

93402Q



NEW ZEALAND QUALIFICATIONS AUTHORITY
MANA TOHU MĀTAURANGA O AOTEAROA

New Zealand Scholarship Economics, 2004

9.30 am Tuesday 23 November 2004

QUESTION BOOKLET

Write all your answers in the Answer Booklet 93402A.

Check that this booklet has pages 2–5 in the correct order and that none of these pages is blank.

YOU MAY KEEP THIS BOOKLET AT THE END OF THE EXAMINATION.

Outcome Description

The student will produce a sophisticated economic analysis in a contemporary New Zealand context.

Scholarship Criteria

The student will:

- produce and effectively communicate a sophisticated economic analysis by applying microeconomic and macroeconomic theory in a contemporary New Zealand context.

Scholarship with Outstanding Performance Criteria

In addition to meeting the criteria for Scholarship, the student will:

- produce an outstanding analysis, which is complete, demonstrates depth in critical thought, and is economically literate.

General Instructions for Candidates

You are to write THREE economic essays. Start each essay on a new page. Each essay consists of three parts. Part A and Part B involve interpretation and some analysis of each situation. Part C is a more open-ended question to demonstrate your ability to produce a sophisticated economic analysis.

To meet **Scholarship** criteria, each analysis will communicate economic ideas effectively and will:

- recognise the complexity of real-life situations
- incorporate a wide range of relevant economic tools: graphs, models and a range of theories
- use the majority of the economic concepts relevant to the context
- recognise the connections between various parts of the analysis that are not immediately obvious
- make generalisations, draw conclusions and include an evaluation of the analysis.

Scholarship with Outstanding Performance will require a qualitatively better analysis – an exceptional analysis. The analysis will be well written, complete and demonstrate an in-depth understanding of how economic ideas may be applied to a range of given contexts.

You should spend time planning your answers.

QUESTION ONE: THE ELECTRICITY MARKET

A large North Island pulp mill halted production yesterday for the second time in four days, in response to soaring electricity prices.

Prices soared on the spot electricity market because of bad weather disrupting key transmission lines from the South Island dams and higher demand, due to people returning from their holidays. Wholesale electricity prices rose from \$50 per megawatt hour to \$1000 per megawatt hour.

The Winstone Pulp International mill at Karioi, near Ohakune, stopped production yesterday, putting its 145 staff on maintenance work. Managing director David Anderson said that the extraordinary price signals from the market mechanism were inappropriate for the export pulp industry. 'The shutdowns will mean a significant loss of production and export dollars.' He believes a price cap is necessary.

The chairman of the Major Electricity Users Group (MEUG), Terrence Currie, agrees and argues that new investment by firms is unrealistic because of the volatile and unstable market.

However, according to Electricity Commission spokesperson Roy Hemmingway, 'the market system has worked'. The market sent signals that cheap electricity was no longer available to big North Island electricity users and they responded by cutting production.

Adapted from New Zealand Herald 13.1.04

- (a)
 - (i) Explain the likely elasticity of supply and demand for electricity.
 - (ii) Use supply and demand analysis to illustrate the rapid increase in the price of electricity in the wholesale market. Briefly explain your answer.
- (b) Assume Winstone Pulp has a monopoly cost and revenue structure.
 - (i) Draw the curves illustrating a profit-maximising level of output where it is better to temporarily shut down rather than continue producing.
 - (ii) Explain your answer.
- (c) Evaluate the merits of a price control system in the wholesale electricity market. Illustrate with appropriate diagrams.

QUESTION TWO: ALLOCATIVE EFFICIENCY AND PROPERTY RIGHTS

The Ministry of Fisheries has announced plans to add the kahawai species to the Quota Management system, making it the 33rd species to be included. The Quota Management System is designed to safeguard fish stocks by specifying a total allowable catch per year. Commercial and recreational fishers are set to make submissions to the Government over the distribution of the quota. The commercial fishing industry wants to be able to catch 70% of the total quota but recreational anglers believe this is too high. They argue that most of the kahawai caught by commercial boats is sold as bait, whereas recreational anglers catch it mostly for human consumption. They also argue that commercial fishers have already depleted the kahawai species, saying that size and numbers are down everywhere, especially Nelson and Western Bay of Plenty.

The debate comes at a bad time for the fishing industry. Many companies are struggling to catch their hoki quota and are also being hit by the high NZ\$. Some Nelson fishing companies are considering the future of their fleets and have left many of their boats tied up at port. Fishing companies are expecting the government to announce a reduction in the hoki quota later this year. Seafood Industry Council chairman Dave Sharp said that the fortunes of the fishing industry go in cycles and 'this cycle is as bad as it has ever been for the fishing industry'.

Adapted from *New Zealand Herald* 27.2.04

- (a) Using an appropriate economic model, illustrate and explain the difference between productive and allocative efficiency.
- (b) Explain why a high NZ\$ may lead to a reallocation of resources away from the fishing industry.
- (c) Using the ideas of property rights and externalities, evaluate the unregulated and regulated (QMS) approaches to the kahawai fishery.

QUESTION THREE: INFLATION AND THE MACRO ECONOMY

Chinese Burn Hurts NZ

China's booming economy is more than an abstract issue for New Zealand.

It has been blamed for rises in the price of products such as reinforcing steel, widely used in construction.

Last month, homeowners were warned to expect a rise of up to \$500 for a typical rewiring job, thanks to a copper price at 16-year highs. That was also, at least in part, put down to demand from China.

The strong Chinese economy has also hit shipping costs. Freight rates for New Zealand's log exports have doubled because of a shortage of bulk carriers, which the industry puts down to demand from China.

It has affected all log exporters but larger companies say longer-term contracts give them some protection. However, the problem will not go away quickly because of the time it takes to build new ships.

China is also playing its part in keeping up oil prices. Last week the International Energy Agency said that world oil consumption would rise faster than expected this year because of China's surging economy.

However, strong demand for commodities has been good news for some exporters. Aluminium, for example, made solid gains last year and so far this year, the ANZ Bank said last week.

Adapted from *New Zealand Herald* 12.04.2004

Newest Export Out of China: Inflation Fears

Price increases in raw materials and other business costs in China will probably spill over soon to consumer prices in China and abroad.

Chinese leaders have taken steps to slow the economy and thus reduce inflationary pressures by raising reserve requirements for banks twice in less than three weeks (government controls on bank lending). By next year, the many steel mills now under construction could start easing the acute shortages that are driving up steel prices. Over the next five years, new power plants should curb blackouts if coal mines can increase output fast enough to supply the plants.

Growing evidence suggests that Beijing has been using informal (maximum) price controls on businesses, especially state-owned enterprises, to help keep inflation under control.

Adapted from *New York Times*, 16.04.2004

- (a) Explain the likely impact of increases in commodity prices and shipping costs on New Zealand's current account deficit.
- (b) What impact is a high level of inflation in China likely to have on the New Zealand economy? Use appropriate diagrams to help with your analysis.
- (c) Contrast the monetary and regulatory policies currently used in New Zealand and China and evaluate the effectiveness of these policies in achieving price stability.