



Rewarding Learning
ADVANCED
General Certificate of Education
2022

Economics

Assessment Unit A2 2
assessing
Managing the Economy in a Global World



AEC21

[AEC21]
MONDAY 6 JUNE, AFTERNOON

TIME

2 hours.

INSTRUCTIONS TO CANDIDATES

Write your Centre Number and Candidate Number on the Answer Booklet provided.
Answer **all** questions in Section **A** and **B** and **one** question in Section **C**.
You are permitted to use a calculator in this paper.

INFORMATION FOR CANDIDATES

The total mark for this paper is 90.

- Section A: 20 marks
- Section B: 40 marks
- Section C: 30 marks

Figures in brackets printed down the right-hand side of pages indicate the marks awarded to each question or part question.

ADVICE TO CANDIDATES

You are advised to take account of the marks for each part question in allocating the available examination time.

Quality of written communication will be assessed in Questions **5**, **6(b)**, **(c)** and **(d)**, **7** and **8**.
Quantitative skills will be assessed where appropriate.

Section A (20 marks)

Answer all questions

- 1 Two countries, Highland and Lowland, are producing apples and pears under the conditions assumed by the theory of comparative advantage. The table below shows the production possibilities if both countries divide their resources equally between the production of apples and pears.

Country	Apples (tonnes)	Pears (tonnes)
Highland	3000	3000
Lowland	1500	500

Using the information in the table above, calculate what the total output of pears would be if both countries specialised completely according to their comparative advantage. [2]

- 2 Ten years after the financial crisis of 2008, Bank of England governor Mark Carney stated that “despite numerous reforms to the financial system, some UK banks are still considered to be too big to fail”.

With reference to the example above, explain the term moral hazard. [4]

- 3 The table below gives estimates of the long-run price elasticity of demand of UK exports to the Eurozone for selected sectors.

Sector	Price elasticity of demand
Agricultural products	-0.20
Foodstuffs	-0.65
Pharmaceuticals	-0.70
Textiles and footwear	-0.46
Machinery and equipment	-1.20
Aerospace	-0.16

Using the information in the table above, explain which sector is likely to benefit most from a 15% reduction in the value of sterling against the euro. [4]

- 4 The table below shows selected components of a country's balance of payments accounts for 2019 and their relationship to the country's gross domestic product (GDP).

Balance of trade in goods (\$bn)	Balance of trade in services (\$bn)	Net secondary income (\$bn)	Current account balance (\$bn)	Current account balance as a % of GDP
105.6	-32.4	-14.6	39.3	6.0

Using the information in the table above, calculate:

(a) The primary income balance for this country in 2019. [2]

(b) The country's gross domestic product (GDP) in 2019. [2]

- 5 The European Central Bank (ECB) has stated recently that it is ready to restart its quantitative easing programme amid concerns of low growth and deflation in Eurozone countries such as France and Germany.

With the aid of an appropriate diagram, analyse the likely impact on the German economy of a decision by the ECB to relaunch a quantitative easing programme. [6]

Section B (40 marks)

Answer all questions

The following passages were compiled in August 2019. Read them carefully and answer the questions which follow.

6 Case study: “From trade war to currency war”

Source 1: Markets increasingly volatile

On 5 August 2019, the Chinese authorities allowed the yuan to plunge against the US dollar to a level not seen since the financial crisis of 2008, as shown in **Fig. 1** below. The move was seen by many as an attempt by the Beijing authorities to lessen the impact of US tariffs on Chinese exporters and to send a warning to Washington that they are willing to use their currency as a weapon in the so-called trade war.

Currency traders are worried that this move could significantly increase the volatility of the foreign exchange market. One of their fears is that governments of other countries might try and weaken their currencies in an attempt to shield their economies from a global slowdown.

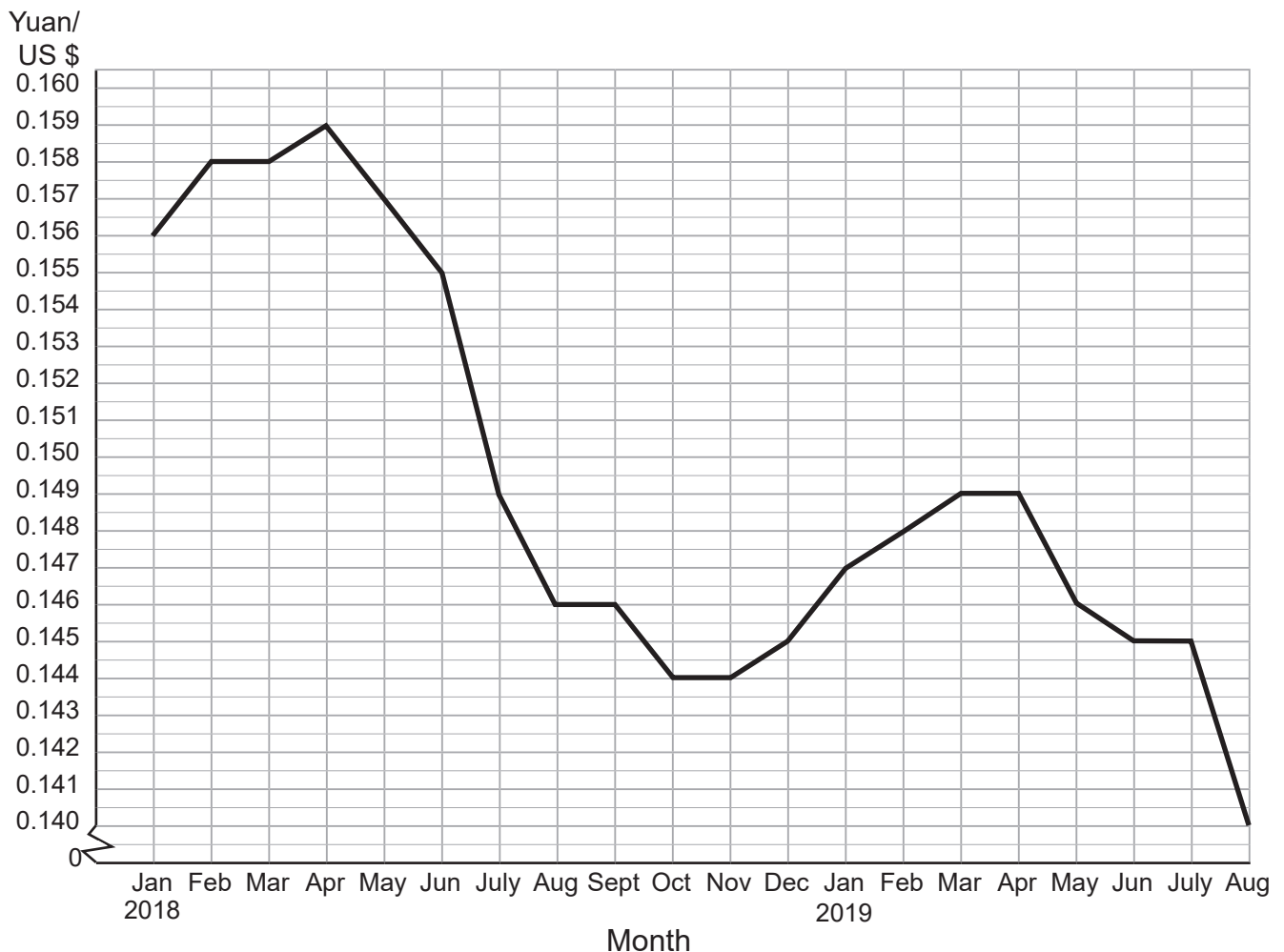


Fig. 1: Value of the yuan against the US dollar, January 2018–August 2019

The fall in the value of the yuan has led to steep rises in “safe haven” currencies such as the Japanese yen and the Swiss franc. In response, the Swiss National Bank began buying foreign currency and the Japanese authorities issued a warning to investors that they were ready to intervene if excessive gains threatened to hurt their export-reliant economy.

Source 2: Washington labels Beijing a currency manipulator

The US has officially named China as a currency manipulator in a statement which will intensify tensions between the world’s two major economies. The US Treasury defines currency manipulation as countries deliberately influencing the exchange rate between their currency and the US dollar to gain an “unfair competitive advantage in international trade”.

In its announcement, the US Treasury said: “China has a long history of facilitating an undervalued currency through protracted, large-scale intervention in the foreign exchange market. In recent days, China has taken significant steps to devalue its currency, while maintaining substantial foreign exchange reserves.”

However, China rejected the charge, and actually moved to contain the yuan’s slide in the foreign exchange markets. In a statement, the Chinese authorities claimed that the fall in the yuan was natural and entirely predictable given the tariffs imposed by Washington on Chinese goods.

This claim has been backed up by currency trader Maria McEvoy, who stated: “Despite claims from Washington of currency manipulation, the fall in the value of the yuan against the dollar since the beginning of 2018 has more fundamental causes. The main reason is the strong dollar; the US economy has been growing strongly in recent years and as a result the Federal Reserve has increased interest rates five times since the beginning of 2018. At the same time, the Chinese economy has slowed and the Chinese stock market has lost almost 20% of its value since the beginning of the year. This has spooked investors who are actively seeking safer currencies. If you add in the tariffs imposed by the Trump administration and the resulting reduction in demand for Chinese goods in the US, it is not hard to see why the yuan has fallen.”

Source 3: President Trump calls on the Fed to cut interest rates

Donald Trump has stepped up the pressure on the Federal Reserve to cut interest rates with a personal attack on Jerome Powell, the man he handpicked to run the US central bank. The US president has taken to Twitter to insult Mr Powell and said he had let the country down by refusing to cut interest rates in response to what he sees as currency manipulation by the Chinese.

Some of President Trump's more vocal supporters have gone even further. They suggest that the Federal Reserve should intervene directly in the currency markets to buy yuan in order to raise its value against the dollar.

However, Maria McEvoy has warned against such a move, and pointed to the fact that it would be difficult for the US to influence the value of the yuan by purchasing it. In a report to investors, she argued that there were far more effective policies available to the US authorities if they wished to reduce the negative impact of the yuan's fall in value. "If the US really wants to put pressure on the Chinese authorities, they could increase the level of tariff from the current average level of 10% to at least 25%", she said. "They could support struggling US firms by mirroring the subsidies given to Chinese firms by the Beijing authorities, and they could prohibit US financial institutions from investing in Chinese equity and bond markets, and hence make it more difficult for Chinese firms to raise finance. Alternatively, they could take the opposite approach and engage directly with the Chinese authorities in an attempt to negotiate a mutually beneficial free trade agreement."

- (a) Using the information in **Fig. 1**, describe the trend in the value of the yuan against the US dollar between January 2018 and August 2019. [4]
- (b) With the aid of an appropriate diagram, analyse the possible causes of the fall in the value of the yuan against the dollar since January 2018. [9]
- (c) Examine the likely impact on the US economy of a fall in the value of the yuan against the US dollar. [12]
- (d) Evaluate some of the steps the US government might take to deal with the fall in the value of the yuan against the US dollar. [15]

Section C (30 marks)

Answer one question

- 7 In 2019 the Turkish Foreign Minister stated that joining the European Union (EU) was still top of the Turkish government's agenda, and he called on the EU to help Turkey remove the difficulties it faced in its bid to join the bloc. He also claimed that Turkish membership of the EU would benefit the EU just as much as it would benefit Turkey.

Evaluate the advantages and disadvantages to Turkey of joining the EU.

[30]

- 8 Economists have long argued that globalisation benefits individuals, businesses and national governments through the international exchange of money, ideas and culture. However, some critics claim that it adversely affects both developed and developing economies and adds to the destruction of the earth's fragile ecosystem.

Critically examine the view that globalisation has been bad for both more developed and less developed countries.

[30]

THIS IS THE END OF THE QUESTION PAPER

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

Question number	
1	Opportunity cost of 1 tonne of apples: Highland = 1 tonne of pears; Lowland = $500/1500 = 1/3$ tonne of pears. Lowland has the comparative advantage in apples and Highland has the comparative advantage in pears (opportunity cost of 1 pear: Highland 1 apple, Lowland 3 apples). If Highland specialises completely in pears it produces $2 \times 3000 = 6000$ tonnes of pears. Lowland produces no pears, so total output of pears = 6000 tonnes.
2	Moral hazard occurs when an economic agent takes on more risk because it is insured against that risk, or because someone else will bear the cost if things go wrong. Banks that are 'too big to fail' know that the government will bail them out to protect the financial system, as happened with UK banks such as RBS and Lloyds after the 2008 crisis. They therefore have an incentive to make riskier loans and investments for higher returns, since profits are kept by the bank but large losses fall on taxpayers.
3	Machinery and equipment is likely to benefit most. A 15% fall in sterling against the euro reduces the euro price of UK exports by about 15%. Machinery and equipment has the highest PED (-1.20), the only price elastic sector, so the quantity demanded rises by $15 \times 1.2 = 18\%$, more than the fall in price, and export revenue in euros rises. For the other sectors demand is price inelastic, e.g. aerospace (-0.16) would see only a 2.4% rise in quantity, so revenue falls.
4 (a)	Primary income = current account balance - (goods + services + secondary income) = $39.3 - (105.6 - 32.4 - 14.6) = 39.3 - 58.6 = -\\$19.3\text{bn}$

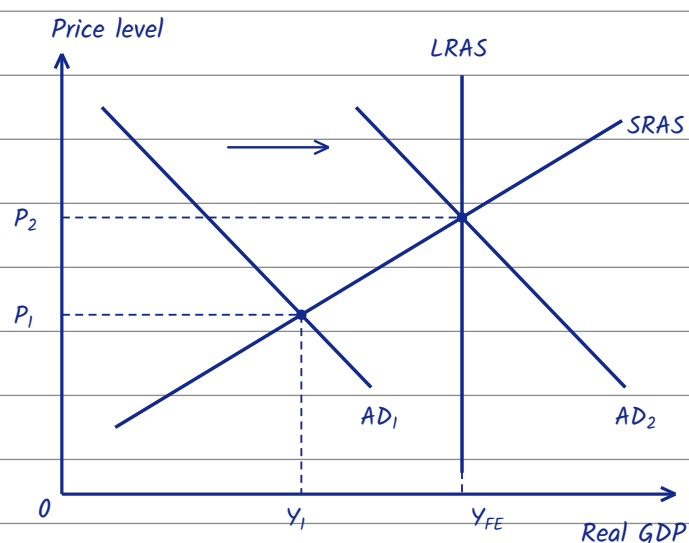
4 (b)

Current account = 6.0% of GDP, so $GDP = 39.3 \div 6 \times 100 = \$655bn$

5

Quantitative easing (QE) is an unconventional monetary policy in which the central bank, here the ECB, creates new money electronically to buy government bonds and other financial assets from banks and financial institutions, injecting liquidity directly into the economy. It is used when interest rates are already close to zero, as in the Eurozone.

The ECB's bond purchases raise bond prices and lower bond yields, so long-term interest rates fall in Germany. Cheaper borrowing encourages German firms to invest and households to borrow and consume. Banks have more reserves so are more willing to lend. Higher asset prices create a wealth effect, raising consumption, and investors seeking higher returns move funds out of the euro, so the euro depreciates, making German exports such as cars and machinery more competitive, raising net exports. As $AD = C + I + G + (X - M)$, AD shifts right from AD_1 to AD_2 , and with the multiplier effect real GDP rises from Y_1 towards Y_{FE} , closing the negative output gap, raising employment and growth.



Negative output gap Y_1 to Y_{FE}

As the diagram shows, the price level also rises from P_1 to P_2 , which helps Germany avoid deflation and moves inflation towards the ECB's target of close

to 2%. However, the impact may be limited if confidence is low and banks hoard the extra liquidity rather than lend it (a liquidity trap), and QE may inflate asset prices, increasing wealth inequality.

6 (a)

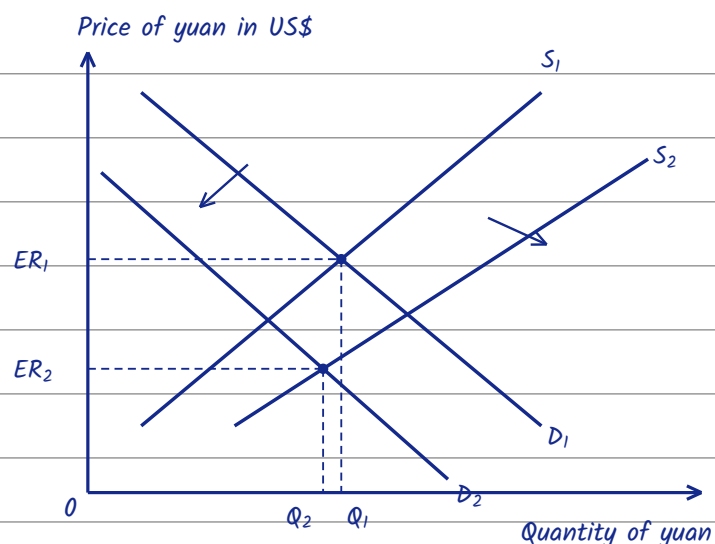
Overall the yuan fell against the dollar, from \$0.156 in January 2018 to \$0.140 in August 2019, a fall of $(0.016 \div 0.156) \times 100 = 10.26\%$. It first rose to a high of \$0.159 in April 2018, then fell sharply to a low of \$0.144 in October to November 2018, a fall of 9.43% from the peak. It then recovered to \$0.149 in March to April 2019 (a rise of 3.47%) before falling again to its lowest value of \$0.140 in August 2019, a fall of 6.04%.

6 (b)

The exchange rate is the price of one currency in terms of another, and under a floating system it is determined by the demand for and supply of the currency on the foreign exchange market. Fig. 1 shows the yuan fell from \$0.156 to \$0.140 (10.26%) between January 2018 and August 2019. This can be explained by a fall in demand for yuan and a rise in its supply.

Falling demand for yuan. Firstly, the US imposed tariffs on Chinese goods (average 10%), so fewer Chinese goods were bought in the US, and Americans needed fewer yuan to pay for them. Secondly, the Chinese economy slowed and the Chinese stock market lost almost 20% of its value, so foreign investors wanted fewer yuan to buy Chinese shares and invest in China. Both shift demand left from D_1 to D_2 .

Rising supply of yuan. The US economy has grown strongly and the Federal Reserve has raised interest rates five times since 2018. Higher US rates attract hot money, and strong growth attracts FDI and portfolio investment into the US, so investors sell yuan to buy dollars. Investors 'spooked' by China also sought safe haven currencies. In addition, the US Treasury claims the Chinese authorities intervened, selling yuan to buy dollars. These shift supply right from S_1 to S_2 .



As the diagram shows, the combined fall in demand and rise in supply cause the exchange rate of the yuan to fall from ER_1 to ER_2 . Some of these causes are market forces, as McEvoy argues, rather than manipulation; the slowdown in China and rising US interest rates are likely to have been the main causes, with the 2019 fall linked to new tariffs.

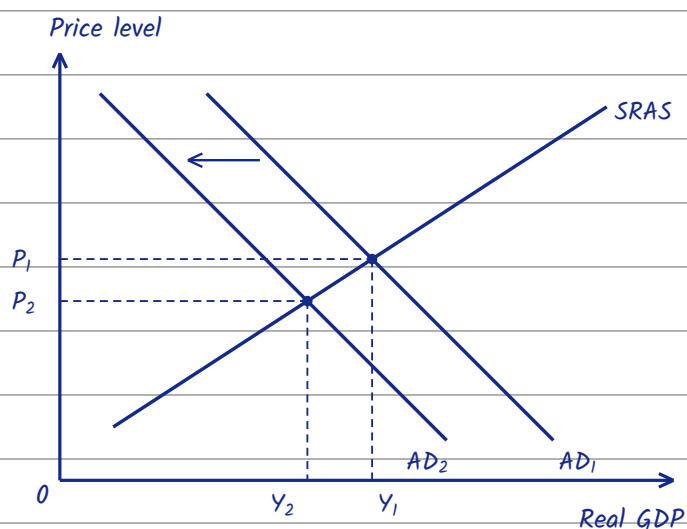
6 (c)

A fall in the yuan from \$0.156 to \$0.140 means the dollar has appreciated against the yuan: each dollar buys more yuan. This changes the relative prices of US and Chinese goods.

Trade and the balance of payments. Chinese imports become cheaper in dollars, while US exports become more expensive in yuan and less price competitive in China. If demand is price elastic (the Marshall-Lerner condition holds), US imports from China rise and exports fall, widening the already large US trade deficit with China and worsening the current account. This offsets the effect of US tariffs on Chinese goods.

Aggregate demand, growth and jobs. Net exports ($X - M$) are a component of AD, so a fall in net exports shifts AD left from AD_1 to AD_2 , and via the multiplier real GDP falls from Y_1 to Y_2 , as the diagram shows. US manufacturing firms that compete with Chinese imports, such as steel and textiles, may lose sales and cut jobs, causing structural unemployment in areas such as the Rust Belt. Exporters such as soybean farmers lose sales. Firms may also move

production (FDI) to China as Chinese workers appear cheaper in dollar terms, reducing US investment.



Inflation. Cheaper imports reduce the price of consumer goods directly and lower costs for US firms that import materials and components from China, shifting SRAS right and reducing cost-push inflation, while lower AD reduces demand-pull inflation, so the price level falls from P_1 to P_2 .

Benefits. US consumers gain higher real incomes and purchasing power, as Chinese goods such as electronics and clothing are cheaper, which particularly helps low-income households and may improve income distribution. US firms that outsource production to China see their yuan wage bills fall in dollar terms, raising profits. A stronger dollar may attract portfolio investment into US financial assets, making it easier and cheaper for the US government to borrow.

Evaluation. The overall impact depends on the price elasticities of demand for imports and exports: in the short run demand is often inelastic (J-curve), so the trade deficit may not worsen immediately. It depends on how important trade with China is relative to US GDP, which is quite low since the US is a relatively closed economy, and on whether the fall is temporary, as the yuan recovered in early 2019. It also depends on how the fall interacts with tariffs, which raised prices of Chinese goods. Overall, the fall is likely to be harmful to US producers and the trade balance but beneficial to US consumers and

importing firms; with the US economy growing strongly, the overall effect on growth is likely to be small.

6 (d)

The fall in the yuan from \$0.156 to \$0.140 makes Chinese goods cheaper in the US and US goods dearer in China, threatening US firms and the trade deficit.

The US government has several options (Source 3).

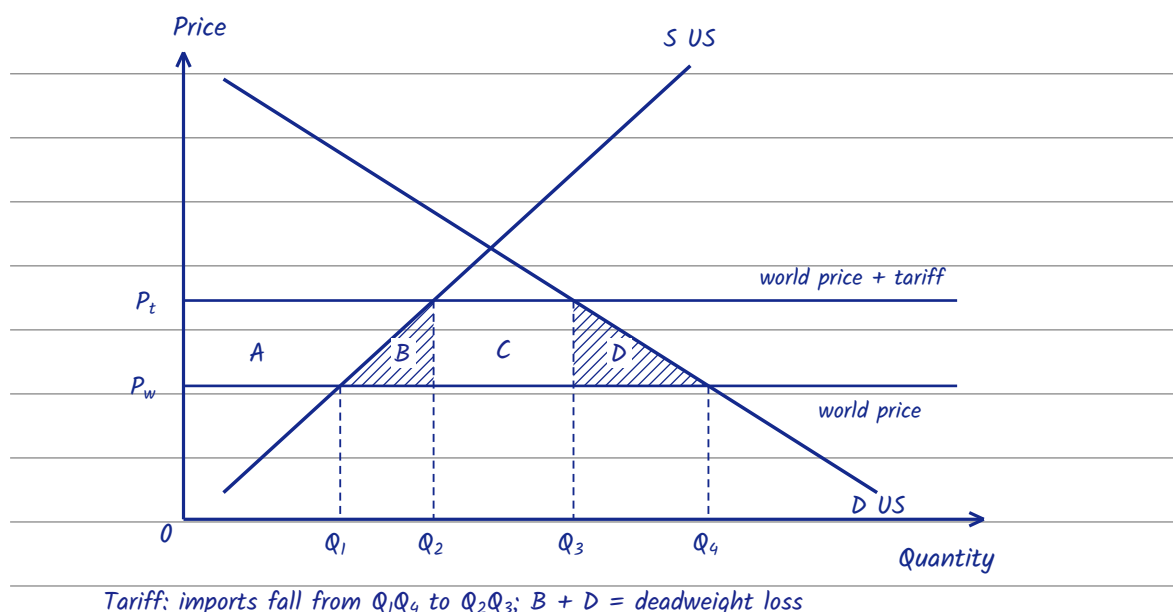
Reduce the value of the dollar. The Federal Reserve could cut interest rates, as President Trump demands, causing hot money outflows and lowering demand for dollars, or sell dollars and buy yuan on the forex market. A weaker dollar makes US exports more competitive and imports dearer, improving the current account.

However, the Fed is independent and targets inflation, and with strong growth a rate cut may be inflationary. Intervention only works if the Marshall-Lerner condition is met, and McEvoy says it would be difficult to influence the yuan by buying it, since China controls its currency and holds substantial foreign exchange reserves. China may simply respond, starting a currency war of competitive devaluations, which would increase volatility in forex markets.

Subsidies to US firms. Mirroring Chinese subsidies would reduce US firms' costs and make them more competitive. But subsidies have an opportunity cost, increase the budget deficit, may protect inefficient firms and also breach WTO rules.

Restricting investment. Prohibiting US financial institutions from investing in Chinese equity and bond markets, or banning trade with firms such as Huawei, would make it harder for Chinese firms to raise finance and put pressure on Beijing. It would also reduce demand for yuan, however, causing it to fall further, and US investors lose profitable opportunities.

Raise tariffs from 10% to at least 25%. A tariff raises the price of Chinese imports from P_w to P_t , as the diagram shows: US consumption contracts from Q_4 to Q_3 , domestic production rises from Q_1 to Q_2 , so imports fall from Q_1Q_4 to Q_2Q_3 , protecting US jobs and raising revenue (area C).



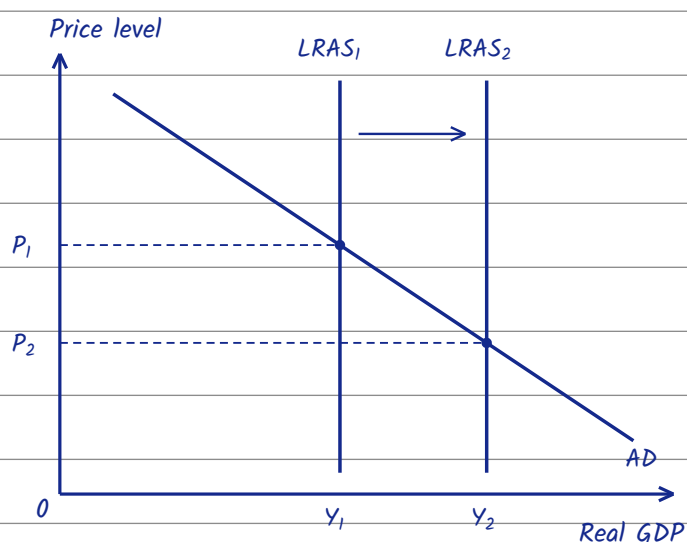
However, consumers lose consumer surplus and there is a deadweight welfare loss of $B + D$. Higher import prices are inflationary and raise costs for firms that use Chinese components. China is likely to retaliate with tariffs on US exports such as soybeans, escalating the trade war, and the tariff breaks WTO rules. If the yuan keeps falling, it may offset the tariff.

Negotiate a free trade agreement. Engaging with China to agree a mutually beneficial deal could reduce trade barriers on both sides, allowing gains from specialisation according to comparative advantage and ending the uncertainty, though negotiations take time and require concessions, and political tensions after naming China a currency manipulator make agreement harder.

Evaluation. The effectiveness depends on the cause of the fall: if McEvoy is right that it is mainly due to strong US growth and higher interest rates, then retaliating against 'manipulation' targets the wrong problem. Protectionist measures are quick but risk retaliation and higher prices, harming the US in the long run, as with the 1930s trade wars. Overall, negotiating a trade agreement is the best long-term option, since it addresses the underlying trade dispute and avoids a damaging currency and trade war, with targeted support for the most affected US industries in the short run.

economies through the growth of international trade, flows of capital (FDI and portfolio investment), migration of labour and the spread of ideas, technology and culture. It has been driven by falling transport costs (containerisation), improvements in ICT, trade liberalisation through the WTO and trading blocs, the growth of multinational corporations (MNCs) and the opening up of China and Eastern Europe. The critics argue it harms both more developed (MDCs) and less developed countries (LDCs).

Benefits to consumers. Globalisation allows countries to specialise according to comparative advantage and trade, raising world output. Consumers in both MDCs and LDCs have access to a wider range of goods at lower prices: greater competition from low-cost producers has lowered prices in MDCs, increasing consumer surplus and real incomes. Lower prices have kept inflation low, which in turn has helped keep interest rates lower than they would otherwise have been. As the diagram shows, specialisation, FDI and the spread of technology increase productive capacity, shifting LRAS to the right, raising real GDP from Y_1 to Y_2 while reducing the price level from P_1 to P_2 .



Benefits to firms. Larger global markets allow firms to grow and benefit from economies of scale, lowering average costs and prices. Firms can off-shore production to low-wage countries, reducing costs and raising profit margins, which can be reinvested. Globalisation of financial markets gives firms and

consumers access to more sources of funds at lower interest rates, encouraging investment and consumption.

Benefits to LDCs. FDI by MNCs has created jobs, growth and tax revenues in LDCs, filling the savings gap and transferring technology, skills and management practices. China, Vietnam and Bangladesh have grown rapidly through export-led growth, and the World Bank estimates extreme poverty fell from around 36% of the world's population in 1990 to about 10% in 2015. Economic migrants earn higher wages and send remittances home, a larger flow than official aid, and the spread of ideas and business practices increases productivity.

Benefits to MDCs and governments. Immigration fills skill shortages and vacancies that citizens do not want, keeping wage rates and cost-push inflation down. FDI also creates jobs in MDCs, such as Nissan in Sunderland.

Governments gain tax revenues from higher growth. There are cultural benefits too, as more people travel and experience other cultures, increasing cultural diversity.

The case that globalisation has been bad. In MDCs, manufacturing firms that cannot compete with low-wage countries have closed, for example in the US Rust Belt and northern England, causing structural unemployment and lower growth in those regions. Off-shoring and migration have moved jobs abroad and may depress the wages of unskilled workers. The share of GDP going to capital has risen relative to labour, increasing income and wealth inequality within and between nations, with gains concentrated among owners of capital and the highly skilled. This has weakened social cohesion and contributed to the rise of populist and far-right parties, Brexit and the US-China trade war.

In LDCs, MNCs may exploit low-paid workers in poor conditions, as the 2013 Rana Plaza collapse in Bangladesh showed, and may repatriate profits rather than reinvest them. Many countries, especially in sub-Saharan Africa, remain dependent on primary commodities with volatile prices and declining terms of trade, and infant industries struggle against foreign competition. Emigration of skilled workers causes a brain drain, reducing human capital.

Globalisation has also created large trade imbalances, such as China's surplus and the US deficit, which promote instability, and has spread economic problems rapidly between countries: the credit crunch began in the US sub-prime market in 2007 but quickly spread to the UK and the rest of the world. Diseases such as coronavirus spread quickly through global travel. Governments have less control over their macroeconomy, since it is difficult to set tax or interest rates very different from trading partners, and MNCs use transfer pricing and tax havens to off-shore profits and avoid tax, reducing government revenue for public services. Shipping goods thousands of miles adds to carbon emissions and the destruction of fragile ecosystems, such as deforestation for palm oil. Finally, cultural imperialism and the spread of American brands may reduce cultural identity.

Evaluation. Whether globalisation has been bad depends on which groups are considered. Consumers and owners of capital in MDCs, and workers in fast-growing Asian LDCs, have gained greatly, while unskilled workers in MDCs and many of the poorest LDCs have gained little or lost. It depends on the time period: the costs of structural change are concentrated in the short run, while gains in efficiency and growth emerge in the long run. It also depends on government policy: countries that invested in education, retraining and infrastructure, or used welfare systems to compensate the losers, captured the benefits, while countries with weak institutions did not. Many of the problems, such as environmental damage and tax avoidance, are negative externalities and market failures that could be corrected by international cooperation, for example carbon taxes and the OECD's 15% global minimum corporation tax, rather than by reversing globalisation. The magnitude matters too: most studies find the aggregate gains from trade exceed the losses, so the winners could compensate the losers.

In conclusion, the view that globalisation has been bad for both MDCs and LDCs is not supported overall. It has raised world output, reduced global poverty substantially and given consumers lower prices and greater choice. However, the

Question
number

gains have been unevenly distributed, and globalisation has increased inequality, instability and environmental damage. The problem is not globalisation itself but the failure to manage it, so governments should use policies to share the gains more fairly and protect the environment.