

3

91400



NEW ZEALAND QUALIFICATIONS AUTHORITY
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Level 3 Economics, 2019

91400 Demonstrate understanding of the efficiency of different market structures using marginal analysis

2.00 p.m. Monday 18 November 2019
Credits: Four

Achievement	Achievement with Merit	Achievement with Excellence
Demonstrate understanding of the efficiency of different market structures using marginal analysis.	Demonstrate in-depth understanding of the efficiency of different market structures using marginal analysis.	Demonstrate comprehensive understanding of the efficiency of different market structures using marginal analysis.

Check that the National Student Number (NSN) on your admission slip is the same as the number at the top of this page.

You should attempt ALL the questions in this booklet.

If you need more room for any answer, use the extra space provided at the back of this booklet.

Check that this booklet has pages 2–11 in the correct order and that none of these pages is blank.

YOU MUST HAND THIS BOOKLET TO THE SUPERVISOR AT THE END OF THE EXAMINATION.

TOTAL

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QUESTION ONE: Perfect competition – falling dairy prices and interest costs

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Dairy prices slip to lowest level in two years.

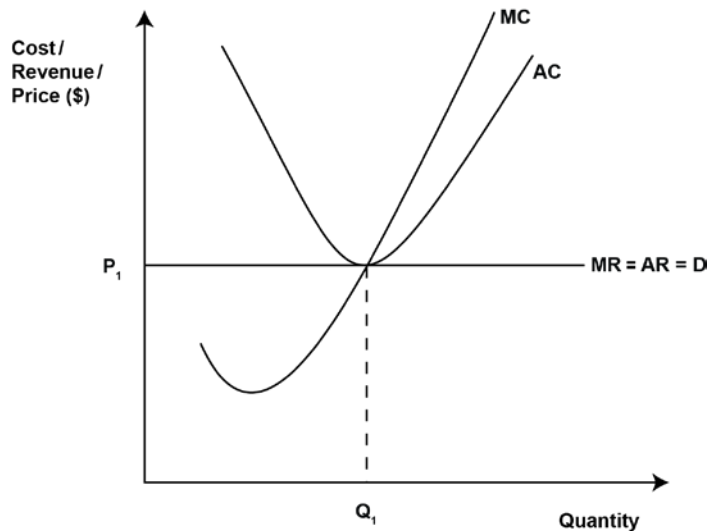
<https://www.rnz.co.nz/news/country/368822/dairy-prices-slip-to-lowest-level-in-two-years>.

Dairy prices forecast to keep falling until next year.

<https://www.radionz.co.nz/news/business/376461/dairy-prices-forecast-to-keep-falling-until-next-year>.

The headlines, above, indicate a lower income received by dairy farmers in New Zealand.

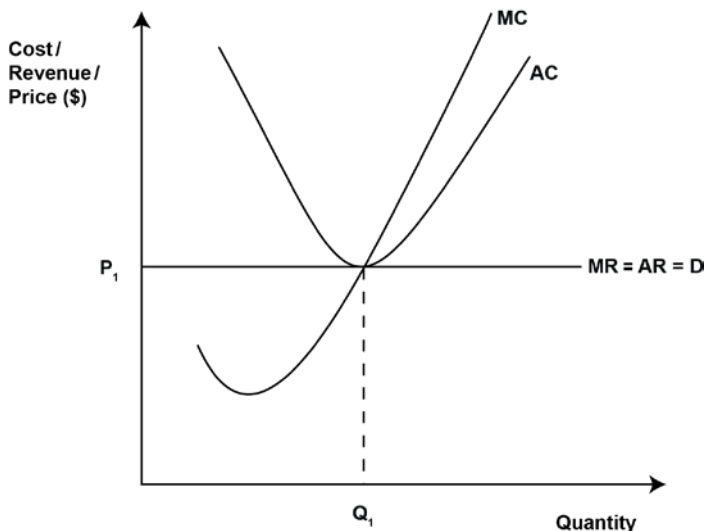
Graph One: A perfect competitor earning normal profit



- (a) Complete Graph One, above, to show how **falling dairy prices** would affect the individual New Zealand dairy farmer in the short run. Clearly label any curve shifts and any changes in the short-run price, quantity and economic profit earned.

Debt servicing is a fixed cost for dairy farmers; a decrease in interest rates would decrease their fixed costs.

Graph Two: A perfect competitor earning normal profit



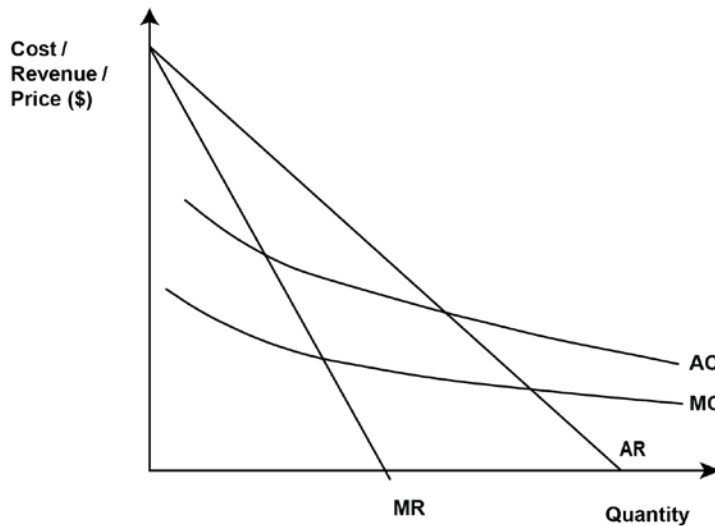
- (b) Complete Graph Two, above, to show how a **decrease in interest rates** would affect the individual New Zealand dairy farmer in the short run. Clearly label any curve shifts and any changes in the short-run price, quantity and economic profit earned.

QUESTION TWO: Natural monopoly – average-cost and marginal-cost pricing

The Commerce Commission regulates markets in New Zealand where there is little or no competition.

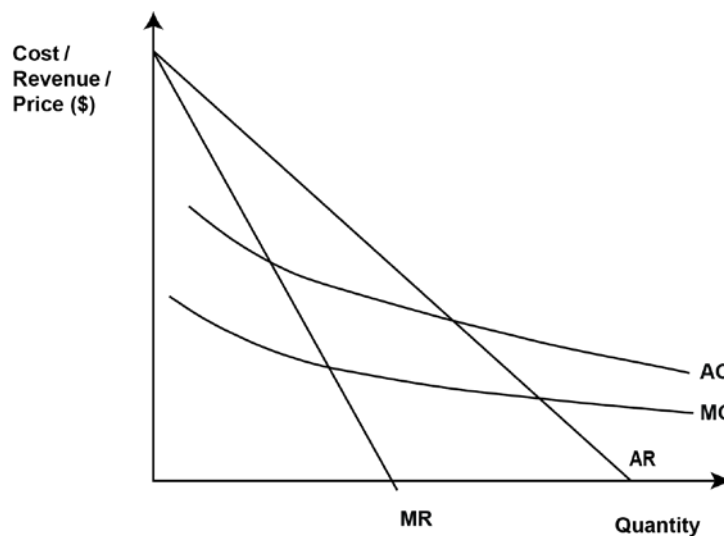
Price regulation is one way of controlling natural monopolies. They can be regulated using average-cost or marginal-cost pricing.

Graph Three: A natural monopoly



- (a) (i) On Graph Three, above, clearly shade and label the price, output, consumer surplus and deadweight loss (if any) resulting from **average-cost pricing**.
- (ii) State the type of economic profit earned by the natural monopoly.

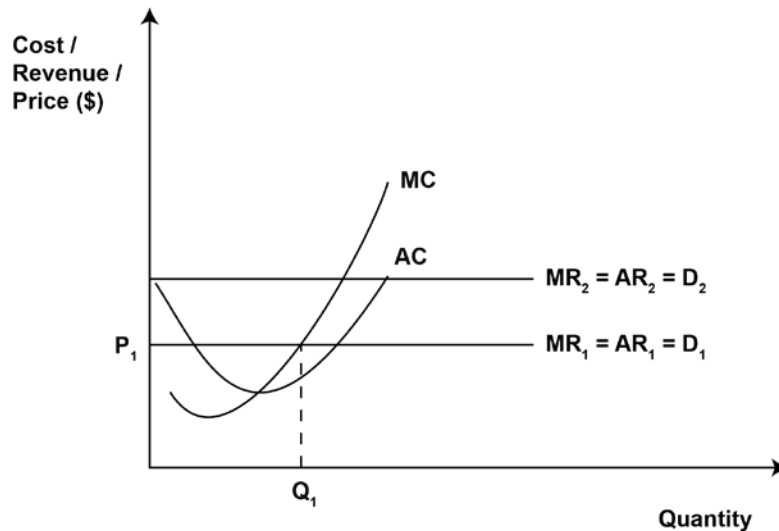
Graph Four: A natural monopoly



- (b) (i) On Graph Four, above, clearly shade and label the price, output, consumer surplus and deadweight loss (if any) resulting from **marginal-cost pricing**.
- (ii) State the type of economic profit earned by the natural monopoly.

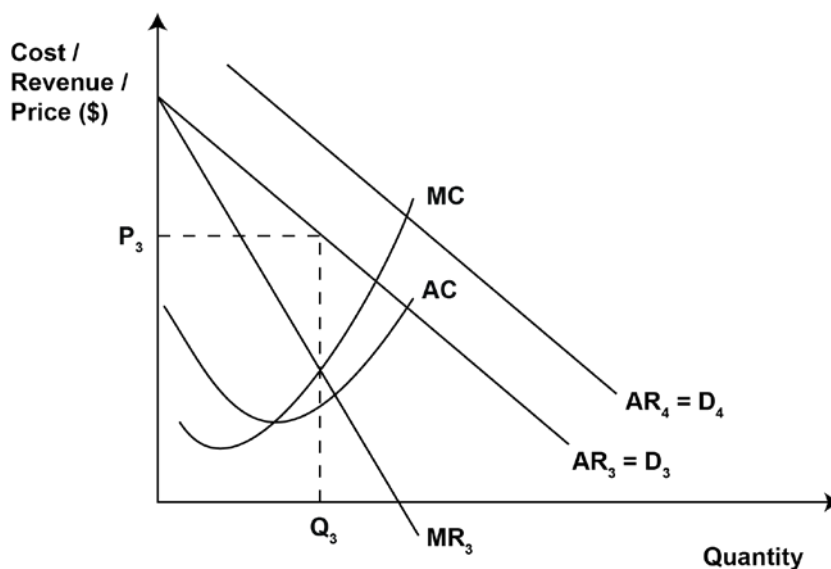
QUESTION THREE: Increase in demand for perfect competition and monopoly

Perfect competition and monopoly are very different market structures with distinct characteristics. An increase in market demand for products from each market structure will therefore produce different outcomes.

Graph Five: Perfect competition with an increase in demand

An increase in demand has been indicated by a shift upwards of the $MR=AR=D$ curve.

- (a) Complete Graph Five, above, to show how an increase in market demand would affect the perfect competitor's short-run pricing and output decisions. Clearly label the new price and quantity, and shade in the new economic profit earned.

Graph Six: Monopoly with an increase in demand

An increase in demand has been indicated by a shift to the right of the $AR=D$ curve.

- (b) (i) Complete Graph Six, above, to show how an increase in market demand would affect the monopoly's marginal revenue. Clearly add and label the new MR curve.
- (ii) Complete Graph Six to show how an increase in market demand would affect the monopoly's short run pricing and output decisions. Clearly label the new price and quantity and shade in the new economic profit earned.

- (iii) Using marginal analysis, explain in detail the impact of an increase in demand on the output decision of the monopoly. Refer to Graph Six in your answer.

- (c) Referring to the characteristics of the different market structures, compare and contrast the impact of an increase in demand on the profit maximising price and economic profit of the typical firm in perfect competition and monopoly. In your answer:

- refer to both graphs
- explain in detail the change in price for each firm in the short run
- explain in detail what will happen to the economic profit in the long run for both perfect competition and monopoly.

**Extra space if required.
Write the question number(s) if applicable.**

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**QUESTION
NUMBER**

Lined area for student response with horizontal lines and a vertical margin line.

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