly lower prices to steal customers from their "partners." Nobody wants to be the last one to break the deal. It's like playing Monopoly and agreeing not to buy any more properties , until one person secretly grabs Mayfair. 🎲

The more successful the cartel is (i.e. high prices, good profits), the **more tempting it is to cheat** and grab an even bigger slice of the pie.

👁️ What if Collusion is Too Risky?

Because **collusion is illegal** in many places (especially overt collusion), some firms might **go for tacit collusion** instead quiet cooperation without paperwork.

2 Tacit Collusion – The Silent Agreement

Tacit collusion is sneakier. Firms **don't talk to each other** or sign anything, but they all seem to follow the same behaviour , like they've got an unspoken understanding.

Imagine your local cafés. One raises the price of coffee to £3, and within days, the others match it without ever meeting.

a) The most common type: Price leadership

This is when the biggest or most powerful firm sets the price, and others just copy.



3.4.4 Oligopoly

Types of collusion

b) Barometric Firm Leadership

Here, a firm becomes the industry's "weather forecaster." It doesn't dominate, but it's really good at **predicting market trends**, and others trust its lead.

Example: A smaller telecom company raises prices just before costs rise. Other companies see this and think, "Wow, they must know something," and follow suit.

Why it's hard to stop tacit collusion:

- Firms aren't breaking any obvious rules (no emails or deals)
- **Regulators** (like the CMA in the UK) struggle to prove wrongdoing
- It has **similar effects** as overt collusion:
 - Higher prices
 - Less competition
 - Still kind of bad for consumers

🚨 Remember:

While it might seem smart for businesses, **collusion is bad for consumers.** It leads to:

- Higher prices 💰
- Less choice 🧑
- Lower quality 🛠️

And that's why regulators like the **CMA** (Competition and Markets Authority) keep an eye out.

3.4.4 Oligopoly

Game Theory

Game theory is like the ultimate strategy game used by businesses to make smart decisions when they know other businesses are also making moves. It's all about **strategy**, **interdependence**, and **thinking ahead** – especially in markets like oligopolies where a few big players rule the game.

The Prisoners' Dilemma (Classic Game Theory Example)

Maya and Luca are arrested after being caught near the scene of a museum art heist. The police are *pretty sure* they're guilty, but they don't have enough evidence to convict them unless one of them confesses.

- They're **interrogated separately**
- They've **agreed to stay silent...** but the police are offering a **deal** 👁️

The Payoff Matrix

	Luca stays silent	Luca confesses
Maya stays silent	2 years / 2 years	8 years / 1 year
Maya confesses	1 year / 8 years	4 years / 4 years

- If both **stay quiet**, they each get **2 years** – the best outcome for both.
- If one confesses and the other doesn't, the one who confesses **gets off lightly (1 year)** while the other gets slammed with **8 years**.
- If both confess, they each get **4 years**.

So, what do they do? **They both confess** – because they're scared of getting betrayed. That's the **dominant strategy** – the option that's safest regardless of what the other person does.

💡 *Firms act in a similar way when making business decisions.*

3.4.4 Oligopoly

Game Theory

Real-World Example: Game Theory in Action

Let's use **Netflix** and **Disney+**.

They're deciding whether to invest heavily in **original content** (expensive shows/movies) or just **license existing content** (cheaper but less exciting).

The £ amount represents the likely profits.

	Disney+ Licenses	Disney+ Invests
Netflix Licenses	£2bn / £2bn	£1bn / £3bn
Netflix Invests	£3bn / £1bn	£1.5bn / £1.5bn

- If both **license**, they each get **£2bn profit** – a chill but safe choice.
- If one invests while the other licenses, the investor **wins big**.
- If both invest, profits drop because costs are so high.

📺 Firms often end up **investing anyway**, fearing they'll fall behind. The result? Higher costs, lower profits, but they stay competitive.

💡 How Firms Use Game Theory

Firms use game theory to:

- Set **pricing strategies** (e.g. should Google increase cloud service prices?)
- Decide on **advertising spend** (e.g. Pepsi vs. Coca-Cola)
- Launch **new products** (e.g. PlayStation vs. Xbox)
- Choose **partnerships** (e.g. airlines forming alliances)

They basically ask:

"If I do this... what will my rival do?"

3.4.4 Oligopoly

Types of price competition

In an **oligopoly**, firms don't always play nice. When they compete on price, things can get intense. Here are the three main ways they do it:

1. Price Wars 💣

Think of this like a never-ending game of discount dodgeball. Companies keep lowering their prices again and again, trying to beat each other and win over customers.

- This happens when **non-price competition** (like branding or quality) isn't working or when firms can't work together (collude) to keep prices stable.
- Example: Two phone networks keep slashing prices on unlimited data plans. One cuts it to £20, the other to £18, then £15... and so on.

2. Predatory Pricing 🐍

This is the sneaky move. A big firm deliberately drops its prices so low that **new rivals can't survive**. Often, they go **below their cost of production** (yes, selling at a loss.) just to knock others out of the market.

- It's like a pizza chain selling extra-large pizzas for £1 even though they cost £5 to make, just to drive out the local pizza place.
- Once the competition is gone, prices go back up. This is usually **illegal**.

3. Limit Pricing 🚧

This one's more strategic. A firm sets prices **just low enough** to make it unattractive for new firms to enter the market, but still high enough to make a profit.

- Think of a big airline offering £50 domestic flights. It could charge £100, but if it did, smaller airlines might try to join the game. By keeping prices "limited," it keeps the competition out.
- Works even better when there are already **high barriers to entry** (like needing lots of money to start or strict licenses).

3.4.4 Oligopoly

Types of non-price competition

In an **oligopoly**, prices often stay quite stable. Instead of constantly undercutting each other on price, businesses get creative with **non-price competition**, basically, they compete in ways other than lowering prices.

Here are the most common strategies they use:

📣 Advertising

This is all about **grabbing attention**. Ads make people aware of a product or brand and try to convince them to buy it. If done well, advertising boosts **sales, market share**, and eventually **profits**.

- **Example:** Nike launches a global campaign featuring athletes and emotional stories. You see the ad and suddenly feel like you *need* those running shoes.

🎁 Loyalty Cards

Loyalty schemes reward customers who keep coming back. They also collect data on buying habits, helping firms create offers that are just too tempting.

- **Example:** A coffee shop gives you a stamp card, buy 9 coffees, get the 10th free. Simple but effective!

🏆 Quality

If a firm is known for **high quality**, people are often happy to pay more. Quality builds trust, reputation, and good word-of-mouth recommendations.

- **Example:** Dyson vacuum cleaners are pricey, but many customers buy them because they're known for lasting a long time and working well.

3.4.4 Oligopoly

Types of non-price competition

Branding

Strong branding means people recognise and trust your product. A good brand makes customers loyal and more likely to try new products from the same company.

- **Example:** Apple fans are so loyal that they'll queue for hours for the latest iPhone, even if their current one works perfectly fine.

Product Development

Firms constantly look to innovate and release new products that set them apart. If they're first to market, they can gain a **competitive advantage**.

- **Example:** Samsung releasing a foldable phone before its rivals gave it a techy edge and tons of buzz.



3.4.4 Oligopoly

Types of non-price competition

Continue to the next page...


3.4.5 Monopoly

Characteristics of monopoly

A **monopoly** is a type of market where one firm **rules the market**. There's **just one seller**, and they pretty much control the whole market. Let's see what makes monopolies so powerful (and sometimes controversial):


1 Single Seller = All the Power

In a monopoly, there's **only one firm** providing a particular good or service. That means no competition.

-  **Example:** Think of Royal Mail in the past, it was the only legal postal service in the UK for years.

2 No Close Substitutes

You can't easily switch to another product because **nothing else is quite the same**.

-  **Example:** If you need electricity and there's only one energy provider in your region, you're stuck with them. There's no "alternative" to plug into.

3 Market Power to Set Prices

Monopolies are **price makers**. Since there's no competition, they can **charge what they want** and control how much they produce.

- This lets them earn **supernormal profit** (profit way above the normal level) especially in the **short run**.
- And since competitors can't easily enter the market, they **keep earning these profits long-term**.




3.4.5 Monopoly

Characteristics of monopoly

4 High Barriers to Entry


It's **very hard for new firms to join** a monopolised industry. Why? Because the big firm can stop them in their tracks.

- These **barriers to entry** can be:
 - Costly (e.g. massive start-up costs),
 - Legal (e.g. patents),
 - Strategic (e.g. buying out smaller rivals).

 **Example:** If a major tech company sees a small app gaining users, it might just **buy them out** before they become a threat.

5 Legal Monopoly (UK-specific)

In the UK, a firm is considered a **legal monopoly** if it controls **more than 25% of the market**.

- The **Competition and Markets Authority (CMA)** keeps an eye on this.
- Their job is to **stop unfair takeovers** or mergers that could give one company too much power.
-  **Example:** If Amazon tried to buy a large UK delivery service, the CMA would step in to see if it gives them too much control.

3.4.5 Monopoly

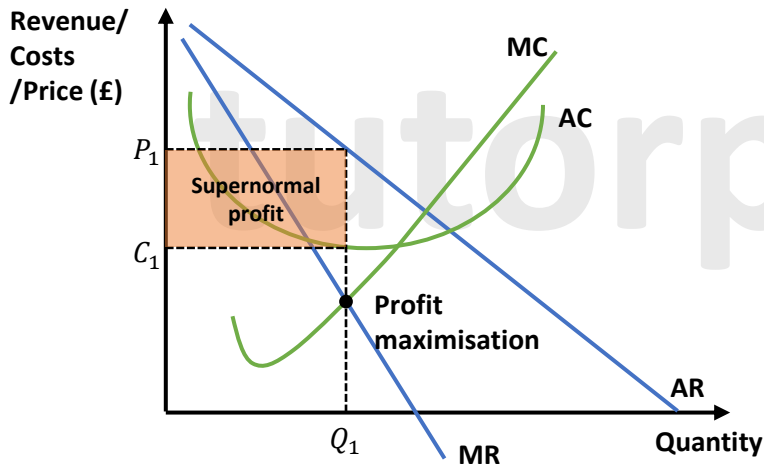
Profit maximising equilibrium

In a monopoly, the firm is the *only* seller in the market – so its **demand curve** is the same as the **industry's demand curve**. Because it faces downward-sloping demand (meaning it has to lower the price to sell more), the monopolist is a **price maker**.

To **maximise profit**, a monopolist produces at the point where:

👉 **Marginal Cost (MC) = Marginal Revenue (MR)**

This is the "sweet spot" where producing one more unit neither adds to nor subtracts from total profit.



Let's break it down with the graph:

- The firm produces **Q1 units** of output
- It charges a price of **P1**
- The area shaded in orange represents **supernormal profit** – this is any profit above the normal level (i.e. the profit that covers more than just the basic costs).



3.4.5 Monopoly

Profit maximising equilibrium

Why can monopolies keep earning more?

Because **there's no competition**, new firms can't just enter the market and take a share of those juicy profits. This lack of **freedom to enter or exit** the market is what makes monopolies different from, say, perfectly competitive markets.

Even though the monopolist rules the market, consumers still have the choice to buy or not. So while the firm has pricing power, it still needs to find a balance: price too high, and people might walk away.

🧠 **Example:** Think of a local train company that's the only provider for a rural route. It sets its own prices, but if they get too high, people might just start driving instead. So while the company has power, it still faces some demand constraints.

3.4.5 Monopoly

Third degree price discrimination



Price discrimination is when a business charges **different prices for the same product or service**, depending on who the customer is. Sounds sneaky? It's actually a common way to **boost revenue** by charging people based on how much they're willing to pay.

There are different "degrees" (or types) of price discrimination, but let's zoom in on one...

What is Third-Degree Price Discrimination?

This happens when a company splits customers into groups and **charges each group a different price** for the **same product or service**.

For example:

- A cinema charges **students less** than adults for the same movie ticket 
- Train fares go up during peak hours when office workers commute, and drop during off-peak hours when students travel 

Companies do this by dividing customers based on things like **age, income, location, or even the time of day**.



3.4.5 Monopoly

Third degree price discrimination

What Must Happen for Third-Degree Price Discrimination to Work:

For a business to successfully charge different prices to different types of customers (while selling the same product), three key conditions need to be met:


1. The firm must have market power.

In simple terms, the business needs to have **control over the price** it charges. This usually happens when there aren't many competitors, or the product is unique enough that customers can't just switch to an alternative. If there are loads of cheaper substitutes, price discrimination becomes nearly impossible.

Example: A private tutor in a small town with no rivals can charge different rates to working professionals and school students.

2. There must be different types of consumers – with different price sensitivities.

Some customers are **willing to pay more**, while others will only buy if the price is lower. The business needs to be able to **identify and separate** these groups based on things like age, location, income, or usage.

Example: A theme park might charge families less (who are price-sensitive) and tourists more (who are less sensitive). 

3. The business must be able to prevent resale.

To make this work, firms need to **stop customers in the cheaper group from reselling** the product or service to those in the more expensive group. Otherwise, everyone would just buy from the cheapest source! There has to be some way to **keep the markets separate**.

Example: A student cinema ticket usually requires a student ID. That way, someone who paid less can't just hand it off to a non-student.

3.4.5 Monopoly

Third degree price discrimination

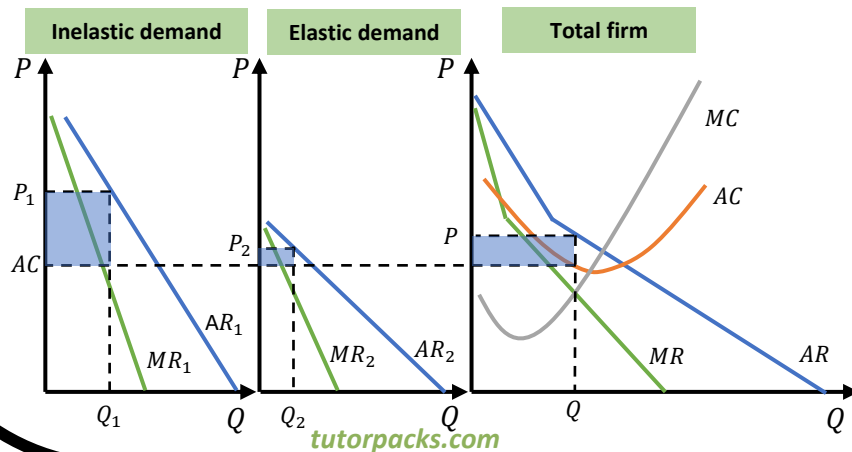
Remember third-degree price discrimination is when a company charges **different prices to different groups of people for the same product or service**, based on how sensitive each group is to price.

💡 Real-Life Example: The Gym

Imagine a local gym offers these membership plans:

- 🧑‍💼 **Busy Professionals (Inelastic Demand):**
These folks go to the gym after work or during lunch. They don't care much about price because they're short on time and need convenience.
The gym charges them **£50/month**.
- 🧑‍🎓 **Students (Elastic Demand):**
Students have more time and are always hunting for a bargain. If the price is too high, they'll skip the gym or go to a cheaper one.
The gym charges them a discounted **£25/month**.

➡ Both groups use the **same gym, same equipment, and same showers**, but they're charged different prices because they value the service differently.



3.4.5 Monopoly

Third degree price discrimination

📊 What's Happening in the Diagram?

The gym finds the **profit-maximising output** where **MC = MR**.

This point is **shared across both sub-markets**:

- **Busy professionals and students.**
- The firm uses this to set different prices for each.
- The **average cost (AC)** is the same for both, helping calculate **total profit** from both groups.

1. Inelastic Demand (Busy Professionals)

- Price (P₁) is **high** (£50).
- Quantity of users is **lower** (Q₁), because not everyone is willing to pay that price.
- But each user brings in **lots of profit (blue box)**.

2. Elastic Demand (Students)

- Price (P₂) is **low** (£25).
- Quantity is **higher** (Q₂), because more students will sign up at a lower price.
- Profit per person is lower, but overall, it's still worthwhile

3. Total Gym Profits

The gym adds together the profits from both groups (Q₁ + Q₂). Since it matches price to willingness to pay, the **total profit is higher** than if it charged one flat fee for everyone.



3.4.5 Monopoly

Third degree price discrimination

Costs and benefits to consumers and producers

Consumers

Some lose out (especially those who are price inelastic)

If you're in a group that's less sensitive to price (maybe you really need the product or have a higher income), you might end up paying **more** than others. This means your **consumer surplus** (the benefit you get from paying less than what you're willing to pay) goes down.

Example: Last-minute business flyers paying £400 for a flight that someone else got for £80.

Others benefit (those who are more price-sensitive)

On the flip side, more price-conscious buyers (like students or early birds) can get lower prices. This increases their **consumer surplus**. It can also lead to **cross-subsidisation**, the higher prices from one group help cover the lower prices for another.

Producers (Businesses)

They make more money

Firms can **boost total revenue** by charging each group the highest price they're willing to pay, this leads to higher profits **if costs stay the same**.

Producer surplus increases

Producer surplus is the difference between what a firm receives and the minimum it would've accepted. Charging more to inelastic groups and less to elastic ones increases the producer surplus **at the expense of consumer surplus**.



3.4.5 Monopoly

Costs and benefits of a monopoly

A **monopoly** is when one firm dominates a market with little to no competition. This can bring both advantages and disadvantages to different people involved, like the firm itself, employees, customers, and suppliers.

The Firm

Benefits:

- **Market Power:** Monopolies can set prices without competition, leading to higher profits.
- **Supernormal profits** (profits above normal levels) give firms extra cash to spend on things like research, product innovation (e.g., developing new tech like smart fridges or AI software), and expanding globally.
- With fewer competitors, firms can **enjoy economies of scale**, basically, making more goods for less money per unit.
- **Price discrimination** (charging different prices to different groups) can help squeeze out even more revenue.
- **Global competitiveness** improves as the firm becomes financially stronger and can operate in international markets.

Costs:

- With no pressure from rivals, there's **less incentive to be efficient** or cut costs.
- **Regulatory Scrutiny:** Monopolies may face government intervention to prevent abuse of power.
- Resources may be **misallocated**, meaning the firm produces too much or too little of something because the price doesn't reflect the true value ($P > MC$).
- Without competition, **innovation might slow down** or become less customer-focused.

3.4.5 Monopoly

Costs and benefits of a monopoly

Employees

Benefits:

- Big profits can mean **higher wages** and **job security**, especially if the company is doing well (e.g., a monopoly tech firm like Microsoft in its early days).
- **Training and Development:** Monopolies may invest in employee development programs.

Costs:

- Since there's usually only one employer in the market, **employees have fewer options** to move to another firm.

Consumers

Benefits:

- Monopoly profits might go into **better products** (e.g., new phone features).
- **Consistent Service:** Monopolies can provide uniform services across regions.
- **Cross-subsidisation** could mean cheaper prices for certain groups, like off-peak travel fares or student discounts.
- If firms pass on their lower production costs, **prices might drop** for some consumers.

Costs:

- **Higher prices** are likely because there are **no close substitutes**, so firms can charge more.
- **Limited Choices:** Consumers have fewer alternatives for products or services.
- Cross-subsidisation can backfire - some people **pay more** to cover costs for others (e.g., business class travellers paying more so economy tickets are cheaper).



3.4.5 Monopoly

Costs and benefits of a monopoly

- **Consumer surplus** (the difference between what a customer is willing to pay and what they actually pay) falls, meaning consumers get less "value" from their purchase.

Suppliers

Benefits:

- Monopolies often buy in bulk or operate nationwide, giving suppliers **steady demand and larger contracts**.
- **Long-Term Partnerships:** Monopolies may establish enduring relationships with suppliers.

Costs:

- Monopolies can have **monopsony power**, meaning they're the only buyer and can **dictate prices** to suppliers. This can lead to **lower profit margins** for the suppliers, which might not be sustainable long-term.
- **Dependency Risk:** Suppliers may become overly reliant on a single buyer.

3.4.5 Monopoly

Natural monopoly

A **natural monopoly** happens when it just makes sense for **only one company** to supply a good or service in an industry. Why? Because it's the most efficient and cost-effective way to do it. Let's unpack why this happens:

Why only one firm?

In industries where **economies of scale** are massive, costs fall as output increases. In fact, they fall so much that even one firm might not be able to take full advantage of them. These are known as **decreasing cost industries**.

So instead of having several companies competing (which would drive up costs), it's more efficient for **just one company** to provide the service.

Real-life examples

You won't find a "perfect" natural monopoly, but there are industries that come close:

1. Electricity Transmission

- **Why it's a natural monopoly:** Building and maintaining the network of power lines and substations requires substantial investment.
- **Example:** In the UK, the National Grid manages the high-voltage electricity transmission network, ensuring consistent power delivery across the country.

2. Water Supply and Sewage Systems

- **Why it's a natural monopoly:** Installing separate water and sewage pipelines for multiple companies would be inefficient and disruptive.
- **Example:** Thames Water provides water and wastewater services to millions in London and surrounding areas, operating as the sole provider in its region.

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3.4.5 Monopoly

Natural monopoly

3. Broadband Internet Infrastructure

- **Why it's a natural monopoly:** Laying down multiple sets of cables and infrastructure in the same area is economically inefficient.
- **Example:** In some regions, a single company provides the broadband infrastructure, which other service providers may lease to offer internet services to consumers.

These firms provide essential services, usually over large geographic areas, where having duplicate networks just doesn't make sense.

Why not allow more firms?

- **More competition = higher costs:** If a second company entered the market, they'd have to build their own pipelines, tracks, or cables; expensive stuff. Their average costs would be much higher, meaning they couldn't compete with the original firm's low prices.
- **This is why we often regulate these firms** or even consider **nationalisation** (when the government takes over).

Why Regulate Natural Monopolies?

Without competition, natural monopolies could exploit their position by:

- **Charging higher prices:** Consumers have no alternative providers.
- **Providing lower-quality services:** Lack of competition may reduce incentives to maintain high service standards.

To protect consumers, governments often:

- **Regulate prices:** Ensuring charges are fair and reflect the cost of service.
- **Set service standards:** Mandating minimum quality and reliability levels.
- **Monitor performance:** Overseeing operations to prevent abuse of monopoly power.

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3.4.6 Monopsony

Characteristics and conditions for a monopsony to operate

A **monopsony** is like the opposite of a monopoly. Instead of there being just **one seller**, a monopsony exists when there's just **one main buyer** in a market. This buyer has **all the power**, and suppliers have little choice but to sell to them.

Imagine you've baked 100 cakes and there's only one café in town willing to buy them. That café can name its price, and you either accept it or your cakes go stale.

✔ Key Characteristics of a Monopsony

1. Only One (or a Dominant) Buyer

In a monopsony, there is only **one buyer** or one that buys **most of what's being sold**. That buyer can influence prices heavily, just like a monopoly sets prices for consumers.

2. Real-Life Monopsony Power

While pure monopsonies are rare, **many buyers have monopsony-like power** simply because they purchase such a large portion of the market's output.

Example: Large food chains like Walmart or Tesco often buy most of the crops from farmers. These farmers may have to accept **lower prices** just to ensure they can sell their produce.



3.4.6 Monopsony

Characteristics and conditions for a monopsony to operate

3. They Aim to Cut Costs

Their goal? **Buy as cheaply as possible**. Whether it's milk, medicine, or manpower, monopsonists try to squeeze the best deals from suppliers to **maximise profits**.

💡 Why It Matters

Monopsony power can be good (keeps costs low) but also harmful (suppliers get squeezed). Understanding it helps explain **why farmers protest**, **why wages in the public sector are slow to rise**, and **why some markets need regulation**.

3.4.6 Monopsony

Costs and benefits of a monopsony

Firms (The Big Buyers)

Benefits:

- Lower buying prices = **lower production costs** = **higher profits**. 🥰
- These savings could be used to grow the business, invest in tech, or pay staff more.
- They can benefit from **economies of scale**, this just means the more they buy, the cheaper it gets overall. Think of it like buying in bulk at Costco.

Costs:

- If suppliers go out of business, it creates **supply chain problems**.

Consumers (That's Us!)

Benefits:

- Lower costs for businesses can lead to **cheaper prices** for us.
- We get a bigger **consumer surplus** (more value for our money).

Costs:

- There's a chance of a **drop in supply** (fewer goods available), because suppliers may not be happy selling at lower prices.
- If suppliers cut corners to save money, we might see a **drop in product quality**. So that cheap milk might not taste as good... or be as nutritious.



3.4.6 Monopsony

Costs and benefits of a monopsony

Employees

Benefits:

- The monopsony business might still hire the same or even **more workers**, since they're spending less on materials and have more money to go around.
- Big profits sometimes can mean **higher wages** for employees working for the monopsony firm.

Costs:

- **Ethical concerns** can affect team morale and company culture as some staff might feel uncomfortable or even **guilty** working for a company that treats suppliers poorly.

Suppliers

Benefits:

- You may get the chance to **increase your sales volume** if the buyer wants lots of what you're selling.
- Selling to a well-known, big firm can **boost your reputation**.

Costs:

- Low prices might not cover your costs, forcing you to **leave the market** 😞
- You might decide to **switch to another industry** that's more profitable (like growing avocados instead of wheat).
- In the worst case, you could be **driven out of business**.

3.4.7 Contestability

A **contestable market** is like an open stage at a talent show , even if only one performer is up there now, **anyone else could jump in at any time** if they think they can shine and make some money.

More seriously:

A **contestable market** is one where **new businesses can easily enter or leave**, and it doesn't cost much (or anything) to do so.

The key thing? It's **not** about how many businesses are actually in the market , it's about the **threat** that new ones **could** enter at any moment. That keeps everyone on their toes.

Characteristics of contestable markets

1. 🚪 Easy Entry & Exit (No Barriers)

- Firms can hop in and out of the market with little to no effort.
- There are **no sunk costs** , these are costs you can't get back (like spending millions on a special machine you'll never use again).

🎮 *Example:* Starting a YouTube channel is pretty contestable, no big startup costs, and you can quit anytime.

2. 📖 Perfect Information

- Everyone has access to the same info, no secrets.
- If a firm is making loads of profit (called **abnormal profit**), others will notice and want in.
- There are **no patents or private info** that block new firms.

💡 *Example:* Anyone can learn to bake cookies. There's no secret cookie monopoly.

3.4.7 Contestability

Characteristics of contestable markets

3. 🎮 Level Playing Field

- New firms don't start at a disadvantage.
- They have access to the **same tools, technology, and knowledge** as the big players.

🍹 *Example:* If you open a bubble tea shop with the same ingredients and machines as others, you can compete right away.

4. 💰 Short-Term Profit Chasers

- We assume firms are in it for the quick wins 🎯 , they want to jump in, make money, and get out without teaming up with others (no collusion).
➡ This means no sneaky behind-the-scenes price fixing.

🚚 *Example:* A food truck shows up at a festival, makes bank while it's busy, then disappears the next day.

5. ❤️ Low Brand Loyalty

- Consumers aren't glued to one brand , if something better pops up, they'll switch.

😊 *Example:* People easily switch food delivery apps (like Uber Eats, Deliveroo, etc.) if they offer a better deal or promo.

💬 Why Do Contestable Markets Matter?

Even if there aren't many firms in the market, the **threat of competition** keeps existing businesses honest , they're less likely to overcharge or slack off, because they know someone could swoop in at any time.


3.4.7 Contestability

What happens in a contestable market? (Implications)


In a **contestable market** (where new firms can easily join or leave), businesses behave very differently compared to markets with high barriers.

Why? Because they know new rivals could pop in at any time and steal their customers. So, to avoid attracting that kind of attention, they often **tone things down** a bit...

1. New Firms Will Enter if They Smell Profit

In a contestable market, if one firm is making big money (**supernormal profit**), other firms will want a piece of the action. 


- These new firms will **enter the market**, take a share of the profits, and stick around **until the profits disappear**.
- This could even **force the original firm out of business** if they don't respond smartly.

 To defend themselves, the original firm might use **limit pricing**; setting prices low enough that new firms say, "meh, not worth it," and stay out.

2. Firms Can Only Make Normal Profits

In a **perfectly contestable market**, firms won't be able to charge high prices and rake in profits forever.

- They'll end up earning only **normal profit** (just enough to stay in business).
- This happens because if they charged any more, other firms would rush in and undercut them.

 **Normal profit** = revenue just covers all costs (including opportunity costs), so no extra profit left lying around.


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3.4.7 Contestability

What happens in a contestable market? (Implications)


3. Firms Must Be Super Efficient

In a contestable market, firms need to be:

- **Productively efficient**: This means making goods at the **lowest possible cost**. If not, new firms can enter and offer lower prices and steal customers. 
- **Allocatively efficient**: This means producing the right amount of stuff society actually wants; where the **value to the customer = the cost to make it**.

Here's how it works:

- At normal profit, **Average Revenue = Average Cost (AR = AC)**
- If firms are producing at their lowest cost, then **Average Cost = Marginal Cost (AC = MC)**
- So, we end up with: **AR = AC = MC**

 This is the economic sweet spot; customers are happy, and society gets what it needs at the right price.

Example Time

Let's say a burger joint is making tons of money. If it's in a contestable market:

- Another burger place opens across the street with similar buns and cheaper fries.
- The first place must either lower prices (limit pricing), improve quality, or become more efficient, or risk being booted out.
- Eventually, both places just make normal profits and run efficiently to survive.

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3.4.7 Contestability

Types of barrier to entry and exit

What are Barriers to Entry?

These are obstacles that make it **hard or expensive** for new businesses to join a market and compete with the big players already there.


What are Barriers to Exit?

These are the things that make it **difficult for a business to leave a market**, even if they're losing money, like being stuck at a party you regret going to.

Common Barriers to Entry


1. Legal Barriers

- Laws and government rules can stop new firms from joining the market.
- These include **patents, copyrights**, or needing a special **license**.

 **Example:** You can't just start your own taxi company without getting a license, same with TV broadcasting or selling medication.

2. Economies of Scale

- Big firms can produce more, for less.
- New firms can't compete because their **costs per unit** are higher, so their prices would have to be higher too, which no customer wants.

 **Example:** Amazon can deliver faster and cheaper than most small online shops.



3.4.7 Contestability

Types of barrier to entry and exit

3. Pricing Tactics by Big Firms


Existing firms (called **incumbents**) may use pricing tricks to scare off new rivals:

- **Predatory pricing:** Selling products so cheaply that new firms can't survive.
- **Limit pricing:** Setting prices just low enough to keep new firms from even trying.
- They might also act shady, like **refusing to supply stores** that work with competitors.

 **Example:** A big coffee chain drops prices near a new café to run it out of business.

4. High Start-Up Costs

- Some industries need a **lot of money upfront** just to get started. These are called **capital costs**.
- There are also **sunk costs**, which are things you spend money on but can't recover (like a custom-made machine).

 **Example:** Starting a car manufacturing business isn't cheap. You need buildings, robots, staff, and way more.

3.4.7 Contestability


Types of barrier to entry and exit

Barriers to Exit – Why It’s Hard to Leave

Sometimes, it’s just as hard to shut down a business as it is to start one.

Barriers to exit include:

- The **cost of writing off equipment** you can’t sell,
- **Breaking leases** on buildings or contracts,
- **Making employees redundant** (which often involves big payouts).

 **Example:** A company with a big warehouse and 200 employees can’t just walk away without losing lots of money and dealing with legal and ethical issues.

3.4.7 Contestability

Sunk costs and the degree of contestability

What Are Sunk Costs?

Sunk costs are expenses a business **can’t get back**, no matter what. Think of them as money down the drain, once it’s spent, it’s gone forever.

Examples of sunk costs:

- Buying super specific machines that no one else wants
- Spending a fortune on a big advertising campaign
- Investing in research or branding that can’t be sold or reused

Why Sunk Costs Make It Hard to Leave

When a company has put a lot of money into things it can’t recover, it becomes **harder to leave the market**, even if business isn’t going well. That’s what we call a **barrier to exit**.

What This Means for Market Contestability

Contestability is all about how easy it is for new businesses to enter (and exit) a market.

- If **sunk costs are low**, new firms can jump in and try their luck without much risk.
 - ➔ The market is **more contestable** = more competition = good for consumers.
- If **sunk costs are high**, firms will think twice before entering. Why risk a bunch of money you can’t get back?
 - ➔ The market is **less contestable** = less competition = bad for consumers.

Reality Check:

There’s **no such thing** as a *perfectly contestable* market in real life. Why? Because there’s **always** some sunk cost, even if it’s just time or branding.

Please see the '3.4 Market Structures Worked Examples' pack for exam style questions.

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