ANDERSON SERANGOON JUNIOR COLLEGE
JC2 PRELIMINARY EXAMINATION
Higher 2

ECONOMICS **9570/01**

Paper 1 **29 August 2023**

Additional Materials: Answer Booklet **2 hours 30 mins**

READ THESE INSTRUCTIONS FIRST

An answer booklet will be provided with this question paper. You should follow the instructions on the front cover of the answer booklet. If you need additional answer booklets, ask the invigilator for a continuation booklet.

Please start your answer to each question on a fresh page of the answer booklet.

Answer **all** questions.

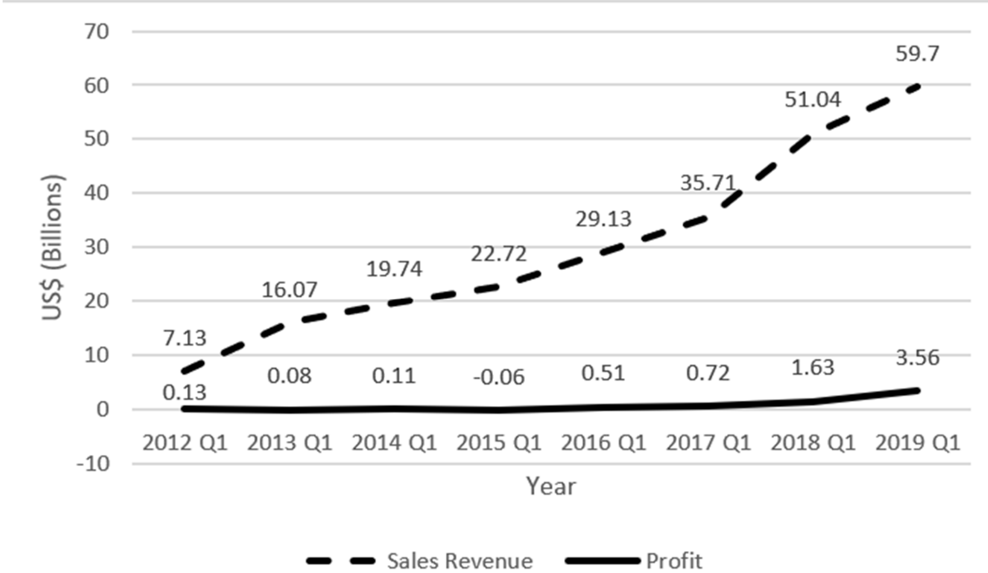
The number of marks is given in brackets [ ] at the end of each question or part question.

This document consists of **9** printed pages and **3** blank pages.

Answer **all** questions

Question 1: Big Technology Firms and the COVID-19 Pandemic

Figure 1: Amazon's sales revenue vs profit



Source: Vox.com, accessed 2 August 2023

Extract 1: How Big Technology* won the pandemic

In the last year, the five Big Technology superpowers — Amazon, Apple, Google, Microsoft, and Facebook (now Meta) — had combined revenue of more than US$1.2 trillion. The pandemic has made the technology giants and their bosses unfathomably rich. Apple has so much extra cash that it is spending an additional US$90 billion to buy its own stock, nearly the equivalent of Kenya's gross domestic product. Of the 10 richest people in the world, eight made their fortunes from technology companies. The man at the top, Amazon's Jeff Bezos, alone is worth more than one-and-a-half Goldman Sachs.

How did this happen? The pandemic created an economy that benefited some people and industries, including in technology, even as it battered others. In the last year of crisis, people and businesses had even greater demand for what the technology giants were selling. Americans' love of home shopping became a safety necessity for some people. Families bought iPads and Macs as work and school went virtual. Any business that still had money to spend on marketing spent it on Google, Facebook, or Amazon. Companies might have cut back in other areas, but they bought software from Microsoft and Amazon.

However, as with other industries, technology is also suffering from a supply chain crisis. This started with the pandemic causing the global shutdown in 2020, a fire that shut down the warehouse of Japan's major producer of microchips, and an unusual and powerful snowstorm In Texas that shut down all Intel microchip production for days. These events started a domino effect that we see affecting the supply chain throughout almost all technology industries.

Source: The New York Times, 12 October 2021 and IBM.com, 10 November 2021

**The Big Technology sector is comprised of businesses that sell goods and services in electronics, software, computers, artificial intelligence, and other industries related to information technology.*

Extract 2: Why Amazon will likely continue to gain e-commerce market share

In the world of e-commerce, there is one undisputed leader: Amazon. As consumers changed their buying behaviour in 2020, the retail giant's financial results revealed a 38% increase in net sales. And those habits are unlikely to change. A study by Salesforce, an American cloud-based software company, found that nearly 60% of consumers believe that they will do even more online shopping after the pandemic than they did before. It is unsurprising then that Amazon is expected to seize 50% of the entire e-commerce retail market this year. So, what is Amazon doing so well that it is in a "prime" position to gain an even bigger slice of this pie?

1. Amazon still leads in logistics

Today, Amazon has just about perfected the art of delivering goods in two days or less. With its own fleet of delivery vehicles, massive numbers of warehouses opening close to end customers for the fastest delivery times, and a workforce that increased by 50% in the past year, it would be difficult, if not impossible, to beat Amazon when it comes to logistics.

2. Amazon is not just convenient; it is the default shopping channel for many

With so many competitively priced products, a powerful recommendation engine, a one-click "Buy Now" option and free delivery on Prime goods, Amazon has removed many elements of friction from the buying experience.

Now compare this with other digital shopping experiences. Say you are in the market for a new pair of tennis shoes. If you have a specific brand in mind, you may have to go to its website, search for the product and even compare across websites. When you are ready to buy, you may be required to create an account that you will likely use only once, input your credit card details, and then sit back and wait. You might have no idea when your goods will ship or arrive. With Amazon, you know when you will likely receive a product even before you place an order.

Source: Forbes, 31 March 2021

Extract 3: Surviving the pandemic - A business perspective

As the global COVID-19 pandemic shows signs of improvement in some countries, most businesses have slowly started to return to normal operations as consumers are coming back since lockdowns are beginning to be a thing of the past. However, this is not true for all firms as the crisis induced by the pandemic resulted in permanent closures of some businesses across the globe. A recent World Bank working paper assessed the effect of the COVID-19 on business closures. Commonalities among the survivors exist. Firms that survived the COVID-19 crisis are older with greater brand loyalty and more productive.

Beyond productivity, certain business characteristics improve the likelihood of businesses surviving. The introduction of new products on the market points to the importance of businesses' ability to adapt to rapidly changing market conditions to increase firms' resilience in a time of crisis. Similarly, the use of technology, which has become particularly relevant during the COVID-19 crisis to offset the physical remoteness imposed by the social distancing requirements, is critical for survival.

Two policy implications can be drawn from this analysis. Firstly, the results confirm the importance of supporting innovation and digitalisation in the private sector for small firms. Next, agile regulations and good governance are beneficial to firm survival.

Adapted from blogs.worldbank.org, 18 June 2021

Extract 4: Big Technology: how can we promote competition in digital platform markets?

As our use of information and communications technologies has increased, a few large digital platforms – 'Big Technology' – have expanded and come to dominate their respective markets. In February 2021, Google accounted for nearly 87% of the global search market, compared with Bing, which took under 7%. Similarly, with over 1.4 billion users, Facebook controls much of our social media, while Apple and Google dominate the market for mobile phones and associated apps stores; and with 1.87 billion monthly users, Amazon has become the giant of e-commerce.

The dominance of these companies and their expansion into new markets – creating major digital ecosystems – have led to ever louder calls for regulation to promote more competition. New regulatory regimes are being developed in a variety of jurisdictions, with detailed proposals now on the table in the UK, the European Union (EU) and the United States (US). These will set out a framework of basic rules by which the largest digital platforms will be required to abide, consequently giving space for new companies to join and establish themselves in the market.

There are also calls for stronger regulatory standards to protect consumer welfare in the digital space. Examples of such regulatory standards are the Digital Services Act (DSA) and the Digital Markets Act (DMA) in the EU. One of the main goals of the Acts is to create a safer digital space in which the fundamental rights of all users of digital services, including their data privacy, are protected. The DSA also gives officials more tools for removing hate speech, and going after e-commerce sellers who promote illegal goods. Companies that do not follow the proposed EU content policies could be fined up to 6% of global revenues and repeat offenders could see their platforms temporarily banned.

However, the EU proposals drew a sharp rebuke from the US Chamber of Commerce, which said it was concerned that "it seems Europe is intent on punishing successful companies that have made deep investments in Europe's economic growth and recovery," Chamber official Myron Brilliant said in a statement. "Moreover, these measures will not improve Europe's own competitiveness."

Some big US technology firms also expressed concerns. "While we will review the Commission's proposals carefully over the coming days, we are concerned that they appear to specifically target a handful of companies and make it harder to develop new products to support small businesses in Europe," Karan Bhatia, Google's vice president of government affairs and public policy, said in a statement.

Source: https://www.economicsobservatory.com, and edition.cnn.com, accessed 22 August 2023

Questions

(a) Compare the changes between Amazon's sales revenue and profit and suggest a reason for the difference. [3]

(b) Extract 1 states that "Families bought iPads and Macs as work and school went virtual."

Using a diagram, explain how this impacted consumer and producer surplus in the technology market. [5]

(c) With reference to Extract 2, explain the likely PED value of Amazon's e-commerce service. [2]

(d) Explain a barrier to entry that exists in the industry that Amazon operates in. [2]

(e) Extract 3 states that "firms that survived the COVID-19 crisis are older with greater brand loyalty and more productive."

Discuss the validity of the statement with respect to firms' short-term survival. [8]

(f) Using Extract 4, discuss the appropriateness of EU's proposals to increase competition and the establishment of regulatory standards in curbing the negative impacts of the dominance seen in the technology market. [10]

[Total: 30]

Question 2: Emerging from the COVID-19 pandemic

Extract 5: Rise of inflation

In late 2021, as economies worldwide began to move out of the COVID-19 pandemic, inflation began to rise. This was partly caused by an increase in demand, as countries reopened their economies. But it was further sparked by the Russian invasion of Ukraine on 24 February 2022, which disrupted supply chains, adding further pressure on inflation. As the cost of energy increased, it has led to substantial rises in prices of other goods, including food, household equipment and restaurants. The cost of living refers to the amount of money needed to cover basic expenses such as housing, food, taxes, and healthcare in a certain place and time period.

Source: Economic Review, Volume 40 Number 4, accessed July 2023

Table 1: Selected economic indicators of Singapore and Indonesia (2018 – 2021)

	Indonesia				**Singapore**			
	2018	**2019**	**2020**	**2021**	**2018**	**2019**	**2020**	**2021**
GDP growth rate (%)	5.2	5.0	-2.1	3.7	3.6	1.3	-3.9	8.9
GDP per capita (constant 2015 US$)	3,741	3,892	3,780	3,893	61,276	61,386	59,175	67,175
Inflation (% change in Consumer Price Index)	3.2	3	1.9	1.6	0.4	0.5	-0.2	2.3
Life expectancy (years)	70	71	69	68	83	84	84	83

Source: World Bank, accessed August 2023

Table 2: 2019-based CPI weighting pattern for general households in Singapore

Category	**Weights (%)**
Clothing and Footwear	2.1
Communication	4.1
Education	6.6
Food	21.1
Healthcare	6.6
Household Durables and Services	4.9
Housing and Utilities	24.8
Miscellaneous Goods and Services	4.8
Recreation and Culture	7.9
Transport	17.1

For 2021, the inflation was not a uniform increase of 2.3%. For example, Clothing and Footwear and Miscellaneous Goods and Services had become cheaper.

Source: Singstat.gov.sg, accessed August 2023

Extract 6: Indonesia bans the export of palm oil, impacting global food prices

As of April 28, 2022, Indonesia has begun a complete ban on palm oil exports, a move that could threaten global food prices and place extra pressure on already steep cooking oil prices worldwide. The ban comes as Indonesia gripes with domestic cooking oil shortages and reins in high prices that had triggered recent protests in the country. Ironically, Indonesia is the world's largest producer of crude palm oil.

The entire palm oil production is derived from Indonesia's rainforest which ranks third in the world, the other two being in the Amazon and Congo basins. As of 2011, there were 7.8 million hectares of palm oil plantations, with 6.1 million hectares of these being productive plantations under harvest, thus making Indonesia the global leader in crude palm oil production.

Palm oil is by far the most consumed and traded edible oil in the world. Grown only in the tropics, the oil palm tree produces high quality oil that is used as a common ingredient in cosmetic and household items, such as detergents, margarine, soaps, chocolates, cakes, and cleaning products, and biofuels, among others.

Indonesia's export ban is "inflationary for everyone", said Mr Atul Chaturvedi, president of the Solvent Extractors' Association of India. India is the top importer of palm oil and gets about 45% of its supply from Indonesia. Singapore also gets most of its palm oil from Indonesia and in 2020 imported US$228 million of it, according to the Observatory of Economic Complexity (OEC) which sources data from international trade database BACI.

Indonesia President Joko Widodo said that the ban would be lifted once the local demand for food staples is met, adding that it was "ironic" that the country had difficulty getting cooking oil. However, the government acknowledged that the policy may cut the country's palm output and result in unsold harvests for farmers. There are also concerns about when Indonesian producers will run out of storage capacity to store oil that they can no longer export. Palm oil production is vital to the economy of Indonesia, which exported US$28.52 billion of palm oil in 2021.

The sudden shifts in high domestic prices will continue to plague Indonesia's palm oil industry unless real reforms are enacted. A major issue is that nearly half of the domestic market for cooking oil is controlled by four conglomerates, who also have businesses throughout the supply chain from cooking oil refineries to processing mills. They thus have more leverage to dictate market prices.

Source: https://www.aseanbriefing.com/news/, 29 April 2022 and The Straits Times, 28 April 2022

Extract 7: Singapore and region stand to benefit from RCEP free trade agreement: MAS

The world's largest trade pact will reduce tariffs and harmonise trade rules, and Singapore and the region stand to gain from it by being more deeply plugged into global supply chains.

This is the conclusion drawn by the Monetary Authority of Singapore's (MAS) biannual macroeconomic review, which said that the Regional Comprehensive Economic Partnership (RCEP) is expected to increase regional trade flows and deepen cross-border production linkages among its 15 member economies.

The review noted that analysis based on past trade pacts such as Singapore's free trade agreements with China and South Korea shows that Singapore became more integrated into the supply chains centred on these countries.

In the same vein, the RCEP will boost the region's competitiveness as a location for supply chains, it said. "It should therefore help to draw in investments, offering companies a broad array of production locations with differing comparative advantages, and the opportunity to export at preferential tariff rates to a wide economic area comprising both high-income consumers and a large and growing middle-income segment."

The RCEP brings together the 10 Asean countries, as well as Australia, China, Japan, New Zealand and South Korea to form the world's largest trade bloc, covering around 30 per cent of the world's population and gross domestic product (GDP).

The overall benefits from the RCEP fall into two categories. The first is tariff reductions. These average a small decline of 0.7 per cent by the 10th year, and 1 per cent by the 20th year after the agreement comes into force. The second category of gains comes from harmonisation of rules of origin, which govern how locally produced content is assessed in order for products to be eligible for preferential import tariff rates.

"With common rules of origin (CRO) under RCEP, companies can more optimally source raw materials and intermediate inputs from member countries, while benefiting from lower tariff rates," said the review. The availability of CRO is also expected to facilitate cross-border integration of supply chains and to draw foreign direct investment flows into the region.

Source: The Straits Times, 28 April 2021

Extract 8: Singapore’s economy rebounded on decisive policy action, but challenges lie ahead

Singapore’s impressive recovery from the pandemic is outperforming similar economies, with total output exceeding pre-crisis levels last year, but the rebound has also been uneven.

Now, the war in Ukraine is confronting Singapore’s policymakers with new challenges and uncertainty as Russia’s invasion and resulting sanctions raise risks for slower growth and faster inflation.

Given Singapore’s strong economic recovery and rising inflation, the shift to tighter monetary policy in October 2021 was timely. Further monetary tightening will be warranted if higher inflation proves to be unexpectedly persistent, to preserve price stability and keep inflation expectations well anchored.

Meanwhile, targeted fiscal support can help cushion the impact on the most vulnerable. As part of the support for households to cushion the impact of higher cost of living, the government has provided a cost-of-living (COL) Special Payment to provide more support for lower- to middle-income groups. There are also Public Transport Vouchers and Community Development Council (CDC) vouchers which can be spent on a wide variety of items.

Source: adapted from https://www.imf.org/en/News, 24 August 2022

Questions

(a) **(i)** Define Consumer Price Index and compare the changes in the cost of living between Indonesia and Singapore from 2018 to 2021 as shown in Table 1. [3]

(ii) With reference to Table 1 and 2, suggest how the overall inflation rate in Singapore was possible in 2021, despite a fall in prices of clothing and footwear, and other miscellaneous goods and services. [2]

(iii) Explain how the data in Table 1 might be used to compare the standard of living between Indonesia and Singapore in 2021. [3]

(b) Explain how Indonesia's export ban on palm oil could cause a rise in inflation in Singapore. [4]

(c) With reference to Extract 6, discuss whether Indonesia should continue to specialise and trade in palm oil, or continue with its export ban. [8]

(d) Singapore is expanding its network of free trade agreements for greater diversification.

Discuss whether the above policy is the most effective option for the Singapore government to deal with the higher cost of living. [10]

[Total: 30]

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