Cambridge Assessment International Education

Cambridge International AS & A Level

ECONOMICS **9708/21**

Paper 2 AS Level Data Response and Essays **October/November 2024**

2 hours

8815727313

You must answer on the enclosed answer booklet.

You will need: Answer booklet (enclosed)

INSTRUCTIONS

- Answer **three** questions in total:
  - Section A: answer Question 1.
  - Section B: answer **one** question.
  - Section C: answer **one** question.
- Follow the instructions on the front cover of the answer booklet. If you need additional answer paper, ask the invigilator for a continuation booklet.
- You may use a calculator.
- You may answer with reference to any economy you have studied where relevant to the question.

INFORMATION

- The total mark for this paper is 60.
- The number of marks for each question or part question is shown in brackets [ ].

This document has **4** pages.

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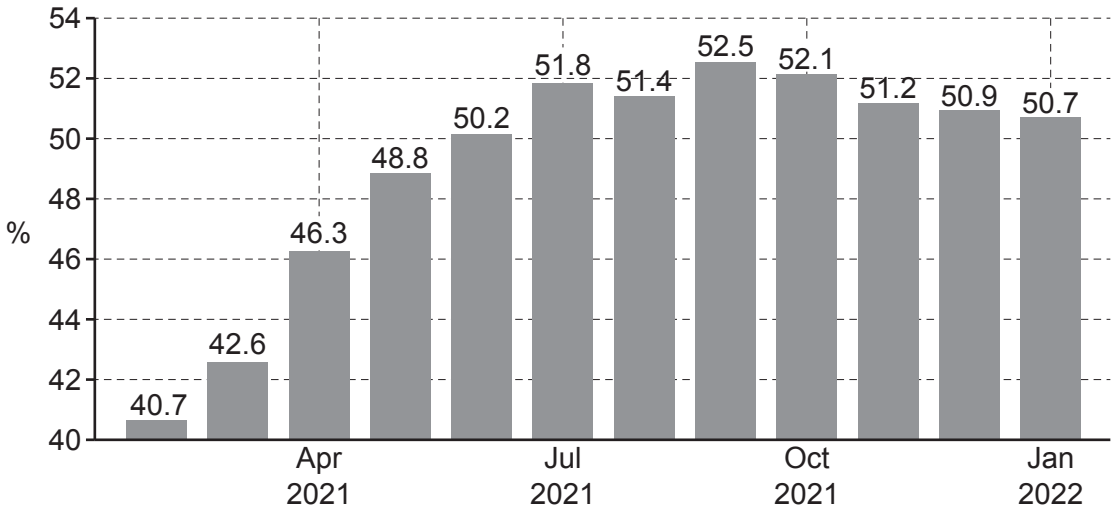
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Section A

Answer all parts of Question 1.

1 **Inflation in Argentina**

Argentina's annual inflation rate increased from just over 40% in February 2021 to just over 50% in January 2022. Argentina's annual inflation rate, as measured by changes in the consumer price index (CPI) over 12 months is shown in Fig. 1.1.



Source: tradingeconomics.com, 19 October 2022

Fig. 1.1 Annual rate of inflation in Argentina, February 2021 to January 2022

Argentina has the fifth highest inflation rate in the world after Venezuela, Sudan, Suriname and Zimbabwe. It is forecast to continue to rise during 2022 to reach an annual rate of between 55% and 58% by the end of the year. One of the main reasons for this high rate of inflation is excessive growth of the money supply. The need to lower the rate of inflation in Argentina is considered essential by many economists.

The government of Argentina has tried to control the increase in the rate of inflation by imposing maximum prices on 1432 products. This has the advantage of limiting price increases, but such a policy can also have a number of disadvantages. One such disadvantage is the creation of excess demand in markets.

Another policy has been to increase interest rates. In January 2022, Argentina's central bank raised its main interest rate from 38% to 40%, but many economists argued that this increase was insufficient to control inflation. This is because the real interest rate will be negative. A more appropriate monetary policy would be to lift the interest rate above the inflation rate so that the real interest rate will be positive.

Source: Adapted from: Buenos Aires Times, 15 February 2022

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(a) Using the data in Fig. 1.1, describe the trend shown in the annual inflation rate in Argentina over the period February 2021 to January 2022. [2]

(b) Explain what is meant by 'the real interest rate will be negative' in Argentina in January 2022. [2]

(c) Consider the extent to which having 'the fifth highest inflation rate in the world' is likely to be a problem for Argentina's economy. [4]

(d) Assess whether the potential benefits of introducing maximum prices on 1432 products in Argentina are likely to outweigh the potential disadvantages. [6]

(e) Assess the potential benefits and limitations of using monetary policy to control inflation in a country such as Argentina. [6]

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Section B

Answer **one** question.

EITHER

2 **(a)** Explain the determinants of supply for an agricultural product, such as rice, **and** consider which of these determinants is likely to be of the greatest significance at the present time. [8]

(b) Assess whether the supply of agricultural products is likely to be more price elastic or less price elastic than the supply of manufactured products. [12]

OR

3 **(a)** With the help of a diagram, explain the significance of a position within a market economy's production possibility curve (PPC) **and** consider whether such a position is likely to be permanent. [8]

(b) Assess whether consumers always benefit when the government of a mixed economy reduces the role of the market mechanism in allocating resources. [12]

Section C

Answer **one** question.

EITHER

4 **(a)** Explain **two** possible causes of economic growth **and** consider whether the consequences of economic growth for an economy will always be positive. [8]

(b) Assess whether a government should always aim for an expansionary fiscal policy rather than a contractionary fiscal policy. [12]

OR

5 **(a)** Explain the potential advantages of free trade **and** consider whether such advantages are always greater than the potential disadvantages of free trade. [8]

(b) Assess whether an economy will always benefit from having a surplus on the current account of its balance of payments. [12]

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Surname	StemUp Model Solution
Answer booklet	Write the question number in the left-hand margin at the start of each answer.

Question number

Answers for paper 9708/21 (all questions answered)

1(a) The overall trend is upward: the annual inflation rate rose from 40.7% in February 2021 to 50.7% in January 2022, an increase of 10 percentage points. However, within this, inflation peaked at 52.5% in September 2021 and then followed a slight downward trend to 50.7% in January 2022.

1(b) The real interest rate is the nominal interest rate minus the rate of inflation. It is negative when the interest rate is lower than the inflation rate. In January 2022 the interest rate was 40% and inflation was 50.7%, so the real interest rate = 40% – 50.7% = –10.7%, meaning savers lose purchasing power.

1(c) High inflation is a problem because it reduces the purchasing power of money, so people on fixed incomes and savers lose out, especially as the real interest rate is negative. It also makes Argentina's exports less price competitive, and creates uncertainty, so firms delay investment. Menu costs and shoe leather costs also rise.

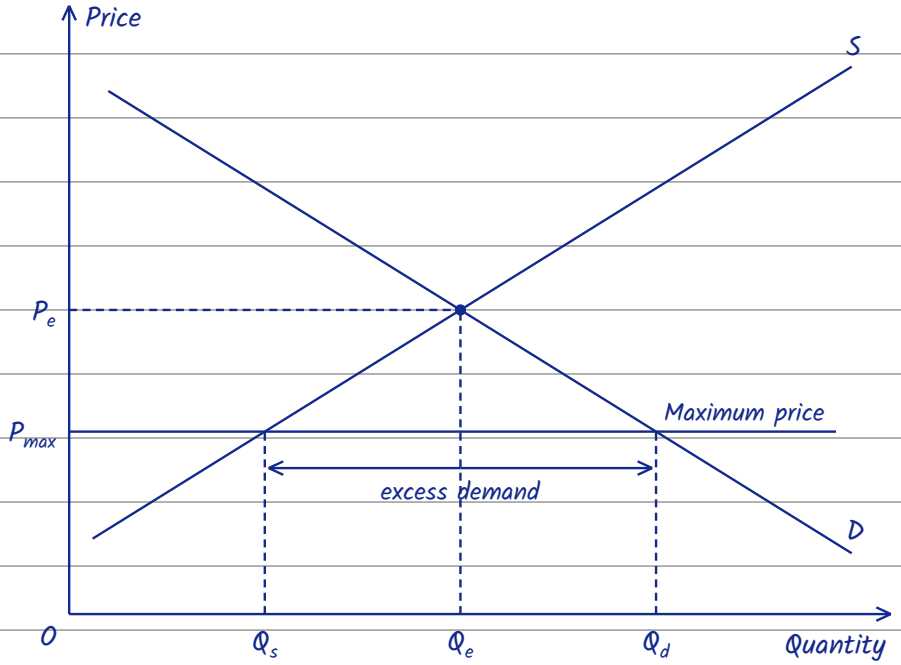
However, there can be some benefits: firms' profits may rise if prices rise faster than costs, and the real value of debts falls, which helps borrowers, including the government.

Overall, at over 50% and forecast to reach 55% to 58%, inflation is a serious problem, although its effect on competitiveness depends on inflation in trading partners, and it is lower than in Venezuela or Zimbabwe.

1(d) A maximum price is a legal limit set by the government below the equilibrium

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price, which sellers cannot charge above. In the diagram the maximum price is set at Pmax, below Pe.



The benefit is that the prices of the 1432 products, such as essential foods, are kept lower than they would otherwise be, so poorer households can afford basic necessities and the rate of inflation measured by the CPI is held down.

However, at Pmax quantity demanded rises to Qd and quantity supplied falls to Qs, creating excess demand (a shortage) of Qs to Qd. Goods must be rationed by queues, waiting lists or first come first served, and an informal (black) market may develop where goods are sold above Pmax. Producers may cut output or quality.

On balance, the disadvantages are likely to outweigh the benefits because maximum prices treat the symptom, not the cause: inflation is mainly due to excessive growth of the money supply, so shortages will grow over time. They may be justified only as a short-term measure for essential goods.

1(e) Monetary policy uses changes in interest rates and the money supply to influence aggregate demand. A rise in interest rates makes borrowing more expensive and

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saving more attractive, so consumption and investment fall, reducing aggregate demand and demand-pull inflationary pressure. As the main cause of Argentina's inflation is excessive growth of the money supply, tighter monetary policy tackles the root cause.

However, there are limitations. It is difficult to know the right interest rate: the rise from 38% to 40% still left a real rate of about −10.7%, so it was insufficient. Raising rates above 50% could cause a deep recession and unemployment and raise the cost of government debt. If demand is interest inelastic, spending falls only a little, and there are time lags of up to two years. If inflation is partly cost-push, monetary policy is less effective.

Overall, monetary policy is likely to be essential to control Argentina's inflation, as it targets the money supply, but only if interest rates are raised to give a positive real rate and the central bank is credible. It works best combined with fiscal discipline, so the benefits outweigh the limitations in the long run.

2(a) Supply is the quantity of a product that producers are willing and able to sell at each price over a given period. The determinants of the supply of an agricultural product such as rice include:

Price of rice: a higher price makes rice more profitable, causing an extension of supply. The prices of other agricultural products also matter: if the price of wheat rises, farmers may switch land from rice to wheat, so the supply of rice decreases.

Physical factors: climate, rainfall and soil quality determine yields. A drought or flood destroys crops, shifting supply to the left.

Costs of production and technology: higher prices of fertiliser, seeds, fuel or labour shift supply to the left, while new high-yield varieties and machinery shift it to the right.

Infrastructural and institutional factors: irrigation, storage facilities and transport increase supply. If rice is easy to store, supply is also more elastic. Land tenure,

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land reforms, subsidies and taxes also affect farmers' incentives to produce.

At the present time, the most significant determinant is likely to be physical factors, as climate change causes more frequent droughts, floods and heatwaves that farmers cannot control, causing large shifts in supply. Input costs, such as fertiliser and energy prices, are also important, but farmers can partly adapt to these. The relative significance depends on the country and whether it has irrigation.

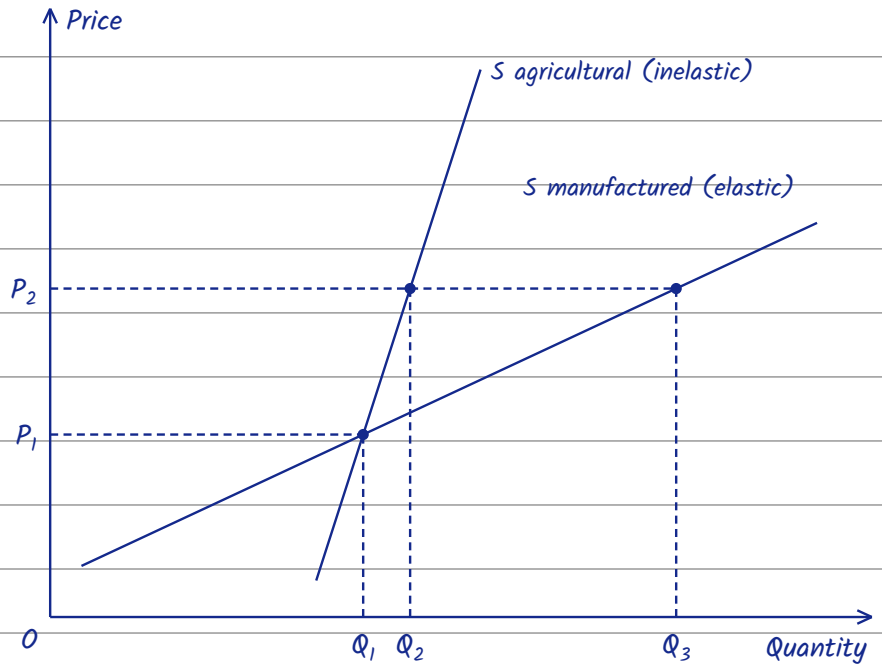
2(b)

Price elasticity of supply (PES) measures the responsiveness of quantity supplied to a change in price: PES = % change in quantity supplied ÷ % change in price. Supply is price elastic if PES > 1 and price inelastic if PES < 1.

Agricultural supply is likely to be less price elastic. The production process is long: rice takes several months to grow and tree crops such as coffee take years, so farmers cannot increase output quickly when price rises. Output depends on weather, and land is fully used and is a fixed factor in the short run. Many agricultural products are perishable, so stocks cannot be held. Factors are immobile: land suited to one crop cannot easily switch, and many farmers are small with little capital.

Manufactured products are likely to be more price elastic. Production is quick, and firms often have spare capacity, so they can increase output by adding shifts or overtime. Many manufactured goods can be stored as stocks, and labour and capital are more mobile between products. In the diagram, when price rises from P1 to P2, quantity of agricultural products only rises from Q1 to Q2, while quantity of manufactured products rises from Q1 to Q3.

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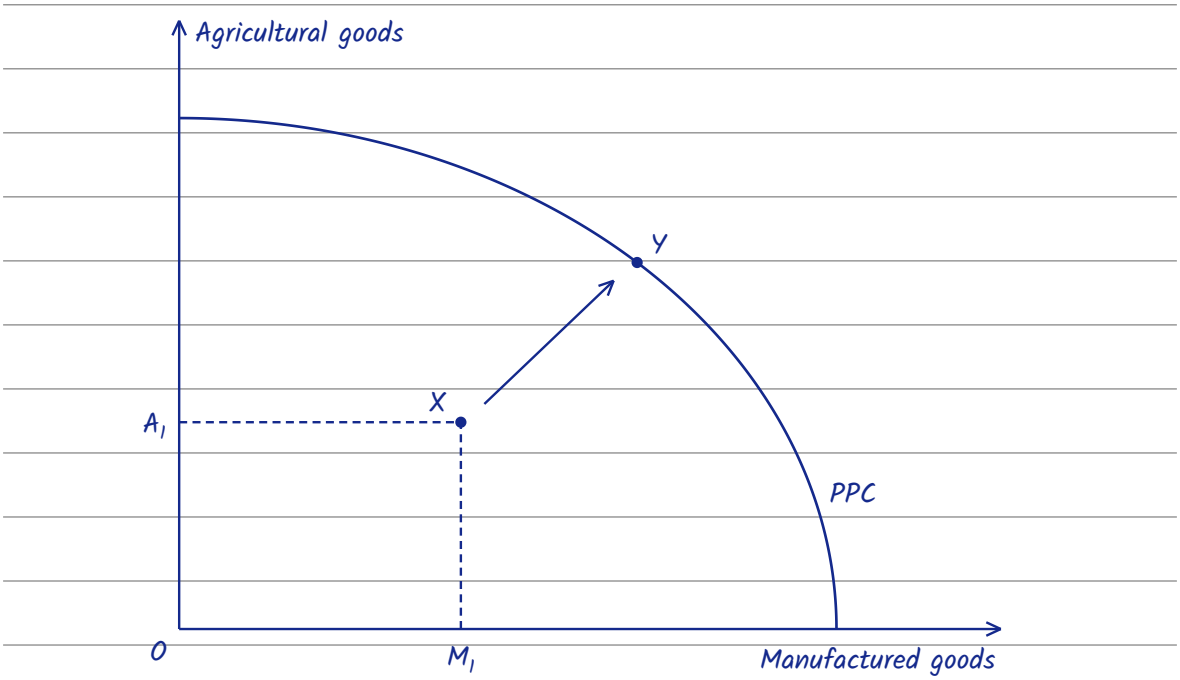


However, this is not always true. Over the long run farmers can bring more land into use and adopt new technology, so agricultural PES increases, and storable crops such as rice and wheat, held in buffer stocks or warehouses, have more elastic supply. Some manufactured products are inelastic in supply when firms are at full capacity or production is complex, as with semiconductors during the 2021 chip shortage, where new factories take years to build. The number of producers also matters: industries with barriers to entry respond slowly.

In conclusion, the supply of agricultural products is generally less price elastic than that of manufactured products, especially in the short run, because of long growing periods, dependence on weather and perishability. The gap narrows in the long run and depends on whether the product can be stored and whether manufacturers have spare capacity.

3(a) A production possibility curve (PPC) shows the maximum combinations of two goods an economy can produce when all its resources are fully and efficiently employed, given its technology.

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A position inside the PPC, such as point X, means the economy is producing only A1 agricultural and M1 manufactured goods. This is significant because some resources are unemployed or underused, for example unemployed workers or idle factories, or resources are used inefficiently. The economy could produce more of both goods, moving to Y on the PPC, without any opportunity cost, so output and living standards are lower than they could be.

In a market economy a position inside the PPC is often caused by a recession, when low aggregate demand causes cyclical unemployment, or by structural unemployment when industries decline.

Such a position is unlikely to be permanent. In a market economy, falling wages and prices and the recovery of the business cycle tend to restore full employment, and governments can use expansionary fiscal and monetary policy to move the economy back to the PPC. However, if unemployment is structural, or workers lose skills during long unemployment, the position may last many years. Overall, it is usually temporary, but its length depends on its cause and on government policy.

3(b) In a mixed economy resources are allocated partly by the market mechanism,

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where prices determine what is produced, and partly by the government. Reducing the role of the market means more government intervention, such as state provision, taxes, subsidies and regulations.

Consumers may benefit because the market fails. Public goods such as street lighting and defence are non-excludable and non-rival, so the free rider problem means the market does not provide them; the government can provide them through taxation. Merit goods such as education and healthcare are underconsumed because of information failure, so state provision raises consumption to the socially optimum level. Demerit goods such as tobacco are overconsumed, so taxes and regulation protect consumers. Governments can also regulate monopolies to stop them charging high prices, and redistribute income so poor consumers can afford essential goods, making the allocation of resources more equitable.

However, consumers do not always benefit, because of government failure. State-run industries lack the profit motive and competition, so they may be inefficient, offer lower quality goods and less choice. Governments lack full information about consumers' preferences and may allocate resources to the wrong products. Maximum prices create shortages and queues, and taxes to finance spending reduce consumers' disposable income. Decisions may be made for political reasons, and there is an opportunity cost of government spending.

Whether consumers benefit therefore depends on the type of product. Intervention is most likely to benefit consumers where market failure is large, such as public goods, healthcare and natural monopolies. In competitive markets for ordinary private goods, such as clothes or phones, the market mechanism allocates resources more efficiently and consumers gain from choice and lower prices. It also depends on how competent and well-informed the government is.

In conclusion, consumers do not always benefit. They benefit when the government corrects a genuine market failure efficiently, but where the cost of government failure is greater than the market failure it corrects, consumers are

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worse off.

4(a) Economic growth is an increase in the real output of an economy over time, measured by the percentage increase in real GDP. Potential growth is an increase in productive capacity, an outward shift of the PPC.

One cause is investment in capital stock and new technology. More and better machinery, such as robots and computers, raises labour productivity, so more output can be produced with the same workers and the productive capacity of the economy increases.

A second cause is an improvement in the quality of labour through education and training. Workers with more skills are more productive and can use new technology, so output per worker rises. An increase in the number of workers, for example through immigration, also increases growth.

The consequences are often positive. Higher real incomes raise living standards, firms employ more workers so unemployment falls, and tax revenue rises, allowing more spending on health and education.

However, growth is not always positive. Rapid, demand-led growth may cause inflation and a current account deficit as imports rise. Industrial growth may deplete non-renewable resources and cause pollution, and people may work longer hours, losing leisure, so the quality of life can fall. The benefits may also go mainly to the rich, increasing inequality.

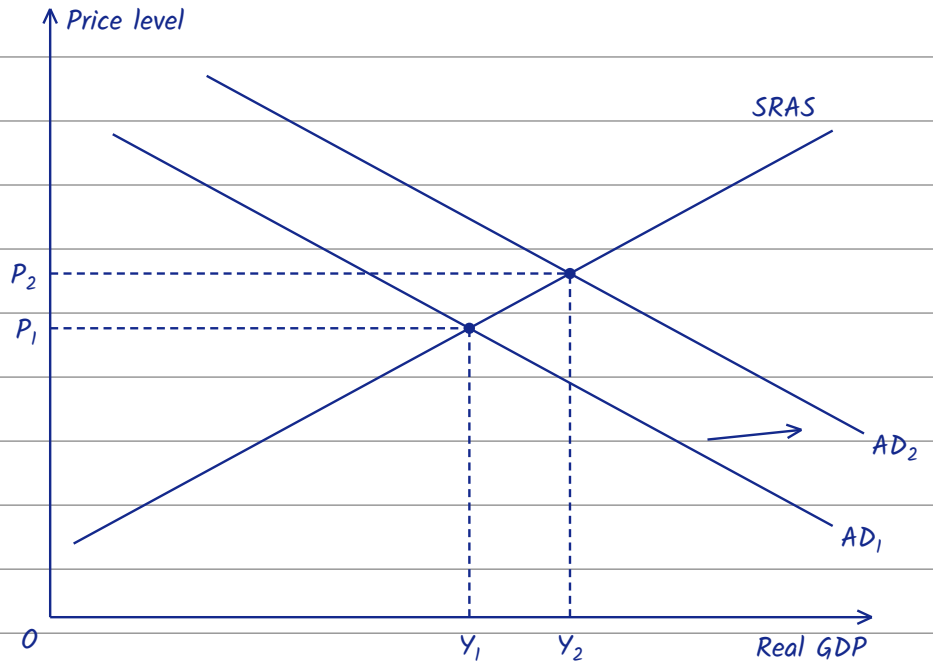
In conclusion, the consequences of growth are not always positive. They are most likely to be positive when growth is sustainable and supply-led and its benefits are widely shared.

4(b) Fiscal policy is the use of government spending and taxation to influence aggregate demand (AD). Expansionary fiscal policy means increasing government spending or reducing taxes, while contractionary fiscal policy means reducing spending or

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raising taxes.

Expansionary fiscal policy is appropriate in a recession. Lower income tax raises disposable income, so consumption rises, and more government spending on infrastructure is a direct injection. AD shifts right from AD1 to AD2, and with the multiplier effect real GDP rises from Y1 to Y2, creating jobs and reducing cyclical unemployment.



However, it has costs. It increases the budget deficit and national debt, so interest payments rise. If the economy is close to full capacity, the rise in AD mainly causes demand-pull inflation, as the price level rises from P1 to P2. Higher incomes also raise imports, worsening the current account, and government borrowing may crowd out private investment.

Contractionary fiscal policy is appropriate when inflation is high because of excess demand, when the current account deficit is large, or when government debt is unsustainably high. Cutting spending or raising taxes reduces AD, so inflation and spending on imports fall, and the budget deficit is reduced. However, it reduces output and raises unemployment, and cuts to education or infrastructure may harm long-run growth.

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Therefore the right policy depends on the state of the economy. In a recession with a large negative output gap, as in the Covid-19 pandemic in 2020, expansionary policy was needed. When inflation is high, as in many countries in 2022, contractionary policy is more suitable. The choice also depends on the level of debt, the size of the multiplier and whether monetary policy is already being used.

In conclusion, a government should not always aim for expansionary fiscal policy. Fiscal policy should be counter-cyclical: expansionary in a downturn and contractionary when the economy is overheating.

5(a) Free trade is international trade without government restrictions such as tariffs, quotas or subsidies.

Its main advantage is that countries can specialise in producing goods in which they have a comparative advantage, that is, a lower opportunity cost. This increases world output, so countries can trade and consume beyond their own PPC, improving living standards. Consumers gain from lower prices and a wider range of products to choose from. Firms gain larger markets, so they benefit from economies of scale, and foreign competition forces domestic firms to become more efficient and innovative. Countries can also obtain resources they lack, such as oil or minerals.

However, free trade has disadvantages. Specialisation means that uncompetitive industries decline, leading to structural unemployment in those sectors and regions. Overreliance on a few commodities is risky, as their prices fluctuate, causing unstable export earnings. Infant industries cannot develop against established foreign firms, and depending on imports of vital goods, such as food, energy or medicines, is a security risk if supplies are interrupted.

The advantages are not always greater. For the world as a whole, and in the long run, the gains in output and efficiency usually exceed the losses. However, for a

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developing country dependent on one commodity, or for workers in declining industries, the disadvantages may be greater. In conclusion, the advantages usually outweigh the disadvantages, but only if governments help those who lose, for example through retraining.

5(b) The current account of the balance of payments records trade in goods and services, primary income and secondary income. A surplus means the value of credits (inflows) is greater than the value of debits (outflows), usually because exports exceed imports.

A surplus can bring benefits. Net exports are an injection into the circular flow, so aggregate demand rises, increasing output and creating jobs in export industries, giving export-led growth. Spending on domestic rather than imported goods also creates jobs. The country earns foreign currency, which can be used to build reserves or invest abroad, for example through a sovereign wealth fund such as Norway's, providing future income. A surplus may also show the economy is internationally competitive.

However, an economy does not always benefit. A surplus may be a sign of weak domestic demand: if households save a lot and spend little, imports are low, but so is consumption and living standards, as in China, where household consumption is a relatively small share of GDP. A surplus caused by a recession, when incomes and imports fall, is not a sign of strength. The country also gives up imported goods it could have consumed. A large surplus increases demand for the currency, so it may appreciate, reducing competitiveness, and if the economy is near full capacity the extra AD causes inflation. Surpluses also mean deficits for trading partners, reducing their output and employment, which can lead to trade tensions and retaliation.

Whether a surplus is beneficial depends on its size, its cause and how long it lasts. A small surplus caused by competitive exporters is beneficial. A large, persistent

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surplus caused by weak domestic spending or a recession is less so. A surplus caused by temporarily high commodity prices may not last. It also depends on how the foreign currency earned is used.

In conclusion, an economy will not always benefit from a current account surplus. A modest surplus based on competitiveness is usually beneficial, but large, persistent surpluses due to weak domestic demand reduce living standards and harm other economies.

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Paper 2 AS Level Data Response and Essays **October/November 2024**

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Section A

Answer all parts of Question 1.

1 Can economic growth in Chile reduce income and wealth inequality?

Chile is the world's biggest copper producer with 28% of global copper production and the second biggest producer of lithium with 22% of world production. Overall, mining contributes 11% of the country's Gross Domestic Product (GDP) and more than 50% of the value of the country's total exports. World copper and lithium prices have increased quickly since 2020. This has led to strong growth in GDP which is expected to increase by 3.5% in 2022, exceeding earlier estimates of 2.5% as world demand is expected to grow following the Covid-19 pandemic. Fig 1.1 shows the world price of copper in United States dollars (US$) per pound (lb) weight. A pound is 454 grammes.



Source: *tradingeconomics, April 2022*

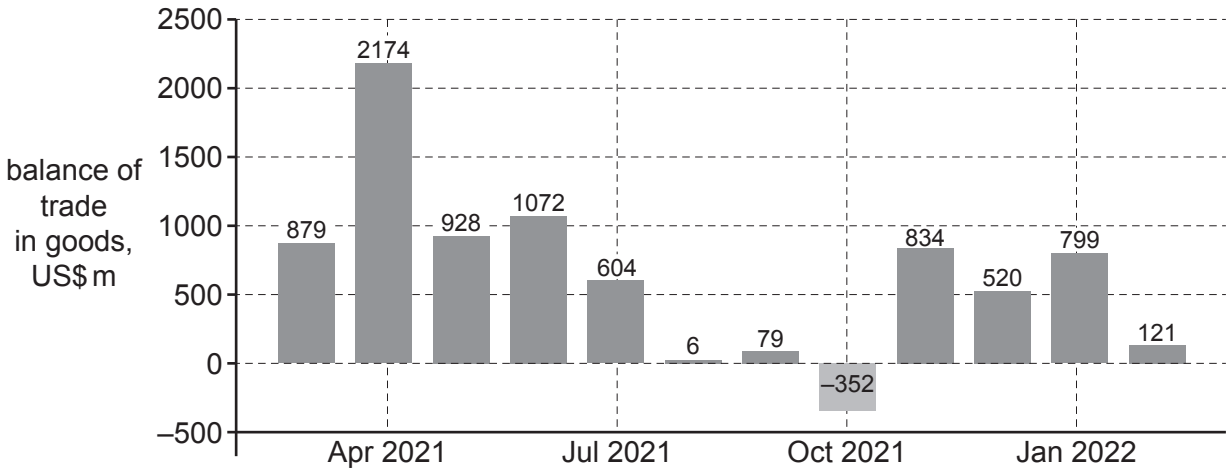
Fig 1.1: World copper price, 2017 to 2022

Economic growth in Chile has also been helped by the world's highest rate of vaccination against Covid-19 and a rapid economic recovery from the pandemic which has led to a large increase in consumer spending.

However, the trade in goods surplus has fallen substantially in February 2022. This is mainly because of a 9.2% fall in the revenue from copper exports due to the higher prices and a fall in world demand during the Covid-19 pandemic. There has also been a 38.3% increase in the value of imported consumer goods. As a consequence, the current account deficit has widened substantially to US$7.5bn in the first quarter of 2022 from a deficit of US$1.1bn in the first quarter of 2021 despite a surplus of US$50m in the secondary income account.

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Source: *tradingeconomics, April 2022*

Fig 1.2: Chile's balance of trade in goods, March 2021 to February 2022

One of the main benefits of Chile's increased prosperity in recent years has been a decline in the number of people living at or below the minimum income level of US$5.50 per day. However, Chile remains the most unequal country in the list of largely developed countries according to the Organisation for Economic Co-operation and Development (OECD) with an income gap 65% wider than the OECD average. In addition, although the Gini coefficient has fallen from 52.1 to 44.4, this is still higher than lower-income countries such as Haiti and El Salvador.

To try and reduce this inequality in income and wealth, the Chilean government has increased its expenditure on education from 3% of GDP in 1997 to 5.4% in 2018. Further recognition of the importance of education as a merit good is shown by the government increasing its education spending by 3.4% each year since 2018. Chile has also recently made all college tuition free of charge. It is hoped that this will reduce the gap in the quality of education received by the wealthiest and poorest students and open up opportunities for everyone.

Sources: Adapted from reuters.com 2 February 2022,
trade.gov/country-commercial-guides/chile-mining, 25 January 2022,
bcentral.cl/inicio and statista.com, April 2022

(a) Identify **two** possible reasons why the current account on the balance of payments in Chile is in deficit in the first quarter of 2022 despite the surplus on the balance of trade in goods. [2]

(b) Consider the likely success of **one** policy that Chile could use to reduce the imports of consumer goods. [4]

(c) Explain what is meant by the fall in Chile's Gini coefficient from 52.1 to 44.4. [2]

(d) Assess the extent to which 'the government increasing its education spending' may improve the incomes of poorer households in Chile. [6]

(e) Assess the likely impact of the rise in the world copper price from 2020 on the future economic growth of Chile. [6]

Section B

Answer **one** question.

EITHER

2 **(a)** With the help of a diagram(s), briefly explain how the cause of a movement along the demand curve differs from the cause of a shift in the demand curve **and** consider the impact on the demand for one good of price changes in other goods. [8]

(b) Assess whether knowledge of income elasticity of demand or price elasticity of demand for its product is more useful to a business aiming to increase the total expenditure on its product during a period of economic growth. [12]

OR

3 **(a)** With the help of a production possibility curve (PPC) diagram(s), explain the difference between constant and increasing opportunity costs **and** consider how choices in deciding which type of goods to produce in the short run may influence future economic growth. [8]

(b) Assess whether a market economy is always the best economic system to effectively answer the three basic questions of resource allocation. [12]

Section C

Answer **one** question.

EITHER

4 **(a)** Explain **two** methods of measuring unemployment **and** consider the extent of the possible difficulties in obtaining an accurate measurement of unemployment. [8]

(b) Assess whether supply-side policy is likely to be equally successful in reducing both structural and cyclical unemployment. [12]

OR

5 **(a)** With the help of examples, explain the difference between the marginal rate of taxation and the average rate of taxation **and** consider whether a government should decide to increase the rate of indirect tax to raise additional revenue. [8]

(b) Assess whether the achievement of a balanced budget should always be a main government macroeconomic objective. [12]

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Question number

Answers for paper 9708/22 (all questions answered)

1(a) The secondary income account is in surplus (US$50m), so the deficit must come from the other parts of the current account. Firstly, the primary income account is likely to be in deficit, for example profits and dividends paid to foreign owners of Chile's mines. Secondly, the trade in services balance is likely to be in deficit, for example payments for foreign transport, insurance and tourism.

1(b) Chile could impose a tariff on imported consumer goods. This raises the price of imports, so consumers switch to cheaper domestic substitutes and the quantity of imports demanded falls.

However, its success is limited. If the price elasticity of demand for imports is inelastic, because there are few domestic substitutes, imports fall only a little.

Trading partners may retaliate against Chile's exports, which are over 50% mining, and tariffs may break free trade agreements. So a tariff is likely to be only partly successful.

1(c) The Gini coefficient measures the inequality of income distribution, from 0 (perfect equality) to 100 (perfect inequality). The fall from 52.1 to 44.4 means income in Chile has become more equally distributed, as the Lorenz curve has moved closer to the line of perfect equality, although inequality remains high.

1(d) Education is a merit good with positive externalities, which is underconsumed in a free market. Higher government spending, from 3% of GDP in 1997 to 5.4% in 2018 and rising by 3.4% a year since, increases the availability and quality of

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schools. Free college tuition removes a cost barrier, so more students from poorer households can afford higher education. They gain skills and become more productive, so they can get higher-paid, skilled jobs, raising their incomes and reducing inequality.

However, the impact may be limited. Poorer households face a higher opportunity cost of education, as their children need to start earning early, so they may still leave education. Information failure means some undervalue education. Better-off students may gain most from free tuition, and a quality gap between rich and poor schools may remain. Graduates also need skilled jobs to be available, and the spending may be unsustainable if tax revenue falls.

Overall, increased education spending is likely to improve the incomes of poorer households significantly only in the long run, as it takes many years for students to enter work. In the short run it has little effect, so it works best combined with policies such as transfer payments.

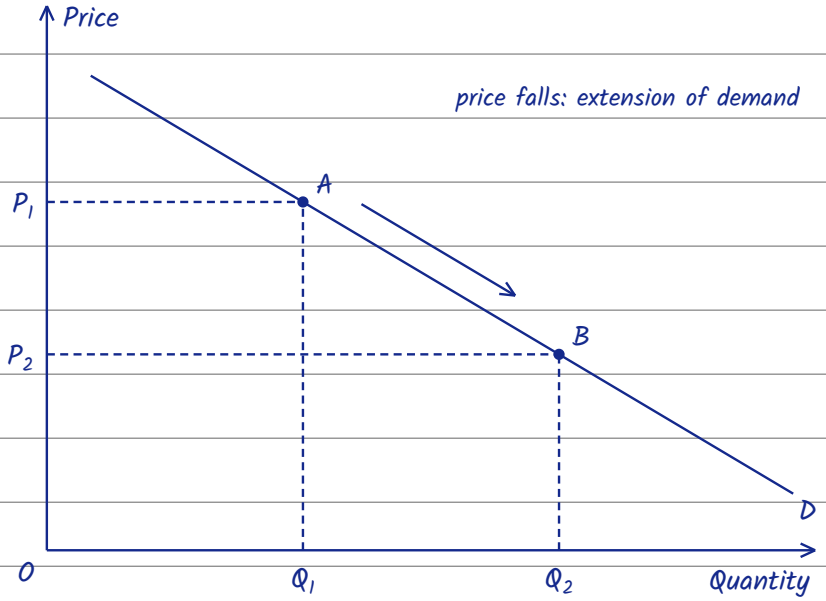
1(e) Chile is the world's biggest copper producer, and mining is 11% of GDP and over 50% of exports. Fig 1.1 shows the copper price rose from about US$2.1 per lb in 2020 to about US$4.8 in 2022. If demand is price inelastic, export revenue rises, which is an injection into the circular flow, increasing aggregate demand and, through the multiplier, real GDP. Higher profits and tax revenue can finance investment in mines, infrastructure and education, increasing productive capacity and future growth.

However, copper export revenue fell by 9.2% in February 2022 because of higher prices, which suggests demand is price elastic, with substitutes such as aluminium, so revenue and GDP could fall if prices keep rising. High prices also attract competition from other copper producers. Copper is finite, so extensive mining may deplete reserves, and dependence on one commodity makes growth volatile if prices fall.

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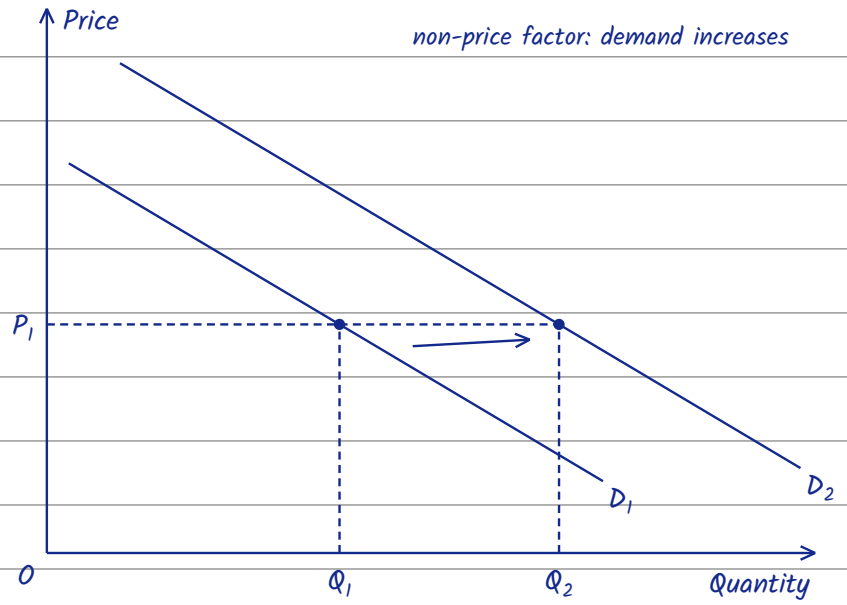
Overall, the fall in copper revenue is likely to be temporary, linked to weak demand during the pandemic, and world demand should grow as the world economy recovers and as copper is needed for electric vehicles and renewable energy. So the rise in price is likely to boost Chile's growth, provided revenue is used to diversify the economy.

2(a) A movement along the demand curve is caused only by a change in the price of the good itself. In the first diagram a fall in price from P1 to P2 causes an extension of demand from Q1 to Q2, a movement from A to B along the same demand curve; a rise in price causes a contraction.



A shift of the demand curve is caused by a change in a non-price factor, such as the price of other goods. In the second diagram demand increases from D1 to D2, so more (Q2) is demanded at the same price P1.

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The price of other goods affects demand depending on the relationship, measured by cross elasticity of demand (XED). Substitutes have a positive XED: if the price of Coca-Cola rises, consumers switch to Pepsi, so demand for Pepsi shifts right. Complements are in joint demand and have a negative XED: if the price of printers rises, fewer printers are bought, so demand for ink cartridges shifts left. Unrelated goods have an XED of zero.

The size of the impact depends on the size of the XED. For close substitutes or strong complements, such as two brands of petrol, the impact is large, but for weak substitutes it is small. In conclusion, price changes in other goods can have a significant impact on demand, but only for goods that are closely related.

2(b)

Total expenditure on a product equals price × quantity demanded. Price elasticity of demand (PED) is the responsiveness of quantity demanded to a change in price: % change in quantity demanded ÷ % change in price. Income elasticity of demand (YED) is the responsiveness of quantity demanded to a change in income: % change in quantity demanded ÷ % change in income.

During economic growth, real incomes rise, so YED is very useful. If the product is a normal good with YED greater than 1, a luxury such as foreign holidays, demand

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rises more than proportionately, so total expenditure rises strongly. The business can plan to expand capacity, hold more stock and increase marketing. If YED is negative, an inferior good, demand will fall as incomes rise, so the business knows it should move into higher-quality products. YED therefore helps the firm forecast demand and choose what to produce.

However, YED has limits. The firm cannot control incomes, so YED does not tell it what action to take on price. It is based on past data, and growth may not raise all incomes equally.

PED is useful because price is something the firm controls. If demand is price inelastic (between 0 and −1), raising the price increases total expenditure, because quantity falls by a smaller percentage. If demand is price elastic, cutting the price increases total expenditure. During growth, consumers with higher incomes may become less sensitive to price, so the firm may be able to raise prices.

However, PED estimates also use historical data and assume ceteris paribus, but in a period of growth incomes, rivals' prices and tastes change, so the PED value may be inaccurate. Rising incomes shift the demand curve, so PED along the old curve may no longer apply.

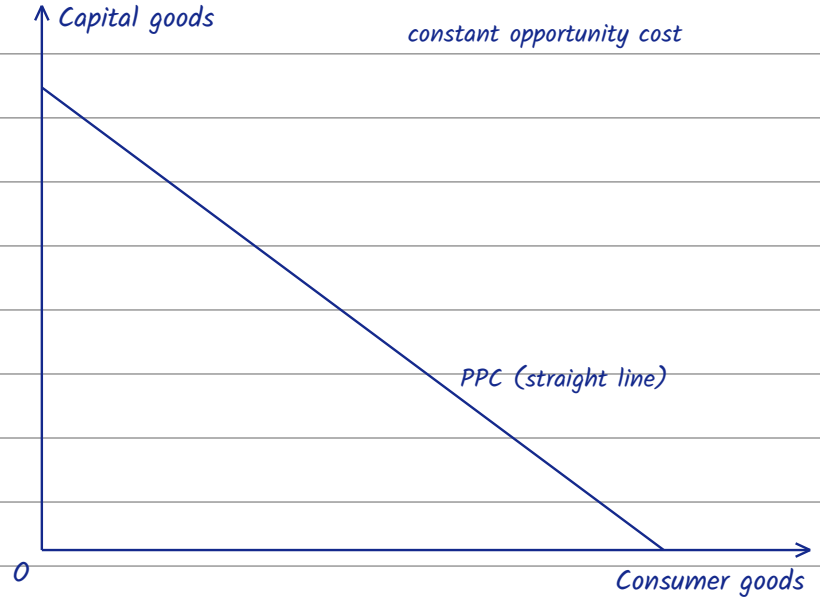
Which is more useful depends on the product. For luxury goods with high YED, demand rises anyway, so YED is more useful for planning capacity. For necessities with low YED, the firm must rely on pricing, so PED is more useful. It also depends on how fast incomes are rising.

In conclusion, during economic growth YED is likely to be more useful, because the change in income is the main cause of changing demand and it tells the firm whether expenditure on its product will rise. However, the firm gets the most benefit by using both together: YED to forecast demand and PED to set the price.

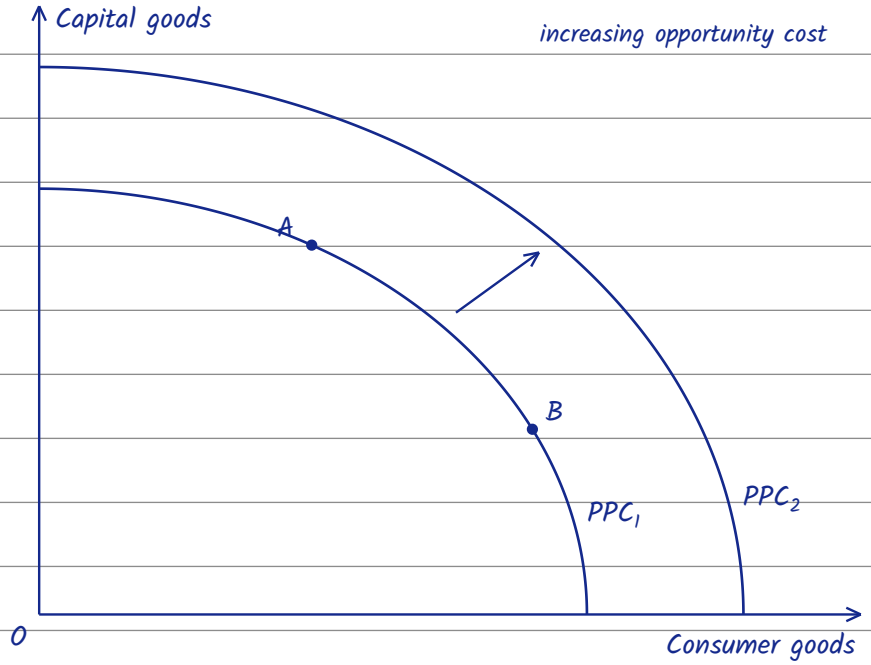
3(a) Opportunity cost is the next best alternative forgone. With constant opportunity cost, the PPC is a straight line: resources are equally suited to producing both

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goods, so each extra unit of consumer goods always costs the same amount of capital goods; the rate of trade-off does not change.



With increasing opportunity cost, the PPC is concave (bowed outward). Resources are specialised, so as more consumer goods are produced, resources less suited to them must be used, and increasing amounts of capital goods must be given up for each extra unit; the rate of trade-off increases.



Choices in the short run influence future growth. If an economy chooses point A,

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producing more capital goods such as machinery and infrastructure, it sacrifices consumer goods now, but its capital stock and productivity increase, so the PPC shifts out from PPC1 to PPC2 and long-run growth is higher and more sustainable. If it chooses point B, with more consumer goods, living standards are higher now, but less capital is accumulated, so future growth is slower.

However, this depends on the capital goods being used efficiently and on the economy being at full employment: if it is inside the PPC it can produce more of both. Very poor countries may not be able to sacrifice consumption. Overall, choosing more capital goods is likely to raise future growth, but a balance is needed.

3(b)

Every economy must answer three basic questions: what to produce, how to produce and for whom to produce. In a market economy these are answered by the price mechanism, through the decisions of individual consumers and firms, with little or no government involvement.

The market economy has strong advantages. What to produce is decided by consumer sovereignty: when demand rises, prices and profits rise, signalling firms to produce more, so resources move to the goods consumers want. How to produce is decided by the profit motive, so firms use the lowest-cost methods, which encourages efficiency and innovation. Competition leads to lower prices, better quality and wide choice, and decisions are made quickly without costly bureaucracy.

However, the market economy has weaknesses. Public goods, such as defence and street lighting, are not provided because of the free rider problem. Merit goods, such as education and healthcare, are underprovided and demerit goods, such as tobacco, are overconsumed because of information failure. Negative externalities such as pollution are ignored, and monopolies may restrict output and raise prices.

For whom to produce is decided by ability to pay, so there can be large inequality, and those with low incomes may not afford necessities. Markets are also unstable,

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with booms and recessions.

In a planned economy the government answers the three questions. It can provide public and merit goods, ensure a more equal distribution and full employment. However, planners lack information about consumers' preferences, so there are shortages and surpluses, little choice, and the lack of a profit motive reduces efficiency and innovation, as seen in the former Soviet Union.

A mixed economy combines the two: the market allocates most private goods, while the government provides public and merit goods, corrects externalities and redistributes income. However, it can suffer from government failure, such as inefficiency and high taxes.

In conclusion, a market economy is not always the best system. It is very effective at answering what and how to produce for most private goods, but fails for public goods, merit goods and equity. A mixed economy, where government intervention corrects these failures, is usually the most effective, although the best balance depends on how efficient the government is.

4(a) Unemployment is when people of working age are willing and able to work but cannot find a job. The unemployment rate = number unemployed ÷ labour force × 100.

The first method is the claimant count, which measures the number of people who are claiming unemployment-related benefits from the government.

The second method is the Labour Force Survey (ILO measure), a sample survey of households which counts people without a job who are available to start work within two weeks and have actively looked for work in the past four weeks.

Both have difficulties. The claimant count omits people actively looking for work who are not entitled to benefits, for example young people or those whose partner earns, so it understates unemployment. It may include people who claim but are not really looking for a job, or who work in the informal economy, and changes in

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benefit rules change the figure without any change in unemployment.

The Labour Force Survey is based on a sample, so there may be sampling errors, and people may not answer honestly. It is also expensive and slower to collect.

Neither measure includes discouraged workers who have given up looking or underemployed part-time workers who want full-time jobs.

Overall, the difficulties are significant, especially in developing economies with large informal sectors and no benefit system. However, the Labour Force Survey is generally more accurate and internationally comparable, so the difficulties are smaller when it is used.

4(b)

Supply-side policies aim to increase the productive capacity of the economy, shifting LRAS to the right, by improving the quantity and quality of factors of production. Structural unemployment occurs when there is a mismatch between the skills or location of workers and the available jobs, caused by changes in the structure of the economy, such as the decline of coal mining. Cyclical (demand-deficient) unemployment is caused by a lack of aggregate demand (AD) in a downturn of the business cycle.

Supply-side policy is likely to be successful in reducing structural unemployment. Government spending on education, training and retraining gives workers the skills needed in growing industries, reducing occupational immobility. Relocation grants, housing policies and better job information reduce geographical immobility. These policies tackle the cause of structural unemployment directly, as workers become able to fill vacancies.

However, they take a long time to work, are costly and have an opportunity cost, and older workers may be reluctant to retrain or move. Their success depends on the quality of the training.

Supply-side policy is likely to be much less successful in reducing cyclical unemployment. The cause is a lack of AD, so firms do not need more workers.

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Training workers or increasing productive capacity does not create jobs if there are no vacancies; shifting LRAS right while AD stays low may even widen the negative output gap. However, some supply-side policies, such as government spending on infrastructure or cuts in corporation tax, are also injections that increase AD, so they can reduce cyclical unemployment in part.

Demand-side policies are more suitable for cyclical unemployment. Expansionary fiscal policy, such as higher government spending or lower taxes, and expansionary monetary policy, such as lower interest rates, increase AD, so firms produce more and employ more workers. However, these may cause inflation and do not solve skills mismatches.

In conclusion, supply-side policy is not likely to be equally successful. It is the most effective long-run policy for structural unemployment but is largely ineffective for cyclical unemployment, which requires demand-side policies. A combination of both is most likely to reduce overall unemployment.

5(a) The marginal rate of tax (MRT) is the proportion of each extra unit of income that is taken in tax. For example, if a person earns an extra £100 and pays £40 more tax, the MRT is 40%.

The average rate of tax (ART) is the proportion of total income paid in tax: total tax ÷ total income × 100. For example, a person earning £10 000 who pays £3000 in tax has an ART of 30%. In a progressive tax system the MRT is higher than the ART, so the ART rises as income rises.

An indirect tax is a tax on spending, such as VAT. Raising its rate can raise revenue quickly, as it is easy to change and harder to avoid than direct taxes because it is collected from firms when goods are sold. It has a broad base and can reduce consumption of demerit goods.

However, indirect taxes are regressive, as poorer households spend a higher proportion of their income, so they take a larger share of poorer people's income.

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The increase in price may cause cost-push inflation. Revenue depends on price elasticity of demand: if demand is elastic, quantity falls a lot, so revenue may rise little, and higher taxes may encourage smuggling.

In conclusion, a government should increase indirect tax only on goods with price inelastic demand, and combine it with measures to protect poorer households, so the rise in revenue outweighs the costs.

5(b)

A balanced budget is when government spending equals government revenue (mainly taxation). A budget deficit is when spending exceeds revenue, and a budget surplus is when revenue exceeds spending. The main macroeconomic objectives are usually economic growth, low unemployment, low and stable inflation and a stable balance of payments.

There are arguments for a balanced budget being a main objective. It stops government debt rising, so less tax revenue is spent on interest payments, which has an opportunity cost. It provides stability and confidence, encouraging domestic and inward investment, and keeps borrowing costs low. It avoids crowding out of private investment and avoids future generations facing higher taxes to repay debt.

However, a balanced budget is inflexible. In a recession, tax revenue falls and spending on benefits rises automatically. To keep the budget balanced, the government would have to cut spending or raise taxes, reducing AD further and deepening the recession, so unemployment rises. This makes fiscal policy pro-cyclical.

A budget deficit can be beneficial. In a recession, higher spending or lower taxes increase AD, and through the multiplier increase real GDP and reduce unemployment. Borrowing to invest in infrastructure and education increases productive capacity and future tax revenue. However, persistent deficits are unsustainable and may cause inflation if the economy is near full capacity.

A budget surplus can be beneficial when the economy is overheating, as it reduces

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AD and demand-pull inflation, and it can reduce debt. However, a surplus has an opportunity cost, as less is spent on public services.

Therefore whether a balanced budget should be a main objective depends on the stage of the economic cycle and the level of debt. A country with very high debt, or one facing high borrowing costs, may need to make reducing the deficit a priority. A country in recession with low debt should prioritise growth and employment.

In conclusion, a balanced budget should not always be a main objective in every year. It is more sensible to aim for a budget that balances over the economic cycle, with deficits in recessions and surpluses in booms, so that fiscal policy supports the other objectives of growth, low unemployment and stable prices.

Cambridge Assessment International Education

Cambridge International AS & A Level

ECONOMICS **9708/23**

Paper 2 AS Level Data Response and Essays **October/November 2024**

2 hours

2074816235

You must answer on the enclosed answer booklet.

You will need: Answer booklet (enclosed)

INSTRUCTIONS

- Answer **three** questions in total:
  - Section A: answer Question 1.
  - Section B: answer **one** question.
  - Section C: answer **one** question.
- Follow the instructions on the front cover of the answer booklet. If you need additional answer paper, ask the invigilator for a continuation booklet.
- You may use a calculator.
- You may answer with reference to any economy you have studied where relevant to the question.

INFORMATION

- The total mark for this paper is 60.
- The number of marks for each question or part question is shown in brackets [ ].

This document has **4** pages.

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Section A

Answer all parts of Question 1.

1 Global coffee bean prices reach a new high

Coffee is big business, especially in the United States (US). The global market was worth nearly US$110 bn in 2020, with production around 10 m tonnes of coffee beans. 95% of this production came from thousands of small-scale producers in South America, Central America, Asia and Africa. If present trends continue, production is forecast to triple by 2050. The Arabica coffee bean price was at a 10-year high in January 2022, having more than doubled in 2021. Fig. 1.1 shows the world price of coffee in United States dollars (US$) per pound (lb) weight. A pound is 454 grammes.



Source: tradingeconomics.com, 18 February 2022

Fig. 1.1: Arabica coffee bean price, 2002 to 2022

So how can this huge price increase be explained? The main cause was a series of weather events affecting Brazil, the world's largest producer of high quality Arabica coffee beans. Its market share is 35% of total global supply. There was severe drought in early 2021 that reduced the number of 'cherries', which contain the beans on coffee bushes. The crop yield was further damaged by frosts that followed the drought. As a result of these weather events, Brazil produced its smallest volume of quality coffee beans for ten years.

In addition, the production of cheaper low-quality Robusta coffee beans in Vietnam was badly affected by storms which stripped the bushes of their 'cherries'. Overall, there was a very large decrease in the global supply of all coffee beans.

Supply issues affecting major producing countries like Brazil and Vietnam mean that the volume of coffee beans produced regularly fluctuates between 'high' years and 'low' years. Producers try to reduce their risks through buffer stock schemes in order to maintain a regular income stream. This type of scheme is particularly important for the many small-scale subsistence producers who have no other source of income.

The dramatic weather events of 2021 have been exceptional, although a few large-scale producers in Brazil who survived the immediate impact of drought and frost should gain from the huge rise in the price of coffee beans. But what about the thousands of other producers elsewhere who lack power in the market? The most likely outcome is that they will once again become victims of the unpredictable global market for coffee beans.

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(a) Use a demand and supply diagram to show why there was a 'huge' increase in the price of Arabica coffee beans in 2021. [2]

(b) Is the price elasticity of supply of coffee beans likely to be elastic or inelastic in any one year? Justify your answer from the information provided. [2]

(c) Consider whether a buffer stock scheme is likely to be successful in reducing the price fluctuations shown in Fig. 1.1. [4]

(d) Assess the extent to which coffee bean producers will gain from the huge increase in coffee bean prices in 2021. [6]

(e) Assess the likely impact of the fluctuations in coffee bean prices on the economies of major producers such as Brazil and Vietnam. [6]

Section B

Answer **one** question.

EITHER

2 **(a)** With the aid of examples, explain the characteristics of public goods and free goods **and** consider whether free-of-charge vaccinations offered by a government should be classified as a free good. [8]

(b) Assess whether the expected benefits of providing healthcare services free of charge at the point of use exceed the likely costs. [12]

OR

3 **(a)** Explain **two** economic reasons for inequality in the distribution of income and wealth **and** consider why inequality in the distribution of wealth cannot easily be measured. [8]

(b) Assess which policies are likely to be most effective in redistributing income. [12]

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Section C

Answer **one** question.

EITHER

4 **(a)** In 2021, year-on-year inflation in many economies increased to a level not experienced for fifty years.

With the help of a diagram, explain what is meant by cost-push inflation **and** consider whether this type of inflation has affected your own economy since 2021. [8]

(b) Assess whether the potential benefits of an increasing rate of inflation outweigh the potential costs for an economy. [12]

OR

5 **(a)** Explain **two** methods of protection in international trade **and** consider which of these is likely to have the bigger impact on employment and output in the economy which imposes them. [8]

(b) Assess whether protectionism is always the best way of reducing a deficit on the current account of the balance of payments. [12]

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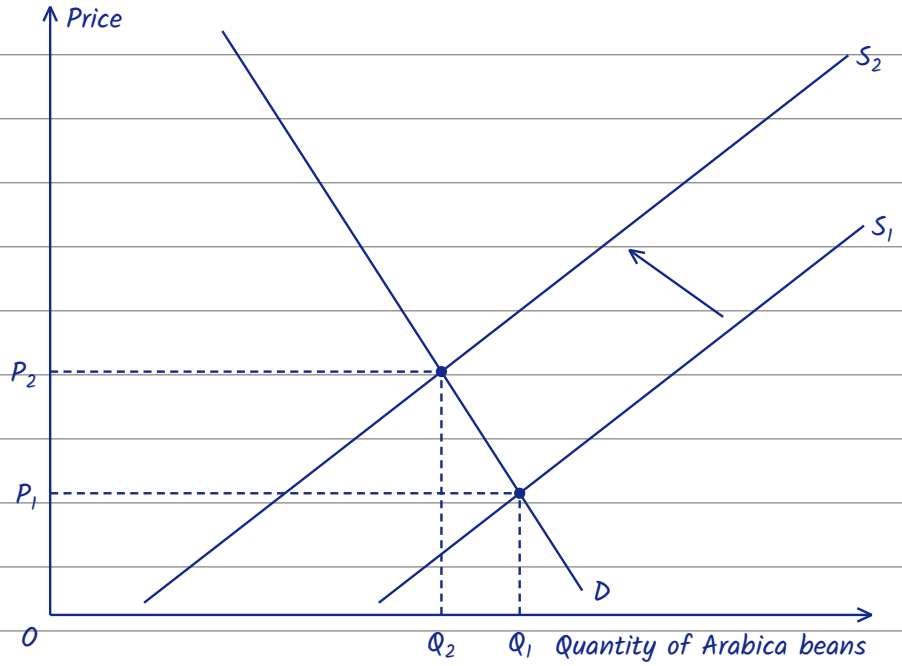
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Surname	StemUp Model Solution
Answer booklet	Write the question number in the left-hand margin at the start of each answer.

Question number

Answers for paper 9708/23 (all questions answered)

1(a) Drought, frosts and storms caused a very large decrease in supply, so the supply curve shifted left from S1 to S2. As demand is price inelastic, the equilibrium price rose sharply from P1 to P2 and quantity fell from Q1 to Q2.



1(b) Supply is likely to be price inelastic in any one year. Coffee bushes take years to grow, and the size of the crop is determined by weather such as the drought and frosts in Brazil and storms in Vietnam, so producers cannot increase the quantity supplied quickly when the price rises.

1(c) A buffer stock scheme sets a target price range for coffee beans. In a 'high' year, when a good harvest would make the price fall below the floor, the scheme buys up surplus beans and stores them. In a 'low' year, when poor yields would push

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the price above the ceiling, it sells beans from its stock, so the price fluctuations are reduced.

However, coffee beans may lose quality in storage, so they may not be sold at the intended price, and storage and buying are expensive to finance. In an exceptional year like 2021 stocks may run out. So the scheme is only likely to be partly successful.

1(d) Coffee producers may gain. Demand for coffee is likely to be price inelastic, as it is habit-forming with few close substitutes, so the higher price increases total revenue. Large producers in Brazil who survived the drought and frost earn far more per lb, which they can invest in better storage and methods. Producers in countries not affected by the weather also gain higher revenue and sales at the expense of rivals.

However, many producers will not gain. Producers whose crops were destroyed by drought, frost or storms have little or nothing to sell, so their revenue falls and they may make losses or close. The thousands of small-scale producers lack market power, so much of the higher price may go to traders. If the price rise is large, some consumers may switch to substitutes such as tea, depending on the XED, reducing demand.

Overall, the gains are likely to be uneven. The few large-scale producers with surviving crops gain a lot, but most small-scale producers, especially those affected by the weather, are unlikely to gain, so the extent of the gain is limited.

1(e) When coffee prices rise, export revenue and producers' incomes increase in Brazil and Vietnam. This raises aggregate demand, economic growth and employment, and improves the current account. Governments receive more tax revenue, which can be spent on education and infrastructure, helping to diversify the economy away from coffee and increasing long-run productive capacity.

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However, fluctuating prices create uncertainty. Producers may save the higher revenue to cover years when prices are low rather than invest, so the effect on growth is small. When prices fall, incomes and export earnings fall, causing business closures, unemployment and poverty for subsistence producers, and government revenue becomes unstable, making planning difficult. The exchange rate may also be volatile.

The impact depends on how important coffee is to each economy: Brazil is large and diversified, so the effect on the whole economy is smaller than on coffee-growing regions. Climate change may make weather shocks more frequent, so fluctuations may increase. Overall, the fluctuations are likely to be more harmful than beneficial, because the uncertainty and losses in low years outweigh the gains in high years.

2(a) A public good has two characteristics. It is non-excludable: once it is provided, people who do not pay cannot be stopped from using it, which creates the free rider problem. It is non-rival: one person's consumption does not reduce the amount available for others. Examples are street lighting and national defence.

Because of the free rider problem, the market fails to provide public goods, so they are provided by the government and financed through taxation.

A free good is not scarce, so no factors of production are needed to produce it and it has a zero opportunity cost and no price. Examples are fresh air, sunlight and sea water.

Free-of-charge vaccinations are free at the point of use, so the consumer pays no price and gives up no other goods to be vaccinated, so from the consumer's viewpoint there is no opportunity cost.

However, vaccinations are not a free good. Producing vaccines and paying doctors and nurses uses scarce resources, paid for by taxpayers. The money spent has an opportunity cost to the government, as it could have been spent on another

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priority such as education. Vaccines are also rival and excludable, so they are not a public good either: they are a merit good provided free by the government.

In conclusion, free-of-charge vaccinations should not be classified as a free good, because they use scarce resources and have an opportunity cost to society, even though the price to the consumer is zero.

2(b)

Healthcare free of charge at the point of use means patients pay no price when they receive treatment; it is funded by the government through taxation, as with the NHS in the UK. Healthcare is a merit good.

The expected benefits are large. Healthcare is underconsumed in a free market because of information failure: people underestimate the benefits of treatment and check-ups. Free provision increases consumption towards the socially optimum level. It improves equity, as access depends on need rather than ability to pay, so poorer households, the elderly and children get treatment, and people do not face high medical bills or need insurance. There are positive externalities: treating infectious diseases protects others, and a healthier workforce has lower absenteeism and higher productivity, increasing output. Early, preventive treatment is also cheaper than treating serious illness later, and resources go to patients' needs rather than profit.

However, there are likely costs. With a zero price, quantity demanded is very high, so demand exceeds supply. Healthcare must be rationed by waiting lists, and patients may wait a long time for treatment. Some consumers overuse the service, and missed appointments waste resources because there is no charge. The cost to the government is very high and rising with ageing populations, so it must raise taxes, which may reduce incentives to work, or cut spending on other services such as roads and education, an opportunity cost. Without the profit motive, state providers may be less efficient than private firms.

Whether the benefits exceed the costs depends on the type of care and how well

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it is managed. For essential and preventive care, such as vaccinations and emergency treatment, the external benefits and equity gains are large. For minor treatments, a small charge may reduce waste. It also depends on the country's tax revenue: a low-income country may not be able to fund it.

In conclusion, the benefits of free healthcare at the point of use are likely to exceed the costs for essential services, because of positive externalities and fairness. However, the best approach may be a mixed system, with free essential care, some charges for non-essential services and private provision to reduce waiting lists.

3(a) Inequality of income and wealth means income (a flow, such as wages, rent, interest and profit) and wealth (a stock of assets, such as property, shares and savings) are unevenly distributed among the population.

One reason is differences in education and skills. People with poor education and training have fewer marketable skills, so they can only get low-paid jobs, while highly skilled workers such as doctors earn high salaries because their labour is scarce and in high demand.

A second reason is differences in the ownership of wealth. Wealthy people receive income from rent, dividends and interest and can save more, so their wealth grows. People on low incomes save little, so it is hard for them to buy property. Rising property prices benefit those who already own property, and inheritance passes wealth between generations, so inequality widens.

Inequality of wealth cannot easily be measured. Wealth takes many forms, such as housing, savings, shares, pensions and valuables, and many assets are not traded, so their value is hard to estimate and changes with prices. Wealthy people may legally hide wealth in tax havens or transfer ownership to family members, so it is not recorded. Different countries also measure wealth differently.

However, wealth can be estimated using surveys and tax records, so it is not

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impossible. Overall, wealth inequality is harder to measure than income inequality, and it is likely to be understated, especially at the top.

3(b)

Redistribution of income means transferring income from higher-income to lower-income households to reduce inequality, which can be measured by a fall in the Gini coefficient.

A progressive income tax system takes a higher percentage of income in tax as income rises, as the marginal rate of tax is higher than the average rate.

Increasing higher tax rates or adding tax brackets reduces the post-tax income of high earners and narrows the gap between high and low earners. It is effective because it directly targets those with high incomes and raises revenue to fund benefits. However, high marginal tax rates may reduce incentives to work and invest, encourage tax avoidance and evasion, and high earners may move abroad, so revenue may fall. It also does nothing for those with no income, and has administrative costs.

Transfer payments, such as means-tested unemployment benefits, pensions and child benefits, give money directly to low-income households, so they are well targeted. However, they are costly, have an opportunity cost, and means-testing can create a poverty trap, as people lose benefits when they earn more.

A minimum wage, or a higher minimum wage, increases the wages of the lowest-paid workers, reducing the gap between the highest and lowest earners without government spending. However, if set above the equilibrium wage, it may cause unemployment, especially among young and low-skilled workers, and cost-push inflation. In some countries only a small proportion of workers receive it, and it does not help the unemployed.

Government provision of free education and healthcare redistributes real income, as poorer households benefit most. Education also tackles a cause of inequality, by raising skills and future earnings, but it takes many years.

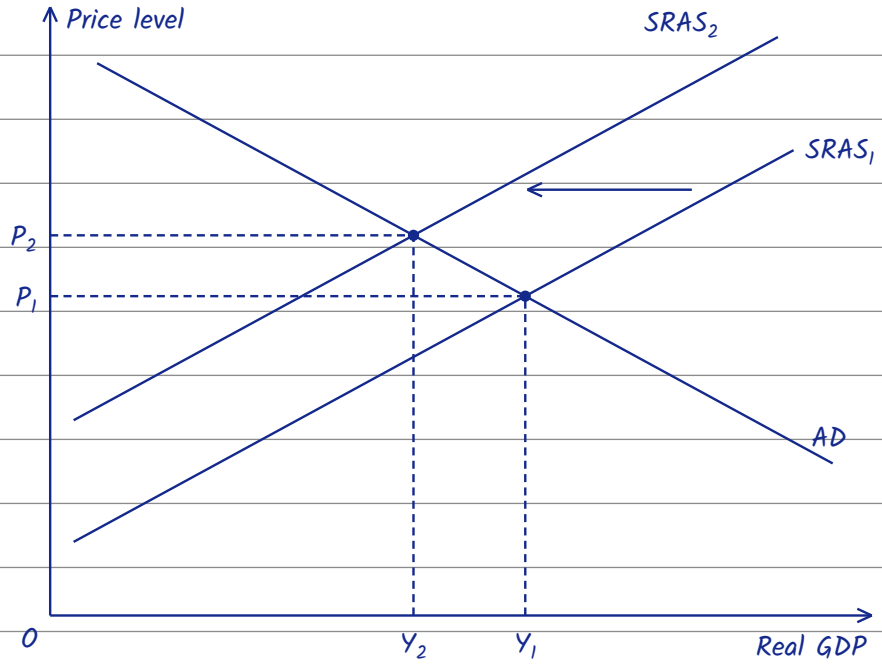
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The most effective policy depends on the cause of inequality and the time period. Progressive taxes and transfers have the biggest direct and immediate effect, as shown by the large fall in the Gini coefficient after taxes and benefits in many countries, while a minimum wage helps only those in work.

In conclusion, a combination of progressive taxation and targeted transfer payments is likely to be most effective in redistributing income in the short run, while spending on education is the most effective in the long run, because it raises the earning power of the poor.

4(a) Inflation is a sustained rise in the general price level. Cost-push inflation occurs when the price level rises because of increases in firms' costs of production, such as higher wages, raw material and energy prices, higher import prices after a depreciation of the currency, or higher indirect taxes. Firms pass the higher costs on to consumers in higher prices.

In the diagram, higher costs shift the SRAS curve to the left from SRAS1 to SRAS2. There is a contraction along the AD curve, so the price level rises from P1 to P2 and real GDP falls from Y1 to Y2.



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In the UK, cost-push inflation has clearly affected the economy since 2021. Energy and food prices rose sharply after the Russian invasion of Ukraine in 2022, and supply chain problems after the Covid-19 pandemic increased the costs of imported components and shipping. CPI inflation reached a peak of 11.1% in October 2022, and higher prices led workers to demand higher wages, adding further cost pressure.

However, not all of the inflation was cost-push. After the lockdowns ended, consumers spent savings built up during the pandemic, so there was also demand-pull inflation. The Bank of England raised interest rates from 0.1% to 5.25% by August 2023 to reduce demand, and inflation fell to around 2% in 2024 as energy prices fell. In conclusion, the main cause of UK inflation since 2021 was cost-push, especially energy prices, with some demand-pull pressure.

4(b)

Inflation is a sustained rise in the general price level, measured by the annual percentage change in a consumer price index. An increasing rate of inflation means prices are rising faster each year.

There are potential benefits. A moderate rise in inflation caused by growing demand can make firms more optimistic, as prices and profits may rise faster than costs, so they invest and expand output, increasing employment. Inflation reduces the real burden of debt, helping borrowers, including the government. If inflation rises faster than nominal interest rates, real interest rates become negative, which encourages consumption and investment. Rising inflation also allows real wages to fall in declining industries without cutting money wages, and avoids the dangers of deflation, when consumers delay spending.

However, there are significant costs. Rising inflation reduces the purchasing power of money, so people on fixed incomes, such as pensioners, and savers lose, especially if real interest rates are negative. It creates uncertainty, so firms find it hard to plan and may cut investment, reducing long-run growth. Firms face menu

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costs, and people and firms face shoe leather costs. If inflation is higher than in other countries, exports become less price competitive and imports more attractive, so net exports fall and the current account worsens. Fiscal drag occurs if tax thresholds are not raised with inflation, pulling people into higher tax brackets. Rising inflation can also lead to a wage-price spiral and, in extreme cases such as Venezuela or Zimbabwe, hyperinflation.

Whether the benefits outweigh the costs depends on the rate and cause of inflation. A rise from 1% to 2%, the target of many central banks, may be beneficial, while a rise from 5% to 10% is very damaging. Demand-pull inflation that comes with growth brings benefits, but cost-push inflation comes with falling output, so it has costs without benefits. It also depends on whether it is anticipated: if wages, pensions and tax thresholds are index-linked, the costs are smaller. It also depends on inflation in trading partners.

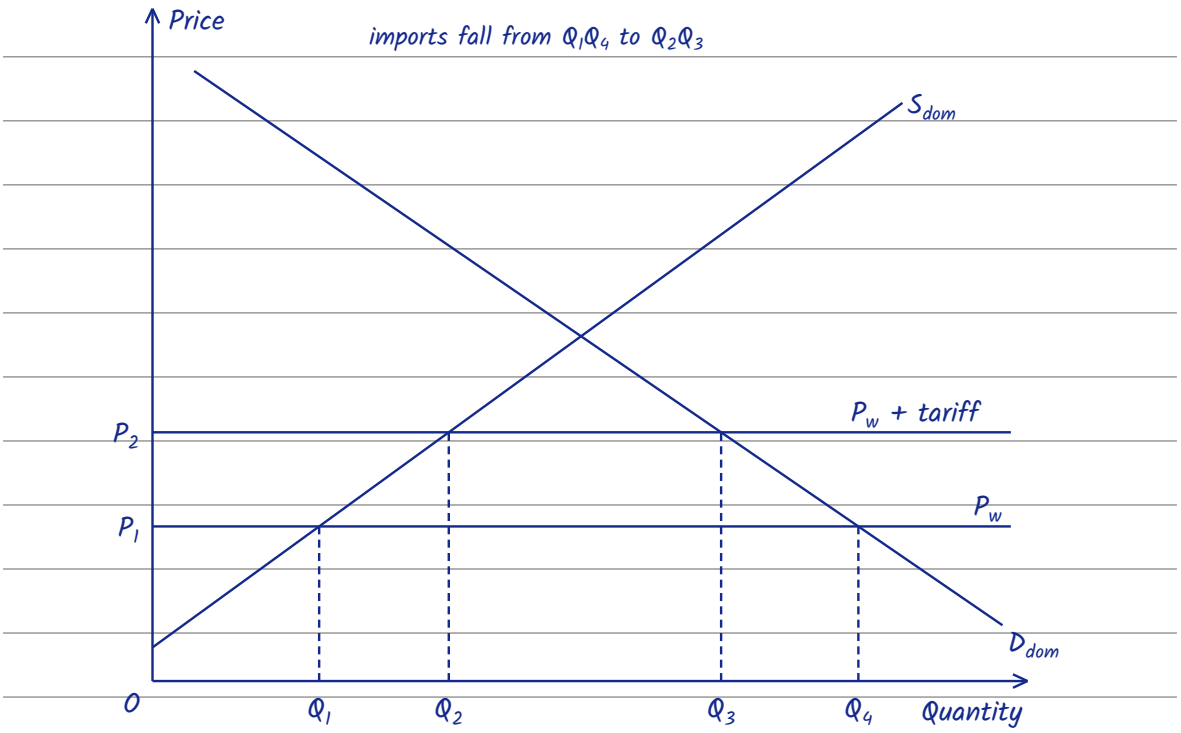
In conclusion, the potential benefits of an increasing rate of inflation outweigh the costs only when it rises from a very low level to a low and stable rate, such as around 2%. Beyond that, the costs of uncertainty, loss of purchasing power and lower competitiveness outweigh the benefits.

5(a)

Protectionism is when a government restricts imports to protect domestic businesses from foreign competition.

One method is a tariff, a tax on imports. In the diagram, the tariff raises the price from Pw to Pw + tariff. Domestic output rises from Q1 to Q2, while imports fall from Q1Q4 to Q2Q3. Consumers switch expenditure to domestic products, so domestic firms recruit more workers and employment rises.

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A second method is an import quota, a physical limit on the quantity of a good that can be imported. As imports are restricted to a fixed amount, the rest of demand must be met by domestic producers, so domestic output and employment increase.

If demand for imports is price inelastic, a tariff reduces imports by only a small amount, so domestic output and employment do not rise much. A quota gives a certain reduction in imports, so its impact on domestic output and employment is likely to be bigger. However, both may lead to retaliation, reducing exports and jobs in export industries, and firms using imported inputs face higher costs, reducing their output.

In conclusion, a quota is likely to have the bigger impact on employment and output, because it limits imports regardless of the price elasticity of demand, although the overall impact depends on retaliation.

5(b) A current account deficit means the value of outflows for imports of goods and services, primary income and secondary income exceeds the value of inflows,

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mainly because imports exceed exports. Protectionism is the use of measures such as tariffs, quotas and subsidies to restrict imports.

Protectionism can reduce a deficit. A tariff increases the price of imports, so consumers switch expenditure to domestic goods, and a quota directly limits the volume of imports. The value of imports falls, reducing the deficit, and domestic output and employment rise. Protecting infant industries allows them to grow and gain economies of scale, so in time they become internationally competitive, reducing dependence on imports.

However, protectionism has problems. If demand for imports is price inelastic, as for oil or components with no domestic substitutes, a tariff reduces the value of imports only a little. Other countries may retaliate with their own tariffs, reducing exports, so the deficit may not improve. Higher import prices raise costs for firms, causing cost-push inflation and making exports less competitive. Protected firms face less competition, so they may become inefficient. It may also break WTO rules and does not tackle the cause of the deficit if it is a lack of competitiveness.

Alternative policies may be better. Contractionary monetary policy raises interest rates, increasing the cost of borrowing and mortgage repayments, so people spend less, including on imports. However, higher interest rates attract hot money inflows, causing the currency to appreciate, which makes exports more expensive and imports cheaper, so if demand is elastic the deficit may worsen.

Contractionary fiscal policy reduces spending on imports but causes unemployment.

A depreciation of the currency makes exports cheaper and imports dearer, but it only works if the combined price elasticities of demand for exports and imports are greater than 1, and it may cause inflation. Supply-side policies, such as education, training and investment in infrastructure, increase productivity and lower costs, improving competitiveness in the long run without reducing output, but they take a long time and are costly.

Which policy is best depends on the cause of the deficit. If it is caused by excess

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domestic demand, expenditure-reducing policies are suitable. If it is caused by a lack of competitiveness, supply-side policies tackle the root cause. Protectionism may help in the short term or to protect infant industries.

In conclusion, protectionism is not always the best way to reduce a current account deficit, because of retaliation, inefficiency and inflation. A combination of policies, with supply-side policies for the long term, is likely to be more effective.