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Higher 2

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ECONOMICS

9570/01

Paper 1

For examination from 2023

SPECIMEN PAPER

2 hour 30 minutes

No Additional Materials are required.

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 paper ask the invigilator for a continuation 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 **1** blank page.



Singapore Examinations and Assessment Board



Cambridge Assessment
International Education

Question 1: Changes in consumer prices pose risks for the global economy

Extract 1: Global inflation rates suggest new potential problems

As vaccination rates increase, an increasing number of countries are reopening their economies during the COVID-19 pandemic. Nevertheless, the outlook for the world economy remains highly uncertain. One of the many uncertainties that the world economy is facing is the prospect of future changes in consumer prices.

Before the pandemic hit the world economy, the global average trend pointed to a historically low level of consumer inflation. Several factors contributed to this trend. First, global supply capacity had been increasing through technological progress. Second, competition created by globalisation exerted downward pressure on the price of goods and services. Third, in some countries, the growth of wages has been insufficient to drive up consumer prices.

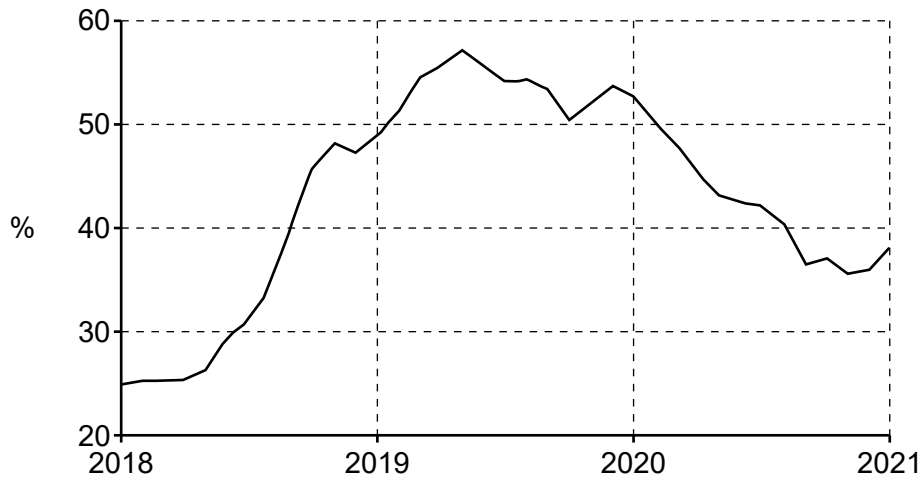
The pandemic accelerated the recent global trend of disinflation. Disinflation occurs when the rate of inflation in an economy falls. The average annual global inflation rate fell from 3% in February 2020 to 1.6% in April 2020. However, many middle-income and low-income countries including Argentina, Iran, Lebanon, South Sudan, Sudan, Syria, Venezuela, Yemen and Zimbabwe, have been experiencing rising inflation rates during the pandemic.

From the onset of the global pandemic, several countries have been experiencing higher inflation due to the rising price of imports that resulted from a decline in the value of their currency. Other countries were able to maintain their exchange rates against these downward pressures by using their foreign exchange reserves. As a result, they were able to maintain price stability. For example, Egypt used 20% of its foreign reserves (US\$9 billion) from March to May 2020 to maintain the exchange rate of the Egyptian pound. However, other countries could not stabilise their exchange rates against the US dollar. For example, the Turkish lira has depreciated against the US dollar by 9.3% since March. This has created pressures on domestic prices despite the weakening domestic demand in the current situation. As Lebanon is heavily reliant on imports for its essential goods, the steep devaluation of the Lebanese pound resulted in a rapid rise in consumer prices. On a year-on-year basis, the Consumer Price Index (CPI) for all items increased by 56.5% in May 2020.

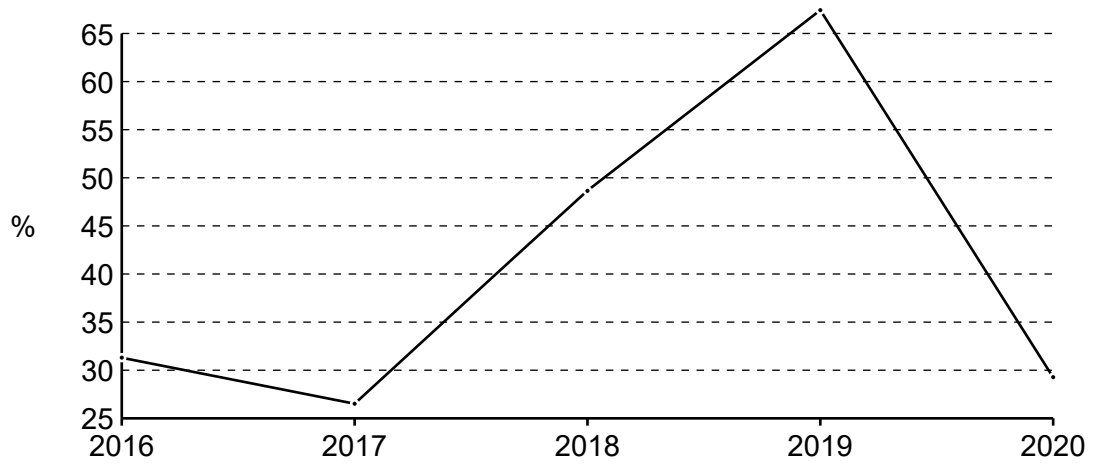
Some concerns are now being raised that high-income countries may face higher inflation, not price deflation, in future due to the high level of fiscal support given to the economy by most governments and the resulting higher level of national debt. However, the majority agree that the demand for goods and services will likely remain subdued for the coming years. Consumer confidence in many countries has been shattered by the pandemic and measures to control the spread of the virus, including travel restrictions. Facing an unprecedented high level of economic uncertainty, many consumers are likely to increase their savings to deal with this economic uncertainty. The household savings rate in the United States, for example, increased from 7.7% of GDP in December 2019 to 23.2% in May 2020.

As much as a high rate of inflation is a significant risk factor for an economy, deflation is also a serious risk. In both cases of high inflation and deflation, the economy can face serious difficulties.

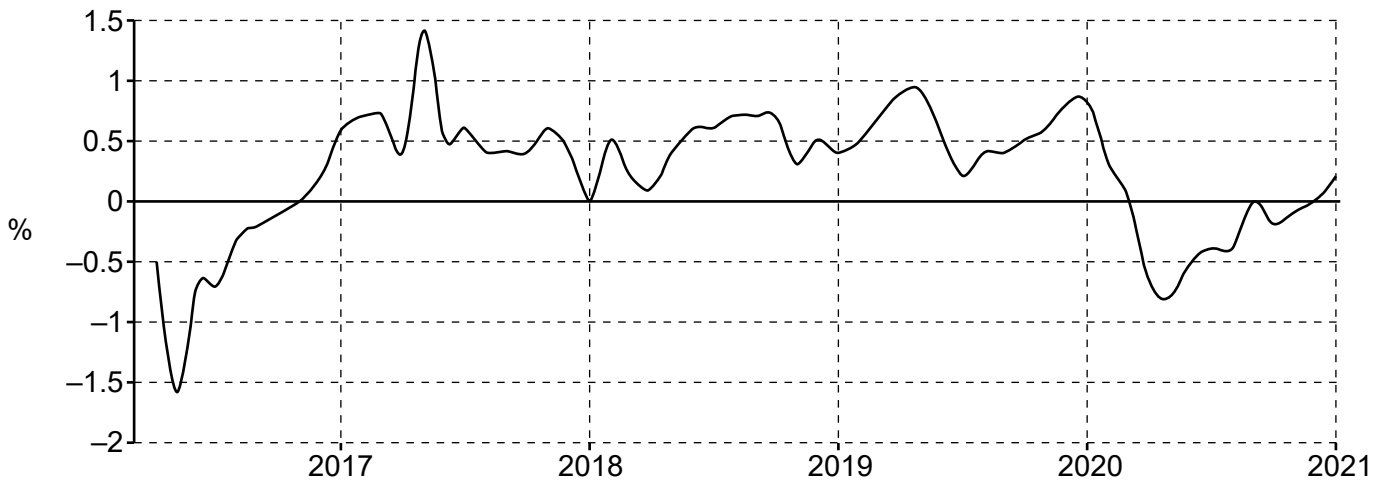
Source: UN Department of Economic and Social Affairs: World Economic Situation and Prospects. July 2020 Briefing, no. 139

Fig. 1.1: Argentina: Inflation rate, 2018–2021

Source: *Tradingeconomics.com*

Fig. 1.2: Argentina, Central Bank Lending Rate, 2016–2020

Source: *data.worldbank.org*

Fig. 1.3: Singapore Inflation Rate, 2016–2020

Source: *Tradingeconomics.com*

Extract 2: Argentina's perpetual crisis

The Argentinian economy was devastated in 2020. Official data records a 10% contraction in output. Inflation is high, at 38.5% over the last 12 months and increasing. The Argentinian peso continues to devalue and Central Bank reserves stand at less than US\$3 billion. Four out of every ten Argentinians live in poverty. The macroeconomic outlook is alarming. Argentina has experienced very high average annual inflation rates over decades and has been obliged to replace its currency on five occasions.

After a financial crisis in 2001, hyperinflation led to the barter system where goods instead of money were used in exchange for other goods. Since 1980, foreign debt payments have been suspended five times (no country in the world has defaulted the same number of times). Argentina is the main debtor of the International Monetary Fund (IMF) with US\$44 billion outstanding.

The other problem faced by the economy in 2020 was even more complex; how to support businesses and citizens affected by the COVID-19 lockdown through subsidies. The Central Bank did not have access to lending markets and resorted to simply printing money. The Central Bank issued 1.2 billion Argentinian pesos in 2020, with the risk factor of inflation increasing further. The current government has blamed the former government for the current crisis. It is true that during 2018, the peso lost 40% of its value and a huge loan received from the IMF was used to cover the fiscal deficit. In 2019, the peso devalued by a further 38% and foreign exchange controls were reintroduced to prevent a collapse.

Argentina never managed to generate the amount of US dollars (US\$) it required, which makes exchange controls a necessity (individuals are not allowed to buy more than US\$200 of currency a month). The drop in tourist arrivals has worsened the lack of US dollars in Argentina. The problem has become so serious that imports of expensive luxury cars and expensive liquors have been banned.

A further problem is that Argentina has been unable to find a solution to the historic contradiction between the requirements of its agriculture industry and the other industries. As a result, different policies are required to develop agriculture as compared to other industries. Argentina's agriculture sector is highly competitive on the international market and therefore supportive of free trade policies. This is the country's primary source of US dollars. Other industries, however, are inefficient and for many years have operated under protectionist policies. The development of Argentina's highly-efficient agricultural industry would generate greater earnings on international commodity markets.

*Source: Enric Gonzalez with Mar Centenera, Federico Rivas Molina and Ignacio Fariza.
English version by Rob Train. El Pais, 5 March 2021*

Extract 3: Weak inflation adds to risk of further drop in the Singapore dollar

The external value of the Singapore dollar is approaching a four-month low. Signs are that weak inflation and a gradual economic recovery will leave monetary policy unchanged at the Monetary Authority of Singapore's (MAS) April monetary policy review. Inflation data due this week is forecasted to show only a slight increase, which would give little cause for the MAS to prevent further currency declines by adjusting the exchange-rate band it uses to ensure price stability.

Unlike most other central banks, the MAS uses the currency as its main monetary tool, rather than interest rates. 'We expect the central bank to maintain the neutral policy,' said a currency strategist at Australia & New Zealand Banking Group Ltd. in Singapore. 'Inflation is emerging from deflation but will remain modest.'

Source: David Finnerty, Bloomberg, 21 March 2021

- (a) Compare the change in the general price levels in Argentina and Singapore from 2020 to 2021. [2]
- (b) Using a diagram, explain how Egypt's stabilisation of its exchange rate resulted in a loss of some of its foreign exchange reserves. [3]
- (c) Using AD-AS analysis, explain why the high level of fiscal support in high-income countries has led to concerns of higher inflation in the future. [4]
- (d) With reference to Extract 3, explain how Singapore's adjustment of its exchange rate can influence its rate of inflation. [3]
- (e) Both Singapore and Argentina monitor their rates of inflation. Discuss whether the 'serious economic difficulties' of high inflation are more harmful than deflation. [8]
- (f) Discuss the effectiveness of economic policies that might allow Argentina to address its economic problems. [10]

[Total: 30]

Question 2: Policies to reduce carbon emissions and implement plans for greener economies

Extract 4: Carbon Pricing

In 2019, a significant number of countries, regions and cities declared a 'climate emergency'. Temperatures in that year closed at 1.1 degrees Celsius above pre-industrial averages, making it the second-warmest year ever recorded. Sea levels have been rising at an alarming rate, and the devastating impacts of climate change are more visible than ever with wildfires ravaging Australia and Arctic regions including Siberia. Social unrest has been spreading across the world, driven primarily by an increasing cost of living. This is partly the outcome of the structural adjustments necessary to transition to a low-carbon economy.

Momentum is growing among countries to put a price on carbon pollution as a means of bringing down emissions and encouraging investment into cleaner options. There are several paths governments can take to put a price on carbon pollution, all with the same intended outcomes. They begin to capture what are known as the external costs of carbon emissions – costs that are not paid by the firm responsible for the pollution. The public pays for these costs in other ways, such as damage to crops and health care costs from heatwaves and droughts or to property from flooding and rise in sea level.

A price on carbon paid by producers who are responsible for carbon emissions helps shift the burden for the damage back to those who are responsible for it, and who can reduce it. A carbon price gives an economic signal and firms that pollute decide for themselves whether to discontinue their polluting activity, reduce emissions, or continue polluting and pay for it. In this way, the overall environmental goal is achieved in the most flexible and least-cost way to society. A carbon price also stimulates cleaner technology and market innovation, fuelling new, low-carbon sources of economic growth.

There are also more indirect ways of pricing carbon, such as through fuel taxes, which pass the cost on to the consumer, the removal of fossil fuel subsidies, and regulations that recognise the full social cost of carbon emissions. Some 40 countries and more than 20 cities, states and provinces already use carbon pricing mechanisms, with more planning to implement them in the future.

As countries try to limit the average global temperature increase to 2 degrees Celsius, average carbon prices could increase more than sevenfold to US\$120 per tonne by 2030. In the transition to a low-carbon economy, carbon pricing could lead to significant costs for companies, amounting to as much as US\$1.3 trillion by 2030.

Carbon pricing is an increasingly popular mechanism that uses market forces to address climate change, as the burden of reducing emissions shifts to those that are most responsible for emitting them.

Source: World Bank 2020

Table 1: Carbon Price in Selected Countries, 2019

Country	US\$ per tonne of carbon dioxide emitted	Country	US\$ per tonne of carbon dioxide emitted
Sweden	129.7	Japan	4.9
Norway	60.3	Singapore	3.7
United Kingdom	23.5	China	2.7
United States	10.9	Australia	0.0

Source: Green City Times

Extract 5: Norway promotes electric car sales despite national reliance on fossil fuels

Norway became the first country to sell more electric cars than cars with petrol, hybrid and diesel engines put together last year. Electric vehicles (EVs) accounted for two-thirds of sales in the final months of 2020. Norway has one of the world's most ambitious green targets, planning to phase out sales of all new fossil-fuel vehicles by 2025. This is quite a contradiction in a country that has become one of the richest in the world on the back of its oil and gas revenues.

A range of incentives have been applied to EVs to encourage their purchase:

- No purchase tax
- No import tax
- No VAT (the equivalent of Goods and Services Tax, which is usually 25%)
- No annual road tax
- Free parking in some municipal car parks
- Reduced or free tolls on some roads

The ambitious strategy to reduce emissions goes back to the late 1990s. Since then, the number of EVs sold has increased sharply, from 3% of total sales in 2012, to 54% in 2020.

The big challenge is the installation of electric charging points around the country. There are now 3200 rapid charge points but there are still problems, particularly on the busiest travel days, with EV drivers facing long queues. Norway's air, however, is cleaner and transport emissions are lower because of these incentives.

The overall signal is that it should always be economically beneficial to choose low or zero-emission vehicles over those with high emissions. This is achieved with 'the polluter pays principle' in the tax system; high taxes for high-emission vehicles and lower taxes for low and zero-emission vehicles. Increasing taxes on polluting vehicles can pay for incentives for zero-emission vehicles without any overall loss in government revenues.

Source: Elisabeth Ulven and Tone Sutterud, The Guardian, 9 January 2021

Extract 6: Singapore Green Plan 2030

In its latest budget, the Singapore government unveiled its Singapore Green Plan 2030. Two of the main features of this plan are outlined below.

Carbon tax

Singapore is one of only a few countries in Asia with a carbon tax. But at only S\$5 (US\$3.7) per tonne of carbon dioxide (CO₂), Singapore's carbon tax is at the low end of the scale globally. This carbon tax was introduced in the 2018 budget and covers the years from 2019 to 2023. After 2023 the carbon tax is due to be increased to between S\$10 and S\$15 by 2030. This is to be reviewed, however, and the government will announce the decision in the 2022 Budget. The planned tax rise may or may not be increased from 2023. The danger is that carbon taxes, if imposed in Singapore but not in neighbouring economies, could potentially give competitors a cost advantage.

Transport

The first significant commitment of this Green Plan is to expand Singapore's EV charging infrastructure, deploying 60 000 electric charging points at locations such as public car parks and airports by 2030. This is a substantial increase from the previous 28 000 target. The EV charging goal is boosted by S\$30 million of government funds aimed at speeding up the initiative. The EV push in Singapore started later than some economies, and one could argue that it consequently needs a slightly stronger push than has been given here.

Countries like Norway show how successful tax incentive schemes can be to help speed the adoption of EV uptake. There could also be preferential treatment for EVs with respect to the Electronic Road Pricing (ERP) traffic system during the transition too, and dedicated lanes to ease congestion for EVs.

The last item under the transport heading was for a S\$60 billion expansion and renewal of the rail network. The Ministry of Transport has for some time noted its goal to expand the rail network from 230 km today to about 360 km in 2030. This is a very positive aspiration, which will help keep Singapore a 'car-lite' nation.

With the 'Singapore Green Plan 2030', Singapore has joined the ranks of countries making solid commitments in the direction of sustainable development.

*Source: Robert Carnell and Prakash Sakpal, Think Economic and Financial Analysis.
Ing Bank N.V. 23 February 2021*

Extract 7: Singapore Parliament debates the Green Plan 2030

The Singapore Government has made it clear that it is serious about decarbonising its economy but will proceed only at a measured pace to avoid any major business disruption or jobs displacement. During the parliamentary debate on 4 March 2021 on the Singapore Green Plan 2030, it highlighted that the country's unique constraints, number one of which is the restricted land space, mean the choices faced by consumers and producers are much more difficult than those that most other nations face.

While expressing the desire to turn the Republic into a 'bright green spark' by embracing sustainability, the Singapore Government also stressed that the necessary changes in the economic structure of Singapore must be paced to ensure industries are not displaced, competitiveness is maintained and the impact on jobs and livelihoods is minimised.

While the topic of climate change and sustainability in general puts the spotlight on the most carbon and energy intensive industries like petrochemicals and transport, the required changes to fuel consumption patterns, carbon emissions and energy efficiency will affect everyone. No sector or industry, big or small, will be immune.

Responding to climate change is an economic necessity for Singapore. There is increasing evidence that climate change can reduce the productivity of agriculture, aquaculture and fisheries across the Asia-Pacific region. As a country that imports more than 90% of its food, Singapore is highly vulnerable to climate-related impacts on regional food production and supply, especially if climate change prompts producer countries to cut exports and ensure their own food security.

While the risk of disruption and job losses is real, there is also growing evidence that moving to a low-carbon economy can produce jobs. The World Bank estimated that a transition to low-carbon economies could create 65 million new jobs worldwide by 2030. For instance, last year, South Korea announced one of the largest green stimulus packages seen to date. The US\$135 billion (S\$180 billion) Korean New Deal commits to US\$62 billion of green funding before 2025. Overall, the New Deal – with a significant push to decarbonisation and investments in advanced technology and skills – is likely to create 319 000 jobs by 2022 and 659 000 by 2025.

Source: Ovais Subhani. The Straits Times, 6 March 2021

- (a) Using a demand and supply diagram, show how the removal of fossil fuel subsidies will affect the use of fossil fuels. [2]
- (b) Using Extract 7 and the concept of opportunity cost, explain the choice faced by producers in Singapore if the carbon tax is increased. [2]
- (c) Using the concept of cross-elasticity of demand, explain the relationship between the price of cars and the demand for rail transport. [3]
- (d) Using the theory of comparative advantage, explain how Singapore's living standards might be affected by a greater reliance on domestic agricultural production rather than imported foodstuffs. [5]
- (e) Discuss how external costs contribute to the social costs of production and consider whether a carbon tax will always lead to a socially optimal allocation of resources. [8]
- (f) Discuss the economic policies that Singapore could adopt to maintain its competitiveness and minimise the impact on employment as it moves to decarbonise the economy. [10]

[Total: 30]

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