



RAFFLES INSTITUTION
2023 YEAR 6 TERM 3 PRELIMINARY EXAMINATION
Higher 2

ECONOMICS

9570/01

Paper 1 Case Study Questions

29 August 2023

2 hours 30 minutes

Additional Materials: Answer Paper

READ THESE INSTRUCTIONS FIRST

Write your name, index number and civics class on all the work you hand in.
Write in dark blue or black pen on both sides of the paper.
You may use a soft pencil for diagrams, graphs or rough working.
Do not use paper clips, highlighters, glue or correction fluid.

Answer all questions.

The number of marks is given in brackets [] at the end of each question or part question.
Start each Case Study on a fresh sheet of paper.
At the end of the examination, fasten your answers to Case Study 1 and Case Study 2 **separately**.
Detach this **cover page** and secure it in front of answers to **Case Study 1**.

Name: _____

Civics Class: _____

Economics Tutor: _____

Question	Marks
1	/30
2	/30

This document consists of **10** printed pages and **1** blank page.

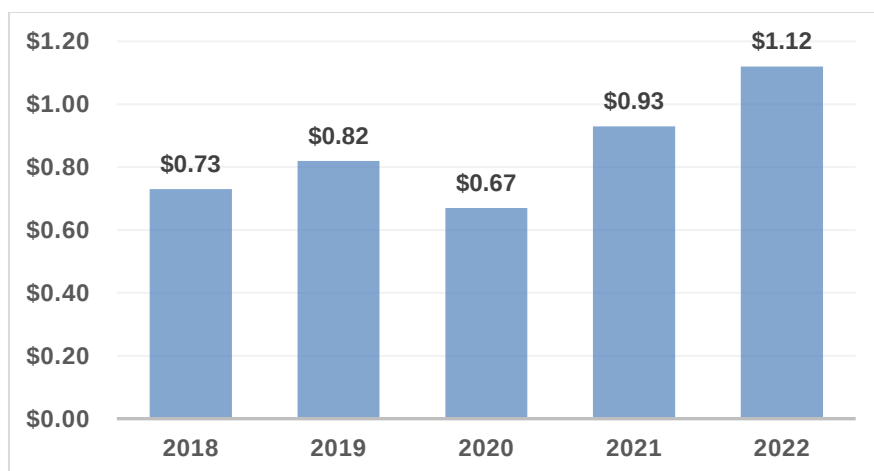


Raffles Institution

BLANK PAGE

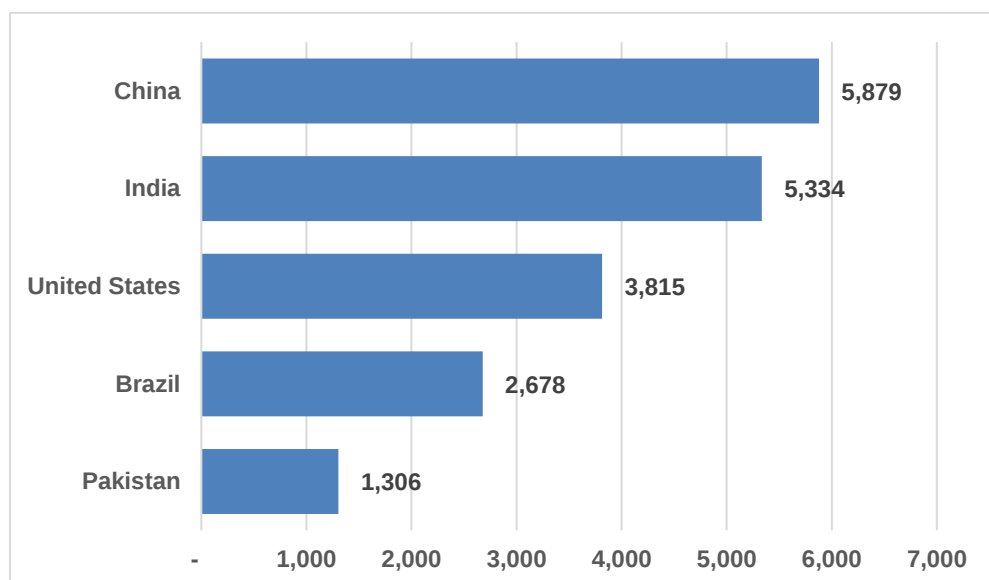
Question 1 The Cotton Market

Figure 1: World Cotton Price (US\$)



Source: Macrotrends, March 2023

Figure 2: Leading Cotton Producing Countries (in thousand metric tons)



Source: Statista, 2021 and 2022

Extract 1: Cotton Farmers in India and Pakistan Bear the Brunt of Unpredictable Rainfall

Farmers have been growing cotton in India and Pakistan for thousands of years. But that shared history and benefit is under threat because of weather volatility. The year 2021 will remain etched in the memory of Anantha Kumar Pichaipillai, a cotton farmer from India. For the first time in eight years, he did not grow cotton.

Extreme rainfall wreaked havoc on his cotton farm. "This has been unseen for 100 years," he said. "January is a month of minimal rain. That has changed since 2021. India received 10 times more rainfall than usual, according to the Indian Meteorological Department (IMD). That deluge was a preview of what Pakistan faced in August 2022, when torrential rains damaged 80% of the cotton crop in the Sindh province and caused a damage of around \$15 billion.

While too much rain can be devastating, so can dry conditions at the wrong time. "Cotton is grown in dry weather conditions and benefits from the monsoon. The recent phenomenon of extreme heat and the extreme downpour is disrupting the situation," said Y.E.A. Raj, former deputy director general at IMD.

Source: The Wire, 11 February 2023

Extract 2: Cotton Subsidies in the US

In the 2019-20 season, the US paid out more than \$2 billion to cotton farmers, up from \$1.2 billion the year before. According to the USDA, that is a significant amount of support and it begs the question of what would happen to cotton and cotton farmers if subsidies were to go away.

US support for cotton growers used to be well over \$3 billion a year and accounted for half or more of a grower's cotton revenue. That is, until Brazil brought a trade dispute in 2002 to the World Trade Organisation against the US, saying its payments to cotton growers created unfair competition and depressed world prices, thereby penalising foreign producers.

According to a 2007 Oxfam report, eliminating US cotton subsidies permanently could lead to millions of households in poorer developing countries being able to feed another person based on the higher prices farmers would get for their cotton. In India alone, cotton production sustains the livelihoods of 5.8 million farmers, the majority of whom are small-scale farmers cultivating land less than 2 hectares in size. These farmers live below the poverty line. Many are deeply indebted from the high-interest loans they are forced to obtain from loan sharks to buy fertilisers.

Source: Kingpins Media, 24 March, 2021

Extract 3: How Do High Cotton Prices Affect Clothing Boutique Businesses?

Economic growth will affect the per capita demand for apparel in developing economies. Since the consumption of apparel is more income responsive than the consumption of food commodities, the uncertainty of how economies will emerge from the pandemic is potentially more damaging for clothing boutique businesses.

The problem is compounded by spiking cotton prices that have resulted in higher expenses for boutique businesses. And cotton constitutes about 30-45% of the fabric cost.

In the US, as of 2023, there are 178,366 clothing boutiques. The most likely strategy for these businesses is to pass the rise in cost along to consumers. But this is a double-edged sword: increasing cotton product prices will rapidly correlate to an increase in non-cotton clothing in retail outlets. Competition from such products as rayon and lycra will increase, as stores replace higher-priced cotton in a bid to retain their customers. However, even with other fibers, the prices are not getting any cheaper. In fact, they have increased at a significant pace as the race for sustainable products is pushing the brands to increase the quantum of such collections in their offerings.

With this tough situation, there are always ways and means to mitigate the impact and retailers can focus on the following:

- cost reduction and productivity improvement
- optimising product mix, and
- strategic withdrawal from unprofitable areas

Source: Various

Extract 4: Why Cotton Is Called The World's Dirtiest Crop

Bugs love cotton - from bollworms, plant bugs, and stink bugs, to aphids, thrips and spider mites. Cotton farmers' usual solution is to douse crops in \$2-3 billions worth of pesticides annually - \$819 million of which is so toxic that it is classified as hazardous by the World Health Organisation. Because of the heavy irrigation required to grow cotton, chemicals are quickly washed into surrounding rivers and regional groundwater, and entering every aspect of the ecosystem from there - including rainwater. Cotton pesticides now contaminate land, air, food and drinking water in the USA, India, Pakistan, Uzbekistan, Brazil, Australia, Greece and West Africa.

And cotton needs a lot of water to thrive. According to the World Wildlife Fund, it takes no less than 713 gallons of water to produce one cotton t-shirt - this is the equivalent of the water needed to sustain one person for two and a half years. Globally, cotton consumes 100 billion gallons of water every year. In order to provide this amount of irrigation, waterways in many developing countries are diverted to feed the cotton fields, often with devastating effects.

A prime example of this - but far from the only one - is the Aral Sea, which is considered one of the biggest environmental disasters in human history. The Aral Sea was once the fourth largest body of inland water and vital to the surrounding communities and wildlife. But after major rivers that fed the Aral were diverted into irrigation canals to serve cotton farms, the sea turned into a desert bigger than Belgium, Luxemburg, and the Netherlands combined. Twenty of the 24 native fish species are now extinct, and many more fish and bird species are on the brink of extinction.

Governments around the world used a slew of measures to counter these problems. Some introduced taxes on fertilisers and pesticides. In India, in 2017, the government fixed a 12% tax rate on fertilisers, up from the initial 4-8% rates. Others encouraged the switch to organic cotton. The fabric has the same quality as conventional cotton but not the negative impact on the environment. Organic cotton addresses most of the environmental challenges that conventional cotton production faces. It is grown from non-GMO (genetically modified organism) seeds and without the use of pesticides, insecticides, or fertilisers. But organic cotton is only 1-2% of global cotton production, though it is currently being grown in many countries. Organic cotton generally leads to lower yields, less revenue and cannot keep up with the demand for it.

Source: The Modern Dane, 1 June, 2019

Questions

- (a) (i) With reference to Figure 1, identify the year in which cotton prices rose the most. [1]
- (ii) Using a diagram, explain the reason for such a change in price. [3]
- (b) Explain whether the use of subsidies can help the US develop comparative advantage in cotton production. [5]
- (c) With reference to Extract 3:
- (i) Explain how the pandemic is 'potentially more damaging' for clothing boutique businesses than food businesses. [3]
- (ii) Given the market structure which clothing boutique firms operate in, discuss whether measures to increase revenue are better than cost-cutting measures to ensure the survival of these firms. [8]
- (d) In view of the problems arising from cotton production, discuss the extent to which conflicts in policy objectives may arise when a government intervenes in the market to achieve an efficient allocation of resources. [10]

[Total: 30 marks]

Question 2 Singapore and the UK Economy

Table 1: The Singapore Economy

Year	Inflation Rate (%)	GDP Growth Rate (%)	Unemployment Rate (%)	Trade Balance (% of GDP)	Overall Budget Balance (\$m)
2018	0.44	3.66	2.2	29.50	3338.5
2019	0.57	1.10	2.3	29.49	844.7
2020	-0.18	-4.14	3.2	31.20	-51567
2021	2.3	7.61	2.4	35.27	1227
2022	6.1	3.65	2.0	36.24	-4220

Source: Various

Table 2: The UK Economy

Year	Inflation Rate (%)	GDP Growth Rate (%)	Unemployment Rate (%)	Trade Balance (% of GDP)	Overall Budget Balance (£m)
2018	2.3	1.7	4.1	-1.53	-2305
2019	1.7	1.6	3.8	-1.61	-15085
2020	1.0	-11.0	4.6	0.36	-14395
2021	2.5	7.6	4.5	-1.24	-17600
2022	7.9	4.1	3.7	-3.48	-23520

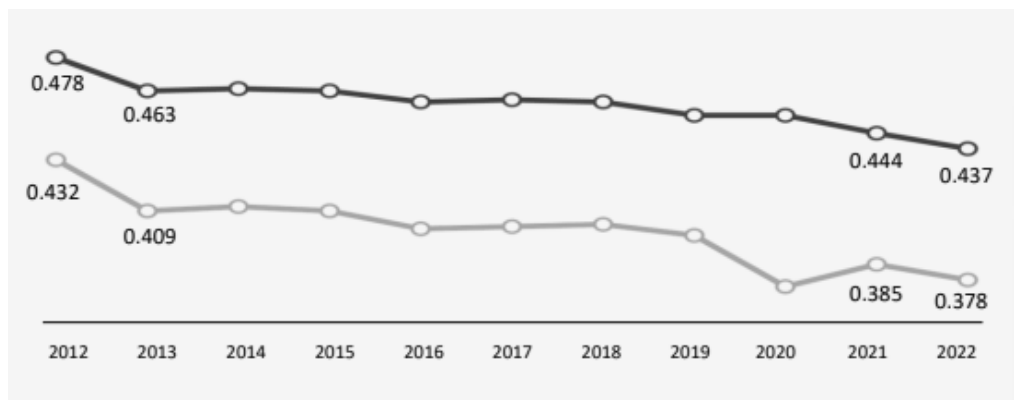
Source: Various

Table 3: Population Growth (%) in Singapore

Year	Total Population	Singapore Residents			Non-Residents
		Total	Citizens	PRs	
2018	0.5	0.7	1.0	-0.8	-0.1
2019	1.2	0.8	0.8	0.6	2.0
2020	-0.3	0.4	0.6	-0.8	-2.1
2021	-4.1	-1.4	-0.7	-6.2	-10.7
2022	3.4	2.2	1.6	6.3	6.6

Source: Singapore Department of Statistics

Figure 3: Gini Coefficient in Singapore



Source: Singapore Department of Statistics

Extract 5: Tightening May Not Be Over Amid Elevated Inflation

Not letting up the fight against inflation, Singapore's central bank tightened monetary policy for the fifth time in 12 months. With inflation remaining on an uptrend, MAS needed a more effective way to give the Singapore dollar a jolt, said MUFG Bank's senior currency analyst Jeff Ng. He also mentioned that: "Given how aggressive the MAS has been in tightening, we do expect the impact to be felt over the next few quarters with the MAS indicating that the string of recent moves should dampen inflation "in the near term and ensure medium-term price stability".

But the fight against rising prices – caused by a confluence of external and domestic factors such as supply disruptions pushing up imported food costs, higher energy prices and a tight labour market – is not over, as seen from the latest adjustments in the central bank's inflation forecasts.

The MAS said that it now expects full-year core inflation for 2022 to average around 4 per cent, while headline inflation is projected to be around 6 per cent. Moving into next year, core inflation is seen at 3.5 to 4.5 per cent and headline inflation is estimated to be at 5.5 to 6.5 per cent, after taking into account the impact of the scheduled Goods and Services Tax (GST) hike.

Source: Channel News Asia, 14 October 2022

Extract 6: UK Inflation Shock

Over the past 18 months, the Governor of the Bank of England has told the BBC that workers should not ask for excessive pay rises and companies should not hike prices too much either. The polite requests have not worked.

The response of Karen Ward, a respected City economist who serves on the chancellor's council of advisers, is that the Bank of England "has to create a recession" partly to "nip in the bud" a spiral of wages going up and in turn pushing up prices, and then pushing up wages again.

"It's only when companies feel nervous about the future that they will think 'Well, maybe I won't put through that price rise', or workers, when they're a little bit less confident about their job, think 'Oh, I won't push my boss for that higher pay,'" she told the BBC's Today programme.

She said out loud what the Treasury cannot say out loud but has implied in repeated interviews - people have to feel the pain for interest rate rises to work. The Chancellor again said he would support the Bank of England in its decisions - making clear his support for further rate rises.

But the unflattering international comparison also shows a limit to how much the government can blame everything on "global factors". Continental Europe was particularly hit by surging energy prices in the aftermath of the Ukraine war, the rest of the world by food prices, and the US by worker shortages. The UK still suffers from a cocktail of all three.

And the government's own post Brexit policies on trade and workers may have lessened competitive pressures that would in the past have brought inflation down more rapidly.

Wednesday's number shows that the already tricky balancing act between inflation and recession is getting worse. It may require more than just the Bank of England to do the heavy lifting.

Source: www.bbc.com, 21 June 2023

Extract 7: The UK After Brexit

Brexit has reduced UK trade openness, foreign direct investment (FDI) inflows, and immigration growth. New border frictions and higher transport costs pose new barriers to trade, and FDI inflows are unlikely to return to levels reached in the 1990s and 2000s.

In the early 2000s, Britain was attracting and retaining a steady flow of foreign-born migrants. But after 2018, EU immigration tailed off, and the number of EU-born residents leaving the UK each year has outnumbered new arrivals. There has not been a compensatory increase in non-EU immigration, which has reduced the size and diversity of the UK labor pool and could have implications for fiscal sustainability.

From 2015 through 2020, the UK was the only economy among the large EU economies that reported a slowdown in its immigrant population growth from the previous five-year period. Its recent trajectory has mirrored the United States', which has been disengaging from the global economy.

The UK has consistently attracted more foreign investment than other comparable economies since the 1970s, driving higher wage growth, more innovation and technological advancement, and greater knowledge and skill sharing. But FDI has retreated since the Brexit referendum, and the UK is no longer a leader among its peers. Between 2017 and 2020, average UK FDI inflows as a share of GDP plummeted to its lowest level since the 1980s.

The effects of this shrinkage in trade, FDI, and immigration still remain to be seen and will depend on the UK government's response. But it could do lasting damage to the UK economy. The UK is a smaller player in the global economy than it was pre-Brexit, and it must adapt to avoid the worst economic consequences.

Source: Peterson Institute for International Economics, 27 April 2022

Extract 8: Free Trade Agreements Are Critical to Singapore's Economic Survival

Singapore, being a small country with no natural resources, has to embrace globalisation to survive and inking free trade agreements (FTAs) is one way of doing so, said Health Minister Ong Ye Kung in Parliament.

Mr Ong said it is in Singapore's interest to pursue FTAs – a strategy that started in the late 1990s and has given the country benefits such as an early mover advantage and a boost to exports.

In addition, FTAs are “especially important” to small and medium-sized enterprises because they free them from the constraints of Singapore's small domestic market and give them access to world markets. FTAs have spurred local companies to venture abroad, said the minister, noting how Singapore's investments overseas have increased nearly five times from S\$200 billion in 2005 to more than S\$930 billion in 2019.

Meanwhile, the FTAs' requirement for countries to remove or lower tariffs on all trade between partners is “of tremendous benefit to Singapore”. “Because while other countries customarily impose tariffs on thousands of items, we are already very open, imposing duties on only three alcohol products – beer, stout and samsu. Hence, any FTA that substantially removes tariffs imposed by both parties is inherently beneficial to Singapore,” said Mr Ong.

Source: Channel News Asia, 6 July 2021

Questions

- (a) With reference to Tables 1 and 2:
- (i) Identify and explain a possible relationship between Singapore's economic growth rate and its budget balance. [3]
 - (ii) Explain why the trend in the UK's budget position is a cause for concern. [2]
- (b) (i) Define foreign direct investment. [1]
- (ii) Explain one factor affecting the inflow of foreign direct investment to the UK. [2]
- (c) With the aid of a diagram, explain how FTA's requirement to lower tariffs on all trade between partners is 'of tremendous benefit' to Singapore's trade. [4]
- (d) Discuss the relative effectiveness of the different approaches to manage inflation in Singapore and the UK between 2021 and 2022. [10]
- (e) Discuss whether greater labour inflows would lead to inclusive growth in Singapore. [8]

[Total: 30 marks]

*******END OF PAPER*******

Copyright Acknowledgements:

Figure 1	© Data Source: Macrotrends, March 2023
Figure 2	© Data Source: Statista 2021/2022
Extract 1	© The Wire, 11 February 2023
Extract 2	© Kingpins Media, 24 March 2021 (adapted)
Extract 3	© OECD Report 2021 (adapted)
	© Chron Newsletter, Jan 2023 (adapted)
Extract 4	© The Modern Dane, 1 June 2019 (adapted)
Table 1	© Singapore Department of Statistics, https://www.theglobaleconomy.com/Singapore/Trade_balance/
Table 2	© Office for National Statistics, https://www.theglobaleconomy.com/United-Kingdom/Trade_balance/
Table 3	© Singapore Department of Statistics, www.singstat.com
Figure 3	© Singapore Department of Statistics, www.singstat.com , https://www.singstat.gov.sg/-/media/files/visualising_data/infographics/households/key-household-income-trends-2022.ashx
Extract 5	© Channel News Asia, 14 October 2022
Extract 6	© www.bbc.com , 21 June 2023, https://www.bbc.com/news/business-65974092
Extract 7	© PIIIE, 27 April, 2022, https://www.piiie.com/research/piie-charts/uk-and-global-economy-after-brexite (adapted)
Extract 8	© Channel News Asia, 6 July 2021 (adapted)