

Cambridge International A Level Economics (9708)

Model Answers: A2 Level

Teacher: Abdur Rehman Shahzaib

Contents

- 1. Barriers to Entry and the Degree of Competition (20-mark evaluation essay)**
- 2. Subnormal and Supernormal Profits Across Market Structures (20-mark evaluation essay)**
- 3. Perfect Competition and Efficiency (20-mark evaluation essay)**

Cambridge International A Level Economics (9708)

A2 Model Essay Answers: Market Structure Evaluation Essays

Written to the mark scheme: AO1 + AO2 = 14 marks, AO3 = 6 marks per essay | Teacher: Abdur Rehman Shahzaib

Question 1

“The degree of competition a firm experiences is determined only by the barriers to entry into its market.” With the aid of diagram(s), evaluate this statement. [20]

AO1: Knowledge and Understanding

Barriers to entry are obstacles that prevent or deter new firms from entering a market. They include legal barriers such as patents and licences, economies of scale that give incumbents lower average costs, high capital and sunk costs of entry, strong brand loyalty built by advertising, and control over key resources or distribution. The **degree of competition** a firm experiences refers to how strongly its price, output and profit are constrained by rivals: it is reflected in the number of firms in the market, the firm's price-making power, and whether supernormal profit can survive. Market structures form a spectrum, from perfect competition and monopolistic competition at the competitive end, through oligopoly, to monopoly at the other end, and the height of the entry barriers is one of the main features separating them.

AO2: Analysis, how barriers shape the degree of competition

Where barriers are absent, competition is at its strongest. In **perfect competition** there is complete freedom of entry and exit, a large number of firms selling a homogeneous product with perfect information, and each firm is a price taker facing a perfectly elastic demand curve ($P = AR = MR$). Figure 1 shows the long run position this produces. If incumbents were earning supernormal profit, nothing would stop new firms entering; market supply would rise, price would fall, and entry would continue until each firm earns only normal profit, producing where $P = MC$ at the bottom of the AC curve. The ABSENCE of barriers is precisely what competes profit away: the market polices itself.

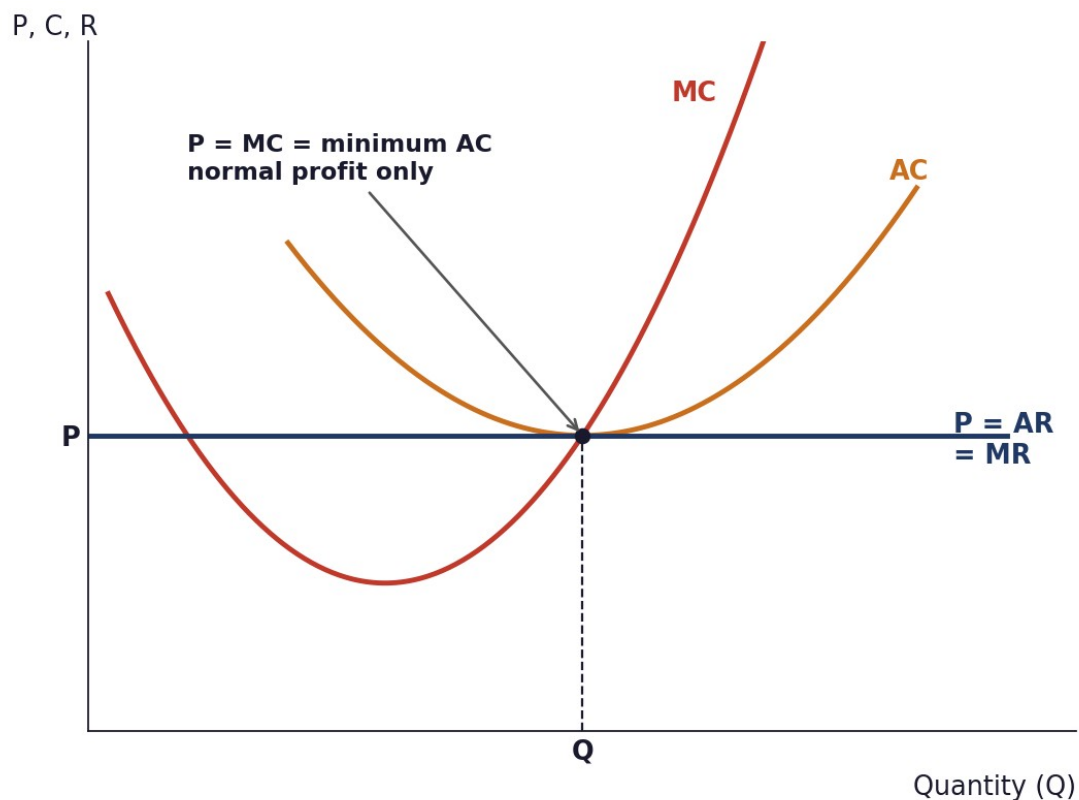


Figure 1: Perfect competition in the long run, free entry forces P down to minimum AC , normal profit only

Where barriers are high, competition is at its weakest. A **monopolist** is the sole seller of a product with no close substitutes and is protected by barriers such as patents, scale economies or control of supply. It faces the downward sloping market demand curve, so it is a price maker, and it maximises profit where $MC = MR$, charging price P and incurring average cost C in Figure 2. The shaded rectangle is supernormal profit, and because barriers prevent entry, there is no mechanism to compete it away: the profit can PERSIST into the long run. Comparing Figures 1 and 2, the only structural difference doing the work is the barrier to entry, which is exactly the intuition behind the statement.

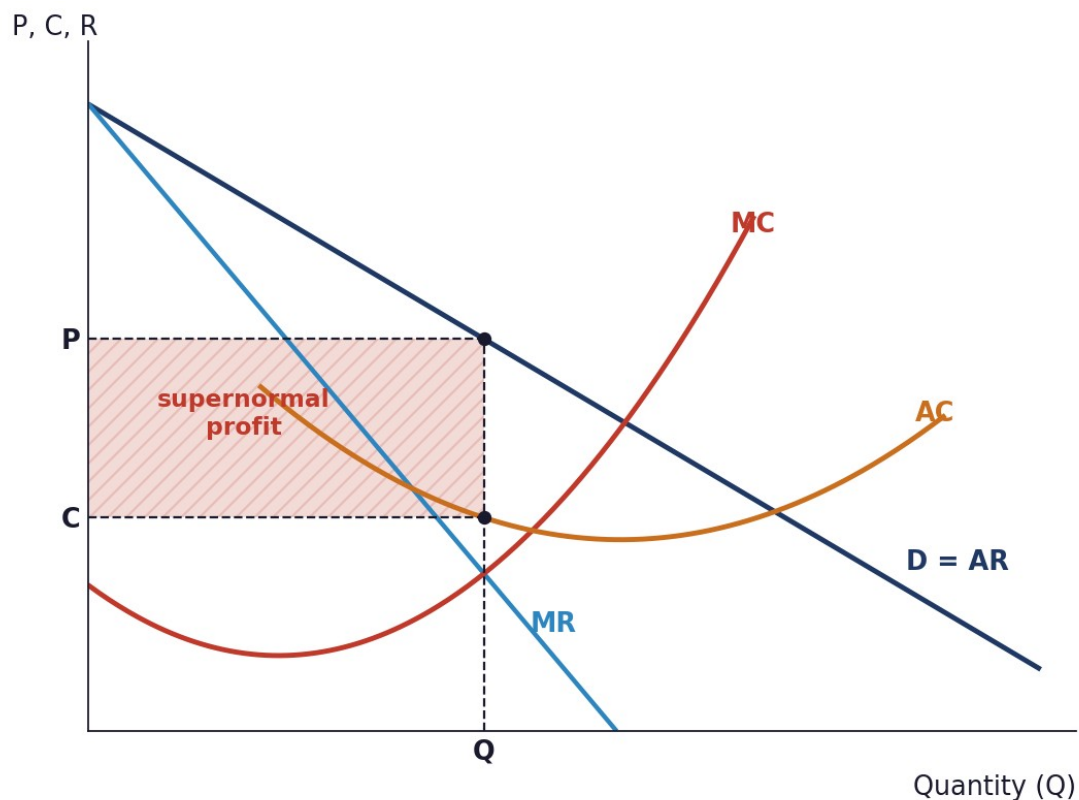


Figure 2: Monopoly, barriers to entry allow the supernormal profit (shaded) to persist in the long run

AO3: Evaluation

The case for the statement is strong but incomplete. Competition is linked to the number of firms able to ACCESS a market, and barriers to entry are what control that access, so the simple answer is yes: markets without barriers (perfect and monopolistic competition) are highly competitive, and markets with high barriers (oligopoly and monopoly) are concentrated. Yet “only” claims that nothing else matters, and several other determinants do.

First, product differentiation shapes competition independently of barriers. Perfect competition and monopolistic competition share the same lack of barriers, yet the degree of competition differs between them: the differentiated products of monopolistic competition give each firm a downward sloping demand curve and some price-making power that a perfectly competitive firm does not have. Same barriers, different competition, so barriers cannot be the ONLY determinant.

Second, oligopoly shows intense competition despite high barriers. Entry into car manufacturing or supermarket retailing is very difficult, yet the few incumbents compete fiercely with each other through product differentiation, branding, advertising and sales promotion, and occasionally through outright price wars. The degree of competition here is determined by the CONDUCT of the existing rivals, their interdependence, not by the entry barriers around them. Conversely, the same high-barrier oligopoly can show almost no competition if the firms collude in a cartel or follow a price leader, again a matter of conduct, not barriers.

Third, even a monopolist's power is limited by forces other than entry barriers. Contestable market theory shows that where sunk costs are low, the mere THREAT of hit-and-run entry disciplines an incumbent into limit pricing, so observed competition exceeds what the market's structure suggests. Government regulation works in the same direction: competition authorities cap prices, block mergers and fine anti-competitive behaviour, and substitutes from other markets (rail competing with airlines) constrain any monopolist's demand curve.

Conclusion

Barriers to entry are the single most important determinant of the degree of competition, they decide whether supernormal profit is a temporary signal that attracts rivals or a permanent prize, which is the essential difference between Figures 1 and 2. But the word “only” makes the statement too strong. Product differentiation separates the two barrier-free structures, oligopolists compete or collude behind identical barriers, and contestability and regulation discipline even protected monopolists. The degree of competition is determined primarily, but not only, by barriers to entry, so the statement should be rejected in its absolute form.

Exam tip

The scheme caps the answer at Level 2 if there is no diagram OR if only one market structure is analysed. The safe template: one barrier-free structure with its long run diagram, one high-barrier structure with its supernormal profit diagram, then evaluate the word “only” with oligopoly conduct, contestability and regulation. Always attack the absolute word in the statement, that is where the AO3 marks live.

Question 2

“Subnormal and supernormal profits are only experienced in the short run and only by firms in perfect competition.” With the help of diagrams, evaluate this statement. [20]

AO1: Knowledge and Understanding

The **short run** is the period in which at least one factor of production is fixed, so firms can neither fully adjust capacity nor enter or leave the industry; in the **long run** all factors are variable and entry and exit are possible. **Normal profit** is the minimum return needed to keep the entrepreneur in the industry; it is treated as a cost and earned when $AR = AC$. **Supernormal profit** is any profit above this, $AR > AC$, and **subnormal profit** means $AR < AC$, a loss relative to the next best alternative. Perfect competition assumes many buyers and sellers, a homogeneous product, perfect information, and complete freedom of entry and exit, which makes each firm a price taker facing a horizontal demand curve $P = AR = MR$.

AO2: Analysis, profits in perfect competition

In the short run the statement's first half is accurate for perfect competition. The firm maximises profit where $MC = MR$. If the ruling market price lies above average cost at that output, the firm earns supernormal profit, the shaded rectangle in Figure 1. Nothing in the SHORT run removes it, because entry is impossible while factors are fixed.

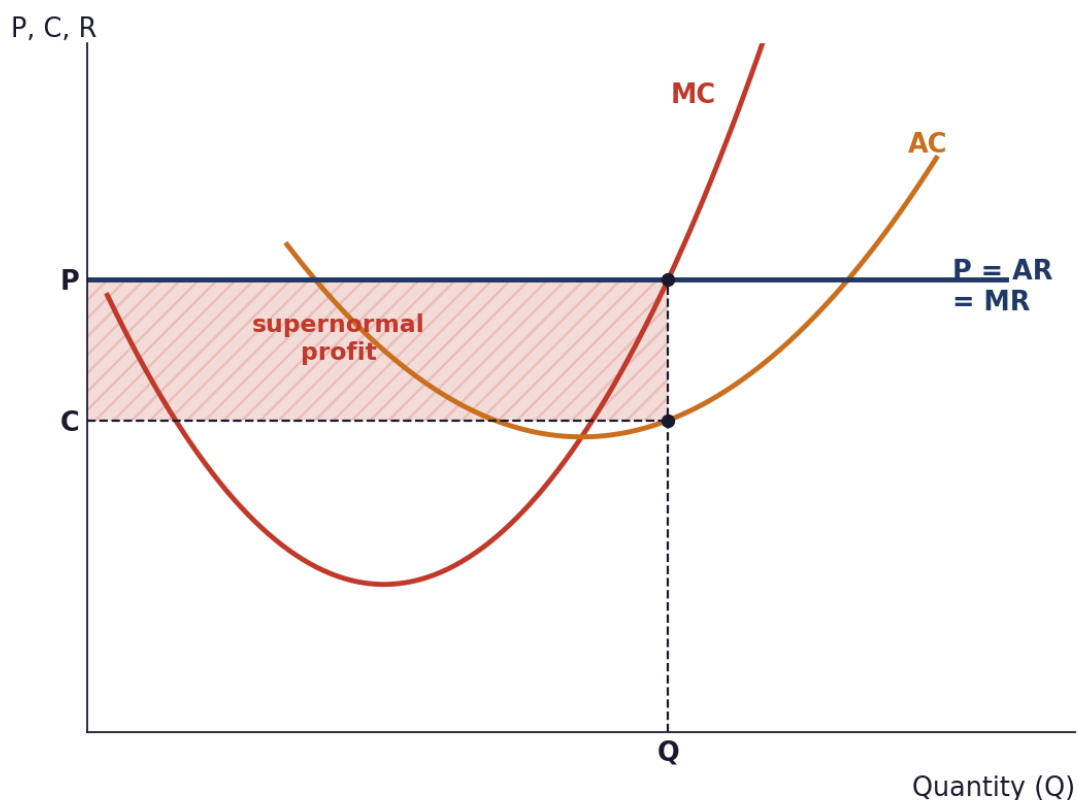


Figure 1: Perfectly competitive firm in the short run, $P > AC$ at the $MC = MR$ output, supernormal profit

Equally, if the market price falls below average cost, the firm makes subnormal profit, the shaded loss in Figure 2. It continues to produce in the short run provided price at least covers average variable cost, since revenue then makes some contribution to the fixed costs that must be paid anyway; below the AVC shut-down point it would close immediately.

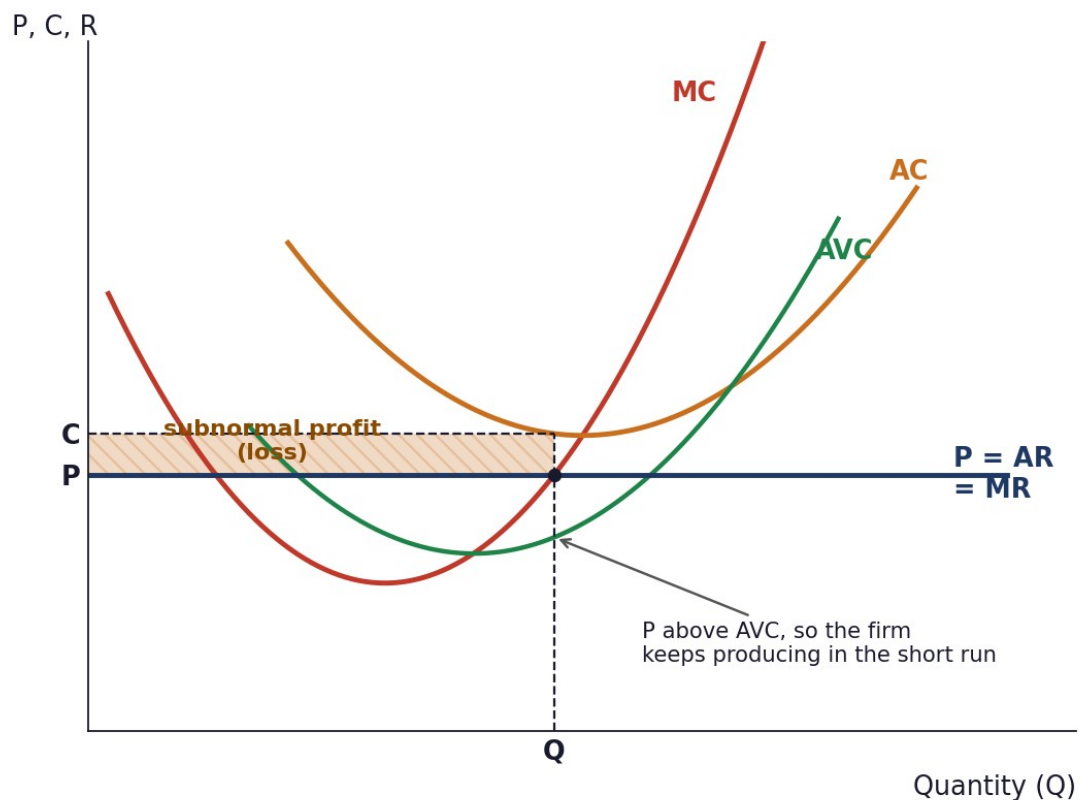


Figure 2: Perfectly competitive firm in the short run, $P < AC$, subnormal profit (loss), production continues while $P \geq AVC$

The long run resolves both positions to normal profit, and freedom of entry and exit is the mechanism. Supernormal profit attracts new entrants: market supply shifts right, the price each price-taking firm faces falls, and entry stops only when $AR = AC$. Subnormal profit drives firms out: supply shifts left, price rises, and exit stops at the same point. Either way the industry settles at Figure 3, each firm producing where $P = MC$ at minimum AC, earning normal profit only. For perfect competition, then, sub- and supernormal profits are indeed short run phenomena.

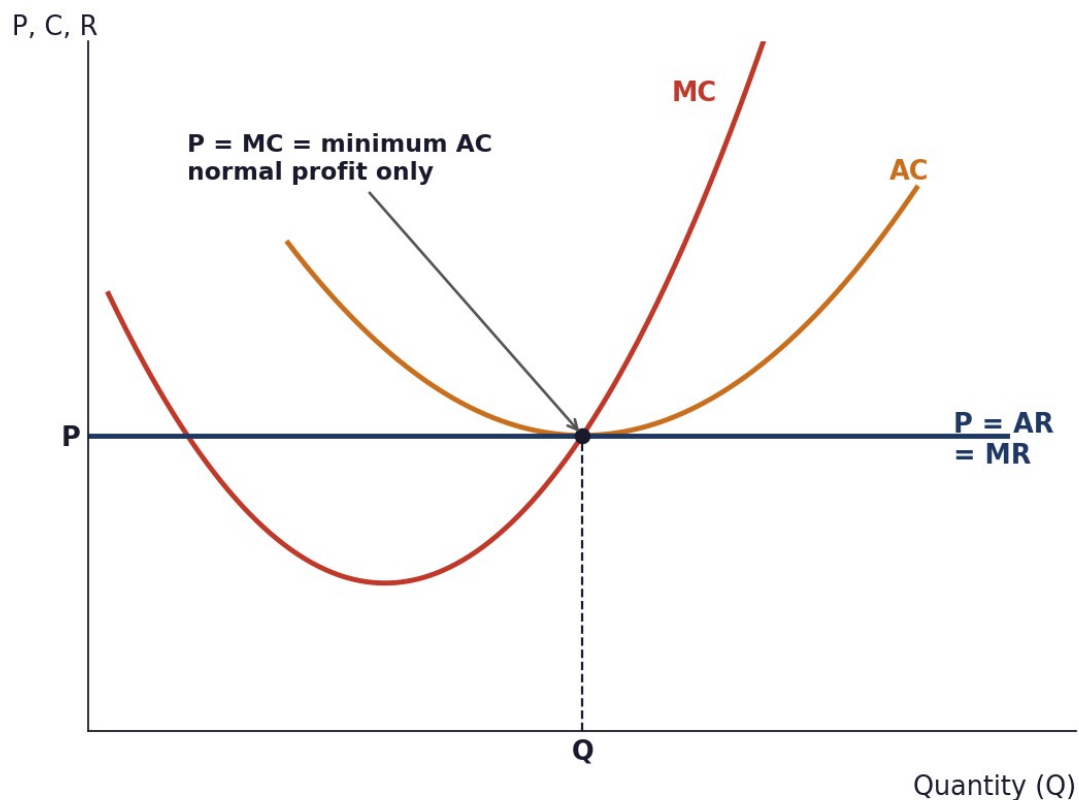


Figure 3: The long run resolution, entry and exit drive every perfectly competitive firm to normal profit

AO3: Evaluation, the other market structures

“Only by firms in perfect competition” is false: monopolistic competition behaves the same way. A restaurant or salon with a differentiated product can earn supernormal profit in the short run (its downward sloping AR lying above ATC), or make losses. Because barriers to entry are weak, entry and exit then do exactly what they do in perfect competition: new rivals shift each firm's demand curve left and make it more elastic until it is tangent to ATC, Figure 4, and only normal profit remains. So short run abnormal profits resolved in the long run are not unique to perfect competition.

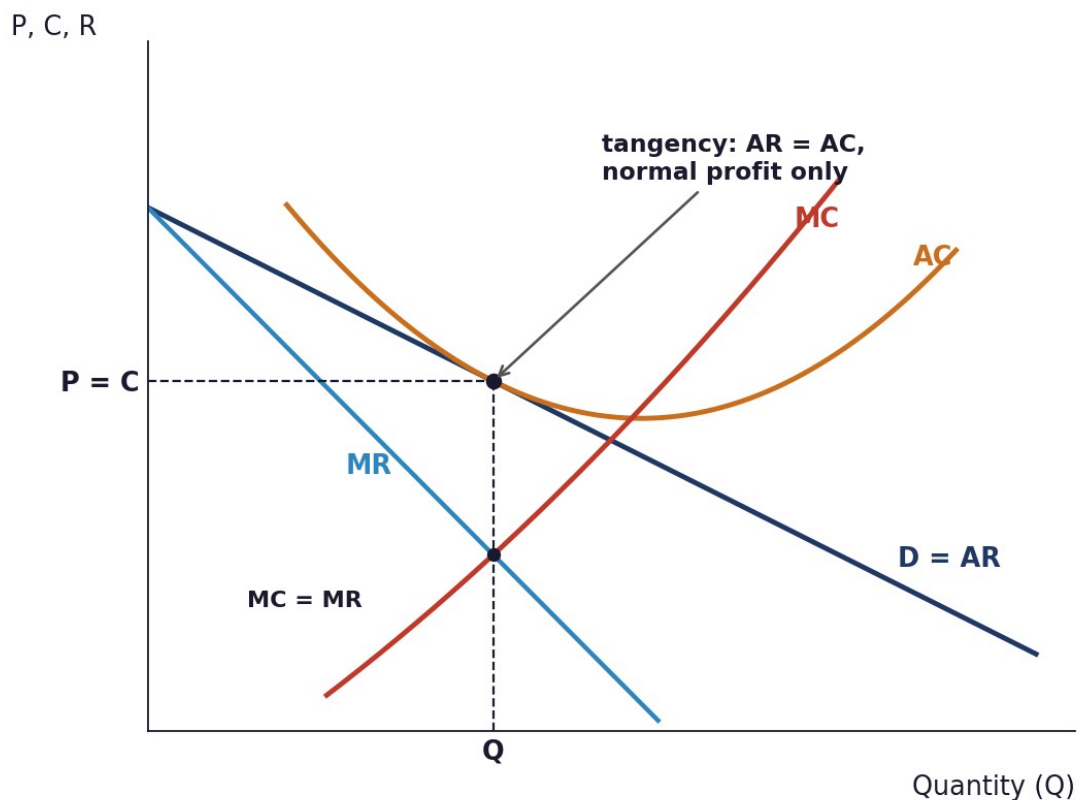


Figure 4: Monopolistic competition in the long run, entry pushes AR to tangency with AC, normal profit only

“Only in the short run” is also false: monopoly can hold supernormal profit permanently. Figure 2 of Question 1 applies: with high barriers to entry, patents, scale economies, control of supply, no entrants arrive to compete the profit away, so AR remains above AC in the long run. The existence of the barrier converts a short run profit into a long run one, which directly contradicts the statement.

Oligopoly may go either way. High barriers mean supernormal profits CAN persist in both the short and the long run, especially under collusion or price leadership, but interdependence means they need not: a price war can push rivals into subnormal profit for extended periods, and a contestable oligopoly may limit-price away its own profits to deter entry. Profits in oligopoly depend on conduct, so no general rule confines them to the short run.

Conclusion

The statement is half right and half wrong. For firms in perfect competition the analysis holds exactly: both supernormal and subnormal profits can exist only in the short run, because free entry and exit force AR back to AC in the long run. But neither restriction in the statement survives the other structures. Monopolistic competition experiences the same short run profits and losses, so they are not unique to perfect competition, and monopoly shows that where barriers to entry exist, supernormal profit is not confined to the short run at all. The accurate version of the claim would be: abnormal profits are temporary wherever entry is free, and durable wherever it is blocked. As it stands, the statement should be rejected.

Exam tip

A statement with TWO restrictions (“only in the short run”, “only in perfect competition”) hands you the evaluation structure: test each restriction separately. Prove the perfect competition case first with the three diagrams (profit, loss, long run resolution), then knock out “only PC” with monopolistic competition and “only short run” with monopoly, and use oligopoly as the it-depends case. Four diagrams here is not

decoration, the scheme explicitly expects the analysis to be shown on relevant diagrams.

Model Essay Answer

Prepared by: Abdur Rehman Shahzaib

"The model of perfect competition is the ideal form of market structure because it is the most efficient." With the help of diagrams, evaluate this statement. [20 marks]

Introduction and Key Definitions

Perfect competition is a market structure with a very large number of small firms selling a homogeneous product, where buyers and sellers have perfect knowledge and there is complete freedom of entry and exit. Because each firm supplies a tiny fraction of the market, it is a price taker: it faces a horizontal demand curve at the market price, where $D = AR = MR$.

The statement judges this structure by its efficiency, so both forms of efficiency must be defined. **Productive efficiency** is achieved when output is produced at the lowest possible average cost, at the minimum point of the ATC curve, so that no resources are wasted in production. **Allocative efficiency** is achieved when price equals marginal cost ($P = MC$): the value consumers place on the last unit exactly equals the cost of the resources used to make it, so society's resources are allocated to maximise total satisfaction. This essay examines whether perfect competition delivers both, and then evaluates whether that makes it the ideal market structure.

Analysis: From the Assumptions to Efficiency

A profit-maximising firm produces where $MC = MR$. In the short run, the market price can sit above the firm's average total cost, and the firm then earns supernormal profit, as Figure 1 shows: at the $MC = MR$ output, AR exceeds ATC and the shaded area is profit above the normal level. Equally, the price could lie below ATC , giving subnormal profit. So in the short run neither productive nor allocative efficiency is guaranteed: the firm is not producing at the minimum of ATC .

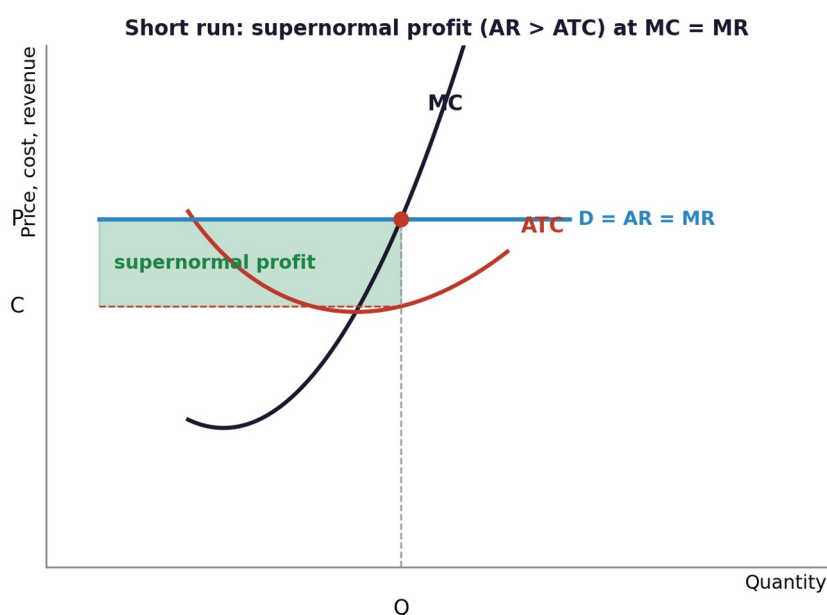


Figure 1: Short-run equilibrium. At the $MC = MR$ output, $AR > ATC$ and the firm earns supernormal profit. Output is not at the minimum of ATC .

The assumptions of the model make these positions temporary. With no barriers to entry, supernormal profit attracts new firms into the industry: supply shifts right, the market price falls, and each firm's AR line slides down. Losses cause the reverse, as firms exit and price rises. Figure 2 shows this resolution: entry continues until the price line is tangent to the ATC curve at its minimum point, where every firm earns only normal profit and the incentive to enter or leave disappears. This is the long-run equilibrium.

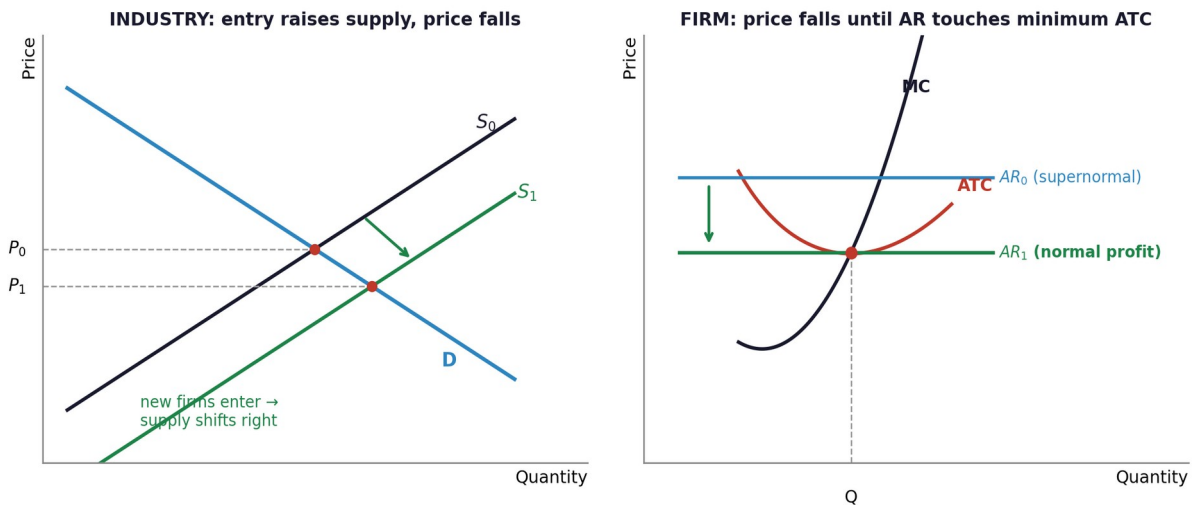


Figure 2: The resolution to normal profit. Entry shifts industry supply from S_0 to S_1 , price falls from P_0 to P_1 , and the firm's AR line falls until it touches ATC at its minimum.

The long-run equilibrium in Figure 3 is where the efficiency claims are earned, because both conditions hold at a single point. The firm produces at the lowest point of its ATC curve, which is **productive efficiency**: competition has forced every firm to produce at minimum cost, since any firm with higher costs would make losses and exit. At the same output, the price consumers pay equals marginal cost, which is **allocative efficiency**: the market produces exactly the quantity society wants, with no welfare loss. No other market structure delivers both efficiencies simultaneously as its normal long-run outcome.

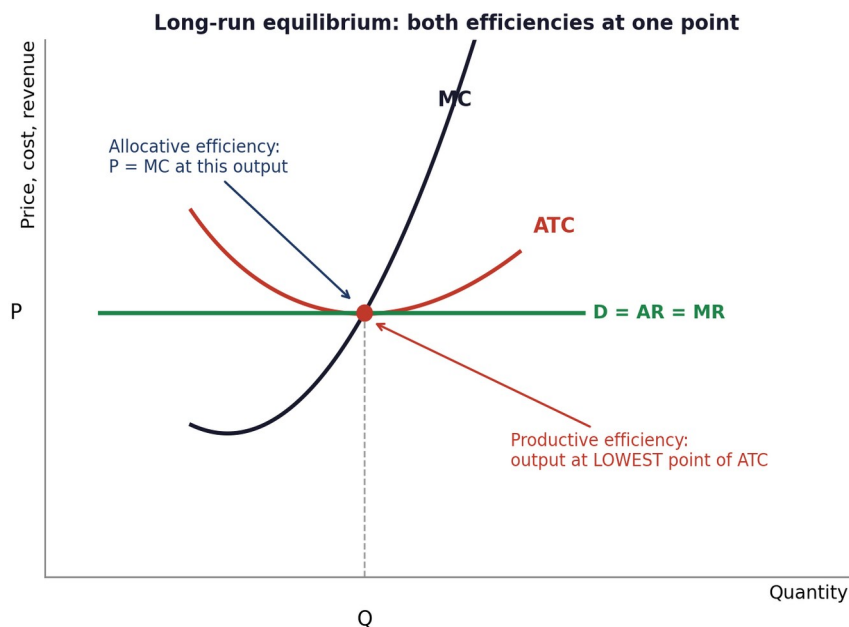


Figure 3: Long-run equilibrium. Output is at the minimum of ATC (productive efficiency) and price equals marginal cost (allocative efficiency) at the same point.

Evaluation: Is It Really the Ideal Market Structure?

As a standard of comparison, the statement has real force. Perfect competition demonstrates an equilibrium at which productive and allocative efficiency occur together, and economists use exactly this outcome as the benchmark against which other structures are judged. A monopoly, by contrast, restricts output to where $MC = MR$ with price above marginal cost, so it is allocatively inefficient, and it need not produce at the minimum of ATC, so it is usually productively inefficient as well. Judged by static efficiency, perfect competition genuinely outperforms the alternatives, which supports the statement.

However, the model's realism is doubtful. The assumptions, thousands of identical producers, perfect knowledge, zero entry costs, no advertising, rarely hold together in reality, and genuinely perfectly competitive markets are extremely scarce; only a few agricultural and financial markets come close. A structure that can barely exist is an odd candidate for "ideal": it may be better regarded as a theoretical yardstick than as a form of market organisation any economy could actually adopt.

The model also ignores dynamic efficiency. In long-run equilibrium every firm earns only normal profit, which leaves nothing to fund research and development. Innovation, new products and better processes over time, is financed largely out of supernormal profit. A monopoly protected by barriers to entry retains such profits and can invest them in R&D, potentially lowering costs and improving products for consumers in the long run. On this dynamic view, championed by Schumpeter, an industry of small perfectly competitive firms may be the least innovative structure, and consumers may be better served over time by imperfect competition.

Economies of scale point the same way. Perfect competition requires many small firms, but in industries with large fixed costs, utilities, aircraft, car manufacturing, a single large producer can achieve far lower average costs than any small firm could. Insisting on many small producers in such industries would raise costs, so perfect competition would not even be productively efficient there. Consumers may also value the variety and quality competition that differentiated products bring, which homogeneous products rule out entirely.

Conclusion

The statement is defensible in the narrow sense in which economists use the model: in long-run equilibrium perfect competition uniquely achieves productive and allocative efficiency together, and it therefore sets the standard by which other market structures are measured. But "ideal" claims too much. The model describes a market that hardly exists, its normal-profit equilibrium starves firms of the funds needed for innovation, and in industries with significant economies of scale a fragmented market of small firms would actually be less efficient than a concentrated one. The balanced judgement is that perfect competition is the ideal benchmark of static efficiency rather than the ideal form of real market organisation, and once dynamic efficiency is considered, a market with some degree of imperfect competition may serve consumers better over time.

Exam tip

The definitions of productive and allocative efficiency carry easy AO1 marks, so state both precisely and mark both on the long-run diagram, the single most important diagram in this essay. The mark scheme rewards the short run versus long run contrast, so show a short-run profit diagram and its resolution to normal profit before claiming efficiency. For the top evaluation band, go beyond "the assumptions are unrealistic": develop the dynamic efficiency argument (normal profit means no funds for R&D) and the economies of scale point, then finish with a judgement that answers "ideal" directly.