



H2 Economics

9757/01

Case Study Questions

11 September 2017

2 hours 15 minutes

Additional Materials: Writing Paper

READ THESE INSTRUCTIONS FIRST

Do not open this booklet until you are told to do so.

Write your name, class and register number in the spaces at the top of the answer sheets.

Write in dark blue or black pen.

You may use an HB pencil for any diagrams or graphs.

Do not use staples, paper clips, highlighters, glue or correction fluid.

Section A

Answer **all** questions.

Begin each question on a fresh sheet of paper.

At the end of the examination, fasten all your work securely to the cover sheet with the string provided.

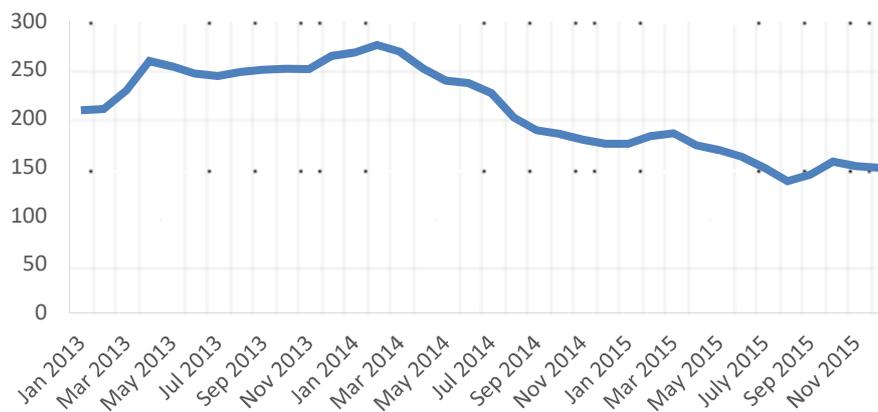
The number of marks is given in brackets [] at the end of each question or part question.

[Turn Over]

This document consists of **7** printed pages and **2** cover sheets.

Question 1 The market for milk in Canada

Figure 1: Dairy Price Index, 2013-2015



Source: Food and Agriculture Organisation of the United Nations

Extract 1: The dairy industry - Turning sour

Little over a year ago, New Zealanders were still talking about a “white-gold rush”. Strong prices for milk were prompting cattle ranchers who produce beef to convert to dairy farming, and Chinese firms were coming in to buy up agricultural land and milk processors. Inevitably, influx has led to glut. Prices have fallen to their lowest in more than ten years. Farmers in France, Britain and Belgium have recently been staging protests against low milk prices, but few places are as badly affected as New Zealand, whose dairy industry produces a quarter of its export earnings. Facing sliding incomes, New Zealand’s dairy farmers are expected to cull one-in-six cows this year.

There are two main reasons why the milk trade has turned sour. One is the economic slowdown in China, a giant market where consumption for dairy produce had until now been growing strongly. Another is the removal of the European Union’s (EU) dairy-production quotas earlier this year, which does away with limits on the amount of milk each farm could produce, encouraging big producers in Germany, the Netherlands and elsewhere to boost their output and exports.

Source: The Economist, 13 August 2015

Extract 2: Protectionism and price controls in Canada’s dairy market

Critics of Canada’s dairy sector which sets a price that takes into account the average cost of production, say it encourages inefficiencies that cost Canadian consumers billions of dollars annually. In addition, protectionism via sky-high tariffs ensures the Canadian market remains closed to all but a tiny wedge of dairy imports.

Advocates of opening Canada’s dairy market to global competition from foreign firms insist it would be a boon to the farmers with potential to be more efficient, allowing them to grow by exporting their products internationally. But that fails to justify the painful fate that would likely await the vast majority of Canada’s 12,000 dairy farms. Having been sheltered from competition for so long, the relentless demands for lower costs and higher productivity would overwhelm most family-run dairy farms.

Those demands are only growing fiercer. The European Union's move earlier this year to abolish milk production quotas is expected to lead to a surge in production in countries with the most efficient dairy sectors. Then there's the United States, where industrial-sized dairy farms with more than 10,000 cows are not uncommon. (The average Canadian dairy farm has 77 cows.) At the Trans-Pacific Partnership talks, the United States is pushing harder than any other country for access to the Canadian dairy market. New Zealand's dairy sector rode the Chinese boom until growth there flinched. China now has big stockpiles of whole-milk powder, leading most analysts to predict that low global milk prices will be around for a while.

That is likely good news for most of the world's consumers, provided processors and retailers pass on those savings. But it's bad news for large dairy-exporting countries such as New Zealand, which bet that China's thirst for its milk would be unquenchable. Not only are European producers now eyeing the Chinese market. Domestic production is growing fast in China – one particular operation has 140,000 cows.

Were Canada to finally join the global milk market, consumers here (particularly the poorest ones) would benefit most. Dairy farmers, not so much. But that is what free trade is all about. As Adam Smith wrote in *The Wealth of Nations*: "It is the maxim of every prudent master of a family never to attempt to make at home what it will cost him more to make than to buy." Countries prosper by focusing on what they do best.

Source: The Globe and Mail, 29 July 2015

Extract 3: Canada's dairy farms forced to dump surplus

Due to the regulation of the price of milk, Canadian dairy farmers are grappling with a glut of milk, forcing them to turn growing volumes into low-cost pig feed and sometimes dump it on farms or in sewage systems. The head of the Dairy Farmers of Ontario (DFO) acknowledged in a recent letter to farmers that it has been forced to get rid of quantities of unwanted liquid skim milk.

Martha Hall Findlay, a former Liberal MP and fellow at the University of Calgary School Of Public Policy, said the victims of the wastage are low-income Canadians, who aren't getting the benefit of lower prices.

Source: The Globe and Mail, 18 June 2015

Extract 4: Should the government intervene in the dairy market?

It may indeed be that a pure free market system for food production would result in lower prices. But in the rush to condemn Canada's management of its dairy industry, the advantages of managed markets in agriculture have often been forgotten. International evidence reminds us to understand what we are losing before we decide to erode a system that has worked well for Canadians.

In global commodity markets, farmers' earnings depend on the total global supply of the product they produce. Market prices swing unpredictably because farmers can never be sure how much the commodity will earn. "One season the price is high and one season it is low," says economist Phil Holden. "And they never really know how much to supply from one year to the next." That means the business of farming is prone to failure.

The purpose of managing markets through methods such as setting prices is not to make prices higher, but to make sure prices are kept steady to cover the cost of production and so

farmers stay in the business. Until quite recently, the production of many agricultural goods was local. But technology, including ultra-high temperature treatment, means milk can be kept for up to a year and shipped without refrigeration, turning milk from local into a global tradable commodity. Thus, it may be that Canada would be a better place if milk production moved to the countries that could produce it most cheaply allowing them to cut their costs so they could go head to head with global producers from China and New Zealand.

But knowing how markets work, it may be likely that losing much of the dairy industry to overseas competitors by removing tariffs would not bring food cost down much in the long term. The cost difference would merely be absorbed by some other part of the production chain. Meanwhile, the advantages of having a strong domestic industry are about more than the price of milk. Canadian dairy farmers remain in the country and don't move overseas so government's tax revenue is not affected. In the current global shakeout in the dairy industry, it might be worthwhile hanging on to that industry at least until the shakeout is over. Maybe well-made Canadian milk products, without hormones, with love, will soon sell overseas at a premium.

Source: *CBC News*, 27 November 2015

Questions

- (a) (i) Using the data in Figure 1, describe the trend of dairy prices from 2013 to 2015. [1]
- (ii) Explain how the factors mentioned in Extract 1 account for the trend of dairy prices in part (i). [3]
- (b) "It is the maxim of every prudent master of a family never to attempt to make at home what it will cost him more to make than to buy." Countries prosper by focusing on what they do best. (Extract 2)
- Using the concept of opportunity cost, explain why Canada is likely to import milk while countries like the United States and New Zealand export it. [6]
- (c) The price set by the Canadian government has led to "glut of milk" in the domestic dairy industry (Extract 3).
- Assess the impact on Canadian households and firms due to the use of price controls for milk. [8]
- (d) Explain how the development of "ultra-high temperature treatment" technology (Extract 4) might change the price elasticity of supply for milk. [2]
- (e) Discuss whether the decision to protect the dairy industry in Canada using "sky-high tariffs" (Extract 2) is justified. [10]

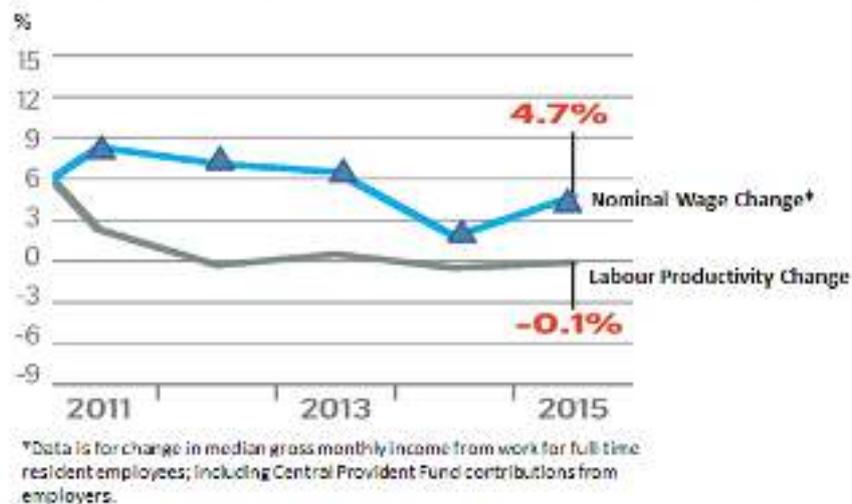
[Total: 30]

Question 2 Growth and competitiveness

Extract 5: Wage versus productivity growth

Economic growth is a combination of both manpower growth and productivity growth. The problem with Singapore, however, is that recent growth has largely been powered by manpower growth. Over the past five years, the Singapore economy's growth of about 4 per cent a year was powered solely by manpower growth, while productivity was more or less stagnant, Mr Lim told Parliament. Add in a shrinking local labour force and a slowing foreign workforce growth, and the result is simple: Growth will fall. "Without a breakthrough in productivity growth low growth will become the new norm," he warned.

Figure 2: Wage and labour productivity changes



Source: Singapore Department of Statistics

But while economists and businesses are clearly worried about Singapore losing its competitiveness should wages continue to push ahead of productivity, some said that it is not all doom and gloom yet.

For many companies, including multinational firms, the decision to set up shop in Singapore rests on a multitude of factors. Labour is a big part of that equation but firms also have other reasons for wanting to do so. SMU's Prof Hoon said that there are other factors that continue to make Singapore attractive to foreign investors. "Our strong legal and corporate infrastructure, our strong economic link with the global economy, and a forward-looking and eager-to-learn workforce all provide us a margin of advantage," he said.

The \$4.5 billion Industry Transformation Package introduced in the recent Budget is proof that the Government has not given up the fight to raise productivity.

Source: The Straits Times, April 2016

Extract 6: Singapore's restructuring efforts

The Government sought to tighten the foreign manpower policy in reaction to the unsustainable high degree of reliance on foreign labour, as well as to remove one of the main impediments to better productivity performance. Initiated in Budget 2010, the tightening began with hikes on levies for work permits and S-Passes spread out over two-and-a-half years. Further measures were announced in subsequent Budgets.

There is no doubt that foreign manpower has served Singapore well. It has, among other benefits, provided the buffer of manpower that has enabled a relatively small economy to exceed its limitations. Nonetheless, businesses would not be served well if this dependence turned into a crutch. If allowed to continue unchecked, it could lull firms into a false sense of complacency about the availability of resources, as well as delay the search for more efficient workplace processes.

From the outset, some businesses have warned that they might be forced to move out if the tightening restricted their capacity to operate. Economists have also suggested that by raising manpower costs without producing immediate improvements in productivity, the tightening measures could lead to a jump in labour costs, and an erosion of competitiveness.

As we have seen reiterated in more than one Budget statement, the sectors suffering from poor productivity performance have also tended to be the most heavily reliant on foreign manpower and the most hesitant to change due to profit considerations.

Source: www.todayonline.com, February 2015

Extract 7: Singapore retains No. 2 competitiveness spot

Singapore has been named the second-most competitive economy in the world - the sixth year in a row it has been runner-up in an annual report compiled by the World Economic Forum (WEF). However, it added: "Singapore still lags behind the best-performing nations in the most sophisticated areas of competitiveness, with a relatively disappointing 19th rank in the business sophistication category and 9th rank in innovation."

Singapore is far from being the only economy weaker in productivity and innovation. The WEF noted that "progress in building an enabling environment for innovation remains the advantage of only a few economies", even though the "Fourth Industrial Revolution" is gathering speed. The Fourth Industrial Revolution is characterized by a convergence of technologies that is blurring the lines between the physical, digital, and biological spheres. "Breakthroughs in technologies such as artificial intelligence, biotechnology, robotics, the Internet of things and 3D printing, to name a few, will provide new avenues for growth and development in the future but could also give rise to significant social challenges," the WEF added.

Source: The Straits Time, September 2016

Extract 8: Achieving inclusive growth and sustainable development in the fourth industrial revolution

In his opening address at the 11th Annual Meeting of the New Champions, Li Keqiang, Premier of the People's Republic of China, acknowledged the widespread impact of the Fourth Industrial Revolution across all economies, sectors and business models. He stressed the importance of pursuing strategies for inclusive growth to ensure that the negative effects of the Fourth Industrial Revolution are limited. If inadequate measures are taken, this can create a problem of displaced workers and the challenge of achieving fairness.

The Chinese Premier underscored the importance of pursuing technological improvements in China's contribution to address global warming. "Our climate change fight is required for our own sustainable development." In the Paris agreement, China said it would cut its carbon intensity by 60 to 65 percent by 2030, compared to its level in 2005. China also pledged that its carbon dioxide emissions would reach their maximum by around 2030, and that it would try

to reach an earlier peak. It aims to achieve that partly by expanding solar, wind, nuclear and other non-fossil energy to about 20 percent of total energy use.

Earlier, Chen Qiufa, Governor of Liaoning Province, People's Republic of China, spoke of how technology and addressing inequality could significantly drive new growth. "Technological change will provide a long-lasting growth driver. By pursuing inclusive growth and scientific development, we will achieve greater progress together."

Source: World Economic Forum & New York Times, June 2017

Table 1: Gross Domestic Product (GDP) and its components in selected economies (% of total), 2015

	China	US	Singapore
Total GDP (US\$ billion) 2015	11,158.5	18,036.6	292.7
Composition:	%	%	%
Private Consumption	38	68	37
Government Consumption	14	14	10
Gross Fixed Investment	43	20	26
Exports of goods and services	21	13	176
Imports of goods and services	-18	-15	-150

Source: United Nations Statistics Division, 2017

Questions

- (a) i) Using Figure 2, describe the changes in wage and labour productivity from 2011 to 2014. [2]
- ii) Explain the impact of the *above* changes on a country's competitiveness. [2]
- (b) Using a diagram, explain why some firms may be hesitant to adopt productivity changes as suggested in Extract 6 in the short run. [2]
- (c) Explain the trade-offs incurred when the Singapore government reduces its reliance on foreign labour to spur productivity. [4]
- (d) Explain how technological change can aid China in its "climate change fight" (Extract 8) to achieve sustainable growth. [2]
- (e) Discuss how current and future living standards are affected by the composition of national income in terms of the expenditure components as shown in Table 1. [8]
- (f) Discuss whether the benefits gained from technological innovation to increase international competitiveness will outweigh the unintended consequences created. [10]

[Total: 30]

– End of Paper –



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COVER SHEET

H2 ECONOMICS

Section A: Case Study Question 1

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11 September 2017

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QUESTIONS ATTEMPTED		MARKS
(a)	(i)	
	(ii)	
(b)		
(c)		
(d)		
(e)		
TOTAL		/30



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COVER SHEET

H2 ECONOMICS

Section A: Case Study Question 2

Name: _____

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QUESTIONS ATTEMPTED		MARKS
(a)	(i)	
	(ii)	
(b)		
(c)		
(d)		
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TOTAL		/30