Cambridge Assessment International Education

Cambridge International AS & A Level

ECONOMICS **9708/42**

Paper 4 A Level Data Response and Essays **February/March 2023**

2 hours

8296462950

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. Any blank pages are indicated.

DC (CE/JG) 316332/1
© UCLES 2023

[Turn over

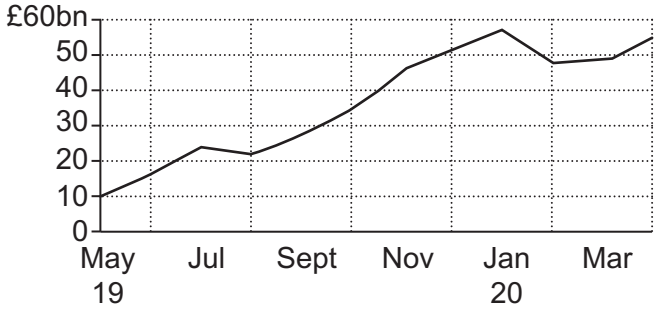
stemup.co.uk

Section A

Answer all parts of Question 1.

1 Increasing public sector debt is a good policy

Politicians do not usually think it a success to borrow a large amount of money but, in June 2020, when the economy was approaching a recession, the United Kingdom (UK) borrowed five times as much as it did in June 2019. This made the government debt only just a little less than the total size of the economy. The ratio of public sector debt to gross domestic product (GDP) was 99.6%. It was the highest figure for 60 years. Public sector net borrowing is shown in Fig. 1.



Source: ONS

Fig. 1: Public sector net borrowing in the UK, May 2019 to March 2020

Borrowing is what the government ought to be doing in a recession in order to finance the spending used to boost aggregate demand. The question in 2020 was how long could the borrowing of such large amounts continue? There can be problems with a large public sector debt. An expansion of government borrowing might increase interest rates if investors require more compensation because they think the risk of holding government bonds has increased. This interest rate rise would affect the rest of the economy.

There is also a theoretical objection that government borrowing could 'crowd out' the private sector, especially when the economy is close to its productive capacity and unemployment of resources is low. This would not happen when there are unemployed resources in a recession.

The UK Finance Minister suggested that a high ratio of public sector debt to GDP was justified; it is the stability of the ratio that is important. This reasoning can be justified. Reducing government spending in order to reduce borrowing would risk stopping any recovery and make the situation worse. Economic recovery is necessary to restore economic activity, which in turn will restore the government's finances.

However, economists cannot know with any precision what the limits of public sector borrowing should be. For many years, Japan has maintained a ratio of public sector debt to GDP of over 200% with no difficulty. But what is suitable for Japan may not be suitable in a different type of economy.

Source: The Times, 24 July 2020

© UCLES 2023

stemup.co.uk

(a) State what is meant by 'a recession'. [3]

(b) Analyse why governments borrow and why it is said that a government should increase spending in a recession. [5]

(c) Consider what is meant by the phrase 'government borrowing could 'crowd out' the private sector.' [6]

(d) Assess whether the evidence in the article makes a conclusive case that the high level of government borrowing is an effective policy. [6]

Section B

Answer **one** question.

EITHER

2 The use of air travel leads to market failure caused by negative externalities.

With the help of a diagram, assess the extent to which a government can intervene to correct this market failure. [20]

OR

3 Some firms in oligopoly markets choose to collude rather than engage in price competition. This will lead to higher prices and a less efficient allocation of resources.

Evaluate this statement. [20]

Section C

Answer **one** question.

EITHER

4 Expenditure-reducing policies will reduce a balance of payments deficit but will also cause significant unemployment.

Evaluate this statement. [20]

OR

5 Assess the impact of globalisation on the standard of living in low-income countries. [20]

© UCLES 2023

stemup.co.uk

BLANK PAGE

Permission to reproduce items where third-party owned material protected by copyright is included has been sought and cleared where possible. Every reasonable effort has been made by the publisher (UCLES) to trace copyright holders, but if any items requiring clearance have unwittingly been included, the publisher will be pleased to make amends at the earliest possible opportunity.

To avoid the issue of disclosure of answer-related information to candidates, all copyright acknowledgements are reproduced online in the Cambridge Assessment International Education Copyright Acknowledgements Booklet. This is produced for each series of examinations and is freely available to download at www.cambridgeinternational.org after the live examination series.

Cambridge Assessment International Education is part of Cambridge Assessment. Cambridge Assessment is the brand name of the University of Cambridge Local Examinations Syndicate (UCLES), which is a department of the University of Cambridge.

© UCLES 2023

stemup.co.uk

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 9708/42 (all questions answered)

1(a) A recession is a fall in real GDP (national output), that is negative economic growth, lasting for at least two consecutive quarters (six months).

1(b) Governments borrow to finance a budget deficit: when government spending is greater than the revenue received from taxation and other receipts, the gap is covered by selling bonds, so borrowing builds up the public sector debt.

In a recession aggregate demand (AD = C + I + G + X − M) is falling. If the government borrows to increase its spending, G rises, which shifts AD to the right. Firms receive more orders, so output and real income rise and firms take on more workers, so employment rises. The extra income is spent again through the multiplier, so the final rise in GDP is greater than the original rise in spending. This helps the economy recover and return to economic growth, as the article says, borrowing is used "to finance the spending used to boost aggregate demand".

1(c) Crowding out is the idea that an increase in government spending transfers scarce resources, or finance, from the private sector to the public sector, so private spending falls and offsets part of the rise in G.

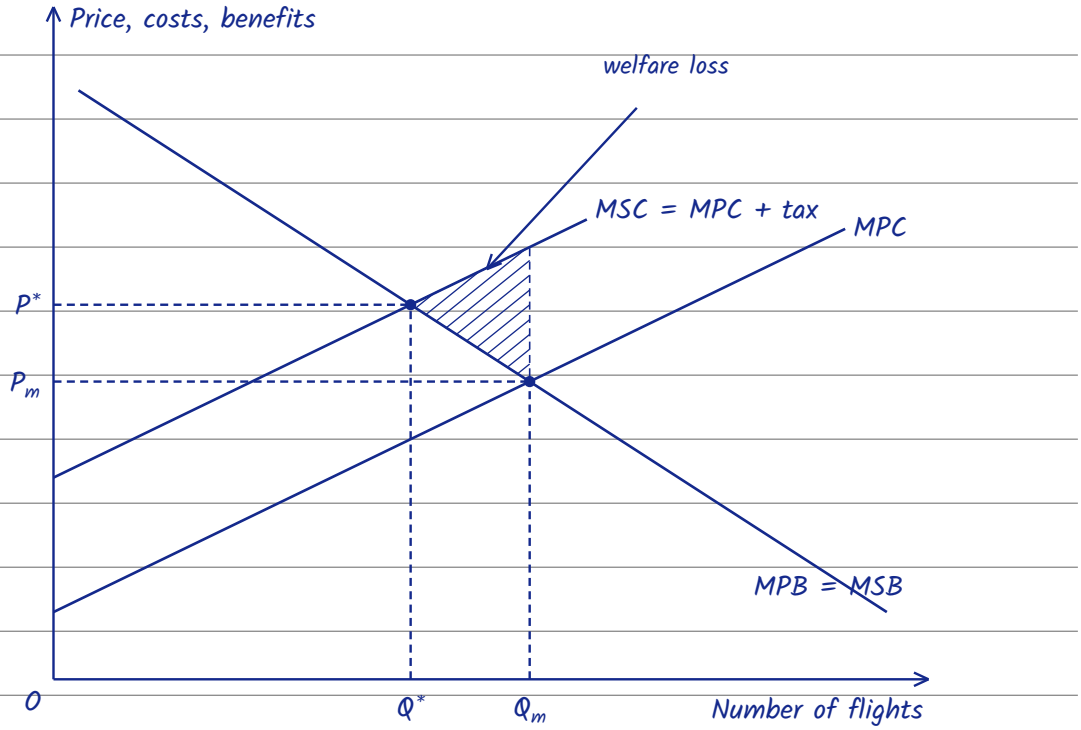
If the government borrows to fund its spending it must sell bonds to the private sector. To persuade banks, firms and households to buy more bonds, it may have to offer higher interest rates, and the funds lent to the government cannot be used by the private sector for other projects. Higher interest rates also make private borrowing more expensive, so firms cut investment and households cut consumption on credit. Private investment and consumption are therefore "crowded

Question number	
	out". The article notes this is most likely when the economy is close to its productive capacity and unemployment of resources is low. In a recession there are unemployed resources and spare savings, so crowding out is unlikely.
1(d)	Some evidence supports the policy. The economy was approaching a recession, so with unemployed resources there would be no crowding out. The article argues that cutting spending to reduce borrowing would risk stopping the recovery, making the position worse and reducing government revenue further. Japan has had a debt ratio above 200% for many years "with no difficulty", far above the UK's 99.6%. Other evidence is against it. The Finance Minister says a high debt ratio is acceptable if it is stable, but Fig. 1 shows net borrowing rising from about £10bn in May 2019 to over £55bn by January 2020, and the ratio is the highest for 60 years, so it was not stable. Japan is a different type of economy, so its experience may not apply to the UK. More borrowing may raise interest rates if investors see bonds as riskier, discouraging investment in the rest of the economy, and economists admit they cannot know the safe limit of borrowing. Conclusion: the evidence is inconclusive. It gives a strong case for borrowing during a recession, but it does not show that such high borrowing is effective once recovery begins.
2	Market failure occurs when the free market does not allocate resources efficiently. Allocative efficiency is reached when resources are allocated to maximise consumer satisfaction, where price (AR) equals marginal cost and, for society, where marginal social benefit (MSB) equals marginal social cost (MSC). A negative externality is a cost of production or consumption that falls on third parties and is not paid by the buyer or seller, a "spill-over" cost, so MSC = MPC + external cost. Air travel creates large external costs: carbon dioxide emissions that

Question number

add to climate change, noise for people living near airports, air pollution and congestion on roads to airports. Airlines and passengers only consider the private costs (fuel, wages, fares), so the external cost is ignored.

In the diagram the market equilibrium is where MPB = MPC, at quantity Qm and price Pm. The socially efficient output is where MSB = MSC, at Q^*, which is lower. Between Q^* and Qm each extra flight has a marginal social cost greater than its marginal social benefit, so too many flights are taken and air travel is over-consumed. The shaded triangle is the welfare loss. The price of flights is also too low, because it does not include the external cost.



The government can intervene in several ways. First, it can tax air travel, for example an air passenger tax or a tax on aviation fuel. If the tax per flight equals the marginal external cost, it internalises the externality (the "polluter pays" principle): the supply curve shifts up from MPC to MPC + tax, which is the MSC curve. The price rises to P^*, the quantity demanded falls to Q^*, and the welfare loss is removed, so allocative efficiency is achieved. The tax revenue can also be spent on reducing the damage, for example noise insulation for homes.

Question number

Second, the government can use negative advertising and information campaigns about the carbon footprint of flying. This reduces demand (MPB shifts left) towards Q^*, so fewer flights are taken. Third, it can use direct regulation, such as limits on the number of night flights, noise and emission standards for aircraft, or a cap on airport expansion, which directly limits output. Fourth, it can use tradable pollution permits, as in the EU Emissions Trading System, which includes airlines: the cap fixes total emissions and the market sets a price on carbon, giving airlines an incentive to use cleaner, more fuel-efficient aircraft.

However, the extent to which intervention can correct the failure is limited. The size of the external cost is very hard to measure, because it means putting a money value on noise or on the future damage of climate change, so the government is unlikely to set the tax at exactly the right level. If the tax is too low there is still over-consumption; if it is too high there is under-consumption and a new welfare loss, which is government failure. Demand for many flights, especially business travel and long-haul trips with no alternative, is price inelastic, so a tax mainly raises revenue and has only a small effect on the number of flights, and the effect on demand can take a long time to appear. A tax is also regressive, hitting lower-income travellers more.

Advertising is costly and it is not certain that it will persuade people strongly enough to cut flights to Q^*. Regulation involves monitoring and enforcement costs and gives no incentive to cut pollution below the limit. In addition, air travel is international: if one country taxes flights heavily, passengers and airlines may switch to airports in nearby countries, so emissions are not reduced and domestic airlines lose business. Effective correction therefore needs international agreement, which is hard to achieve.

In conclusion, a government can reduce the market failure significantly, but it cannot fully correct it. A carefully set tax or a well-designed permit scheme is likely to be the most effective, because it uses the price mechanism and gives a

Question number

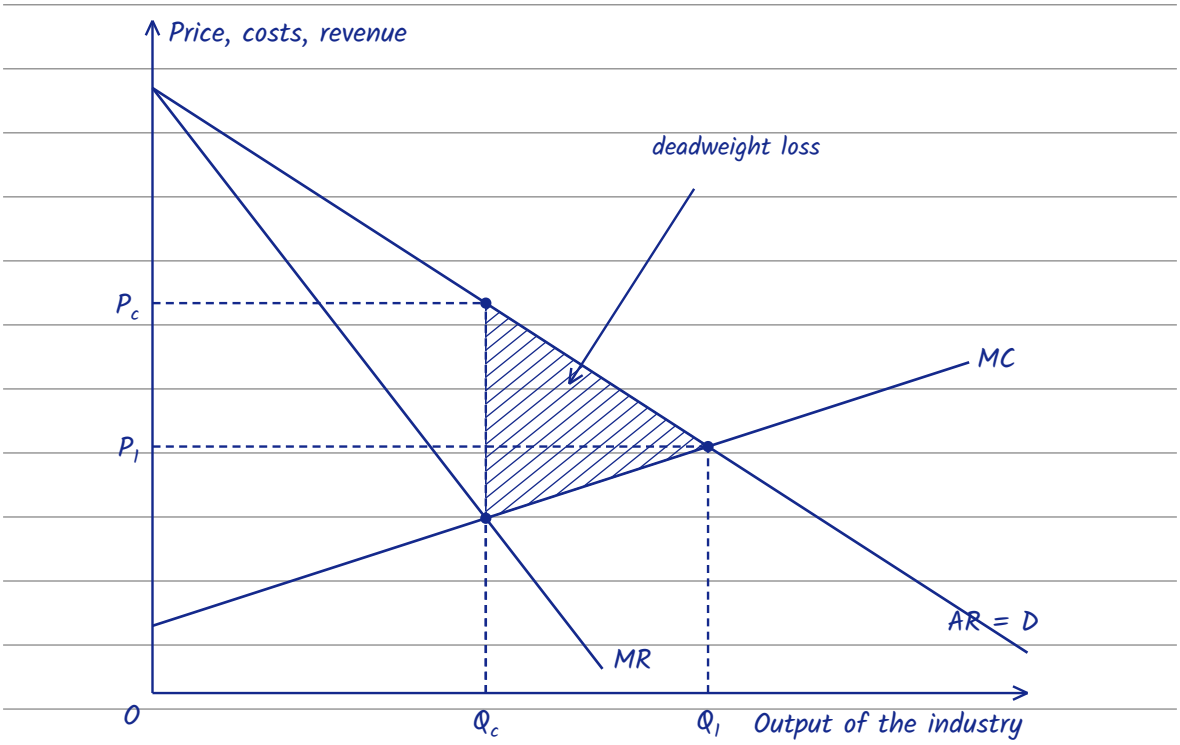
continuing incentive to cut emissions, while regulation is useful for local problems such as night-time noise. The net effect of intervention will be positive only if the external cost is estimated reasonably well and if policies are coordinated internationally; otherwise the risk of government failure is high.

3 An oligopoly is a market dominated by a few large firms, with high barriers to entry, products that may be homogeneous or differentiated, and interdependence: each firm must consider how its rivals will react to its decisions on price and output. Because of this uncertainty, firms may either compete or collude.

Price competition can lead to a price war, in which firms keep undercutting each other; prices fall towards marginal cost and profits fall, which benefits consumers in the short run. To avoid this risk, firms may collude. Collusion is an agreement between firms to restrict competition, either formally in a cartel, such as OPEC, which sets output quotas, or tacitly, for example through price leadership by the dominant firm.

If firms collude they act together like a single monopolist and maximise joint profit where MR = MC for the industry. In the diagram the colluding firms produce Qc and charge Pc. If the market were competitive, output would be where price equals marginal cost, at QI and PI. Collusion therefore leads to a higher price and a lower output, and consumer surplus is transferred to the firms as supernormal profit.

Question number



Collusion also leads to a less efficient allocation of resources. Allocative efficiency requires P = MC, but at Qc price is well above marginal cost, so consumers value extra units more than the cost of making them, and too few resources are allocated to this good. The shaded area is the deadweight loss. Productive efficiency is also unlikely, as output is not at the minimum of average cost. Since firms are protected from competition by barriers to entry and their agreement, there is less pressure to control costs, so X-inefficiency may occur, with average costs above the lowest possible level, for example through overstaffing.

Firms that do not collude may still avoid price competition and use non-price competition, such as branding, advertising, loyalty schemes and product development. The kinked demand curve model explains why prices tend to be stable in oligopoly even without collusion, so prices may not be much lower without collusion either.

However, the statement needs to be evaluated. First, collusion is often unstable. Each member has an incentive to cheat by secretly cutting price to gain market share, as game theory (the prisoners' dilemma) shows, so agreements often break

Question number

down and prices fall. Collusion is more likely to last when there are very few firms, similar costs, a homogeneous product and high barriers to entry.

Second, the supernormal profits earned through collusion can be used for research and development, leading to dynamic efficiency: new products and new processes that lower costs and, in the long run, prices. Colluding firms that grow larger may also benefit from economies of scale, for example lower managerial or purchasing costs, so their average cost is lower than that of smaller competing firms. If costs fall enough, the price under collusion could even be lower than under competition. Firms may also argue that stable prices and larger size allow them to offer a wider range of goods and more consumer choice.

Third, government regulation can reduce the harm. Formal cartels are illegal in most countries, and competition authorities can fine firms, as the European Commission did with the truck makers' cartel, which deters collusion. However, tacit collusion is hard to prove, so regulation is only partly effective.

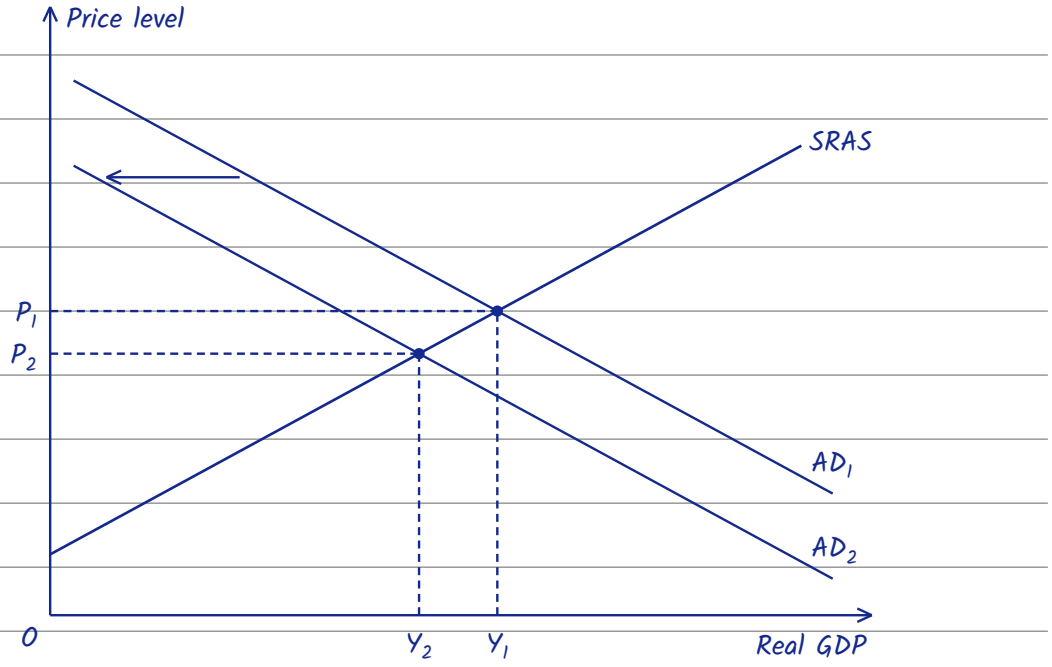
In conclusion, the statement is largely correct: when collusion is successful, prices are higher and resources are allocated less efficiently in the static sense. The extent depends on how stable the agreement is, on the price elasticity of demand and on whether profits are reinvested. On balance, collusion is likely to have a net negative effect on prices and efficiency, because any dynamic gains are uncertain and are not guaranteed to be passed on to consumers, which is why it is usually regulated.

4

A balance of payments deficit on the current account occurs when the value of imports of goods and services (plus income and transfers paid abroad) is greater than the value of exports. Expenditure-reducing policies aim to reduce this deficit by reducing aggregate demand, and so total spending in the economy, including spending on imports. The size of the fall in imports depends on the marginal propensity to import.

Question number

Examples are contractionary fiscal policy, such as higher income tax or lower government spending, and contractionary monetary policy, such as higher interest rates. For example, a rise in interest rates makes borrowing more expensive and saving more attractive, so consumption on credit and investment fall. Higher income tax reduces disposable income. Aggregate demand shifts left from AD1 to AD2, as in the diagram, so real GDP falls from Y1 to Y2 and the price level falls from P1 to P2.



This reduces the deficit in two ways. Lower incomes mean households and firms buy fewer imports. Also, lower inflation makes exports more price competitive and imports relatively dearer, and domestic firms facing weaker home demand may switch sales to export markets.

However, the fall in output will cause unemployment. Firms need fewer workers when demand falls, because labour is a derived demand, so there is cyclical (demand-deficient) unemployment. This can be large because of the multiplier: the initial fall in spending reduces incomes, which reduces spending further. For a country with a marginal propensity to import of 0.2, imports fall by only 20% of the fall in income, so a large fall in national income and employment is needed to

Question number

remove a sizeable deficit. This is why the statement is often true.

Whether the unemployment is significant depends on the state of the economy. If the deficit has been caused by excess demand, with a positive output gap and high inflation, reducing AD mainly lowers inflation and removes the excess demand, so the rise in unemployment is limited. If the economy is already near or below full employment, the same policy will cause a large rise in unemployment. It also depends on the cause of existing unemployment: if it is mainly structural, demand policies change it little.

The effect also depends on which policy is used. Higher interest rates may attract hot money inflows, causing the exchange rate to appreciate, which makes exports dearer and imports cheaper and may worsen the deficit, and reduces employment in export industries. Cutting government spending on capital projects may damage long-run productivity.

In addition, the fall in incomes may lead consumers to substitute domestically produced goods for goods previously imported, so some demand is switched to domestic firms, protecting jobs. The government could also combine expenditure-reducing policies with expenditure-switching policies, such as a devaluation, and with supply-side policies, such as training and investment in infrastructure, which raise productivity and competitiveness, and reduce structural unemployment at the same time. The deficit is then reduced in a more lasting way, although supply-side policies take a long time to work.

Finally, if the deficit is caused by a lack of competitiveness, for example high costs or low quality, reducing expenditure treats the symptom rather than the cause, so the deficit returns once growth resumes.

In conclusion, expenditure-reducing policies will reduce a balance of payments deficit, but usually only by reducing national income, so some unemployment is likely. Unemployment will be significant if the economy has spare capacity, the marginal propensity to import is low and the policies are used alone. It will be

Question number

small if the economy is overheating or the policies are combined with supply-side and expenditure-switching policies. The statement is therefore only partly true.

5 Globalisation is the increasing integration of the world's economies through free trade in goods and services, free movement of capital and labour, and the transfer of technology, together with closer cultural and political ties. It has been driven by trade liberalisation, the WTO, lower transport costs and the growth of multinational corporations (MNCs).

Low-income countries have low GDP per capita, low productivity, high dependency ratios, rapid population growth and a heavy dependence on producing and exporting primary goods. The standard of living refers to the material and non-material welfare of people: real income per head, together with health, education, housing, and poverty and inequality, often measured by the Human Development Index (HDI).

Globalisation can raise living standards in several ways. First, free trade allows low-income countries to specialise according to comparative advantage, for example in labour-intensive manufacturing, and export to large world markets. Output and real income rise, and consumers gain access to cheaper and a wider range of imported goods. Second, inflows of foreign direct investment from MNCs create jobs, often paying higher wages than local firms, and bring capital, technology and management skills, raising productivity. As productivity rises, GDP per capita can rise, which is the basis for higher living standards: China and Vietnam lifted hundreds of millions of people out of poverty through export-led growth.

Third, higher incomes and profits mean more tax revenue for the government, which can be spent on health care, education, housing and infrastructure. Life expectancy and literacy rise, so HDI improves. Fourth, the free movement of labour allows workers to migrate and send remittances home, which raise household incomes, and technology transfer, such as mobile phones and mobile banking,

Question number

improves access to services.

However, the link between globalisation and higher living standards in low-income countries is not certain. Labour may be exploited by MNCs from high-income countries, with low wages, long hours and poor working conditions, and profits may be sent back to the home country rather than reinvested. MNCs may also use transfer pricing to avoid tax, so the government gains less revenue than expected.

Globalisation can also create dependency. Many low-income countries depend on exports of a few primary products, whose prices are volatile and which have a low income elasticity of demand, so their terms of trade may worsen over time and they may run persistent trade deficits, harming living standards in the long run.

Domestic infant industries may be out-competed by large foreign firms and go out of business, so unemployment rises and incomes fall.

In addition, skilled work may be done by workers brought in from abroad, so local people are not trained, while emigration of skilled workers (a brain drain) can reduce the supply of doctors and teachers. Growth driven by globalisation may also be unequally shared, benefiting urban and skilled workers more than rural workers, so inequality rises, and it can cause environmental damage, such as pollution and deforestation, which reduces the quality of life.

The impact depends on several factors: the quality of institutions and governance, whether tax revenue is spent on education and health, the level of human capital, and whether the country can diversify away from primary products. Countries in East Asia that invested in education and infrastructure gained greatly, while some countries in sub-Saharan Africa that remain dependent on commodity exports have gained much less.

In conclusion, globalisation has the potential to raise the standard of living in low-income countries, mainly through higher real incomes, investment and technology transfer, but the impact is not automatic and may be negative for some groups. It is also important to use a broad measure of the standard of living,

Question number

such as HDI, rather than only GDP per capita, because material gains may be offset by inequality, poor working conditions and environmental damage. Overall, the impact is likely to be positive where governments have strong institutions and policies to share the gains.