Cambridge Assessment International Education

Cambridge International AS & A Level

ECONOMICS **9708/22**

Paper 2 Data Response and Essay **February/March 2022**

1 hour 30 minutes

0481538977

You must answer on the enclosed answer booklet.

You will need: Answer booklet (enclosed)

INSTRUCTIONS

- Answer **two** questions in total:
  - Section A: answer Question 1.
  - Section B: 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 40.
- 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 this question.

1 Aspects of Turkey's macroeconomic performance and monetary policy

Figs 1.1,1.2 and 1.3 show aspects of Turkey's macroeconomic performance for the period August 2019 to April 2020.

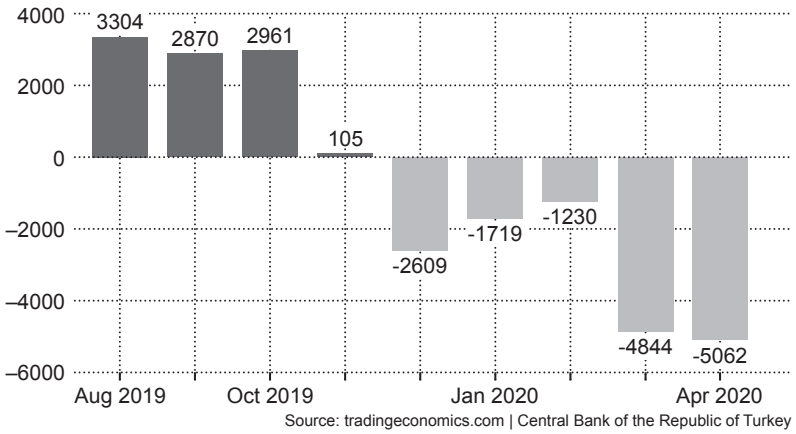


Fig. 1.1: Turkey Current Account Balance (US$m), August 2019 to April 2020

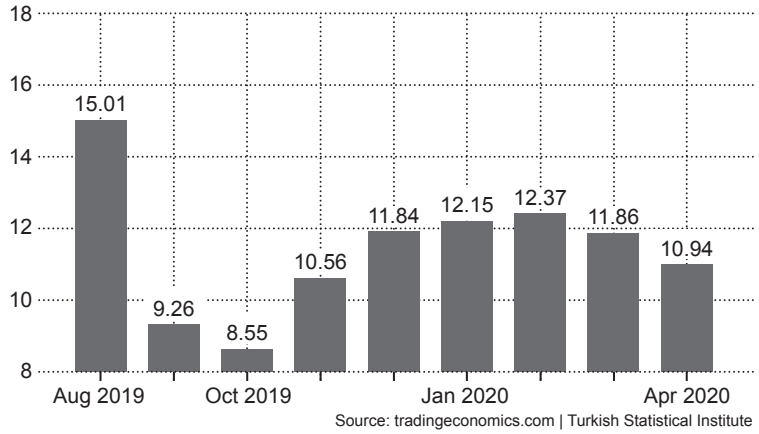


Fig. 1.2: Turkey annual inflation rate (%) each month, August 2019 to April 2020

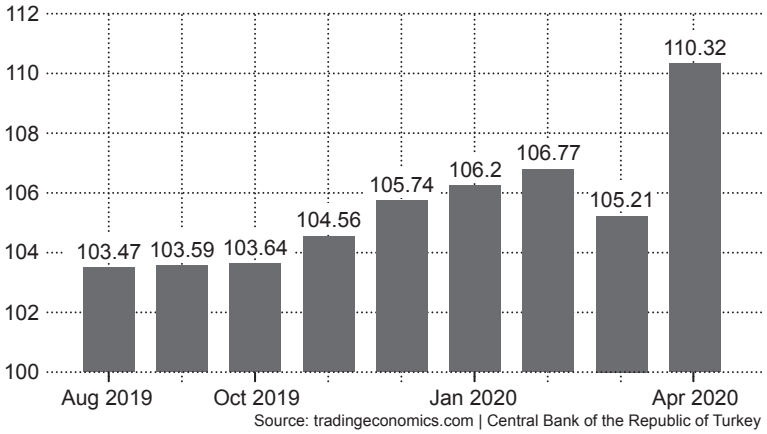


Fig. 1.3: Turkey Terms of Trade, August 2019 to April 2020

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Turkey's central bank expected to cut interest rates for 10th time in a row

Turkey's central bank is expected to approve a further reduction in interest rates. Most economists predict that interest rates will fall. However, some wonder whether rates will continue to fall or whether the bank may soon need to raise them to reduce inflation. Turkey's central bank has cut the interest rate from 24% in July 2019. It is now expected that the rate will be cut to 8%.

Annual consumer price inflation was 8.6% in October 2019 and is now 11.4%, reducing the international competitiveness of Turkey's goods and services. This means that if the rate of interest is cut to 8%, the real interest rate will be negative.

The real interest rate in Turkey, calculated by subtracting annual inflation, is among the lowest in the world. It is negative at –3.4% compared with –0.6% in the Euro area and –0.3% in South Africa. The negative rate in Turkey discourages foreign investors from lending to the Turkish government, potentially affecting the value of Turkey's currency, the lira. The currency fell to a record low of 7.3 per US dollar in early May, mainly due to concerns over the level of interest rates.

Analysts differ over whether the expected interest rate cut will be the central bank's last or whether it will continue to reduce borrowing costs. Some think it will generate inflation as the economy recovers from the impact of the COVID-19 pandemic. However, others are suggesting that the bank may continue to cut the interest rate because the Turkish government appears determined to do everything it can to speed up the economic recovery.

Source: Ahval, *25 June 2020*

(a) With reference to Fig 1.1 describe how Turkey's current account balance has changed between August 2019 and April 2020. [2]

(b) How could the data in Fig 1.2 be used to explain the changes in the terms of trade between August 2019 and April 2020 as shown in Fig 1.3? [2]

(c) 'Consumer price inflation was 8.6% per annum in October 2019 and is now 11.4%, reducing the international competitiveness of Turkey's goods and services.'

Explain, using the concept of price elasticity of demand, how the increase in inflation has caused the change in Turkey's current account of the balance of payments between October 2019 and April 2020 as shown in Fig 1.1. [4]

(d) Explain how a negative real rate of interest in Turkey will affect the function of money as

(i) a standard of deferred payment. [3]

(ii) a store of value. [3]

(e) Discuss, with the help of an aggregate demand and aggregate supply diagram, whether further cuts in Turkey's interest rate are likely to 'generate inflation' or 'speed up the economic recovery'. [6]

Section B

Answer **one** question.

2 **(a)** Explain with the help of a production possibility curve diagram(s) how a decision to re-allocate resources in an economy to produce more capital goods and fewer consumer goods would affect consumers in both the short run and the long run. [8]

(b) Discuss whether the transition from a planned economy to a market economy will always benefit consumers. [12]

3 **(a)** Use examples to explain why the supply of some products is price elastic and the supply of other products is price inelastic. [8]

(b) Discuss the ways in which fiscal policy can be used to increase the aggregate supply of products in an economy and consider whether this approach is likely to be effective. [12]

4 An economy is facing the shutdown of its steel making industry as a result of cheap imports.

(a) Explain what is meant by 'protectionism' and describe **two** ways in which this steel industry could be protected. [8]

(b) Discuss the advantages and disadvantages of protecting an industry such as steel and consider whether the protection will be of overall benefit to this economy. [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

1(a) Turkey's current account changed from a surplus to a deficit. It was in surplus of US$3304m in August 2019 (and still US$105m in November 2019), but it moved into deficit from December 2019 and the deficit widened to US$5062m by April 2020.

1(b) Fig 1.2 shows that inflation in Turkey stayed high (between 8.55% and 15.01%), so the prices of Turkey's exports were rising. The terms of trade = (index of export prices ÷ index of import prices) × 100. If Turkey's export prices rose faster than its import prices, the terms of trade index rises, as shown in Fig 1.3 by the rise from 103.47 in August 2019 to 110.32 in April 2020.

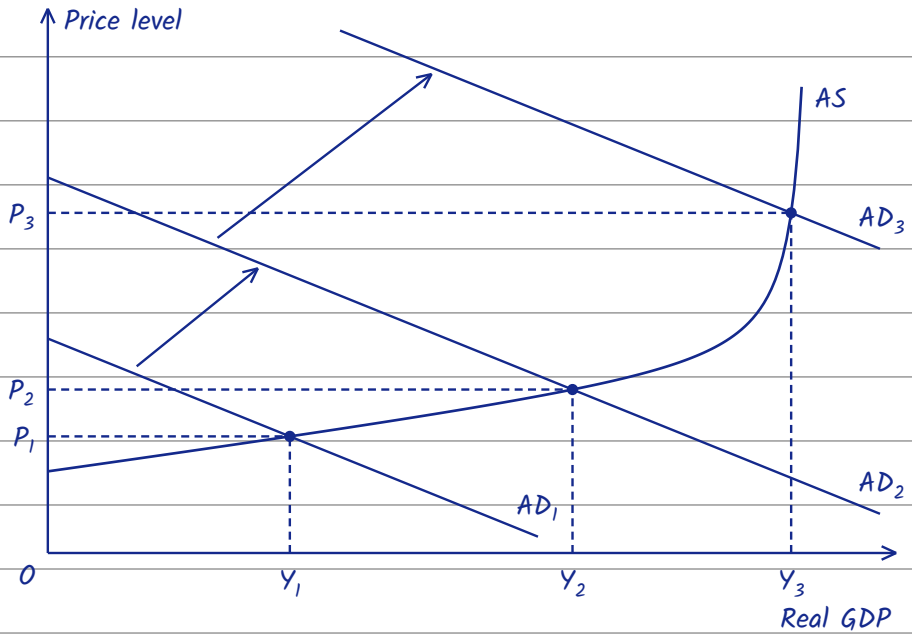
1(c) Price elasticity of demand (PED) measures the responsiveness of quantity demanded to a change in price: PED = % change in quantity demanded ÷ % change in price.

Inflation rose from 8.6% to 11.4%, and the rising terms of trade show that Turkey's export prices rose by more than its import prices. If foreign demand for Turkey's exports is price elastic (PED > 1), the % fall in the quantity of exports is greater than the % rise in their price, so export revenue falls. At the same time imports become relatively cheaper; if Turkish demand for imports is price elastic, the quantity of imports rises by more than their relative price falls, so spending on imports rises.

Under the Marshall-Lerner condition, if the sum of the PEDs for exports and imports is greater than 1, this relative price change worsens the current account. This explains the move from a surplus of US$2961m in October 2019 to a deficit of US$5062m in April 2020.

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1(d)(i)	As a standard of deferred payment, money is the unit in which debts and future payments are agreed and settled, eg a loan repaid later. With a negative real interest rate (8% – 11.4% = –3.4%), borrowers gain: they repay less in real terms than they borrowed, because inflation reduces the value of the lira they repay by more than the interest charged. Lenders lose, so they become less willing to agree loans or deferred payments in lira, which weakens this function.
1(d)(ii)	As a store of value, money can be held to buy goods and services in the future, keeping its purchasing power over time. With a real interest rate of –3.4%, savers holding lira lose about 3.4% of the purchasing power of their savings each year in real terms, even after interest. Money becomes a poor store of value, so people may switch to holding US dollars, gold or property instead.
1(e)	A cut in the interest rate reduces the cost of borrowing and the reward for saving, so consumption (especially of durables on credit) and investment rise. It also tends to make the lira depreciate (it fell to a record 7.3 per US$), making exports cheaper and imports dearer, so net exports rise. Aggregate demand therefore shifts to the right. In the diagram below, if the economy has a lot of spare capacity, as after the COVID-19 pandemic, AD shifts from AD1 to AD2: real GDP rises a lot, from Y1 to Y2, while the price level rises only slightly from P1 to P2. The cut speeds up the recovery. However, if the economy is close to full capacity, a shift from AD2 to AD3 mainly raises the price level from P2 to P3 with little extra output (Y2 to Y3), so it generates inflation.

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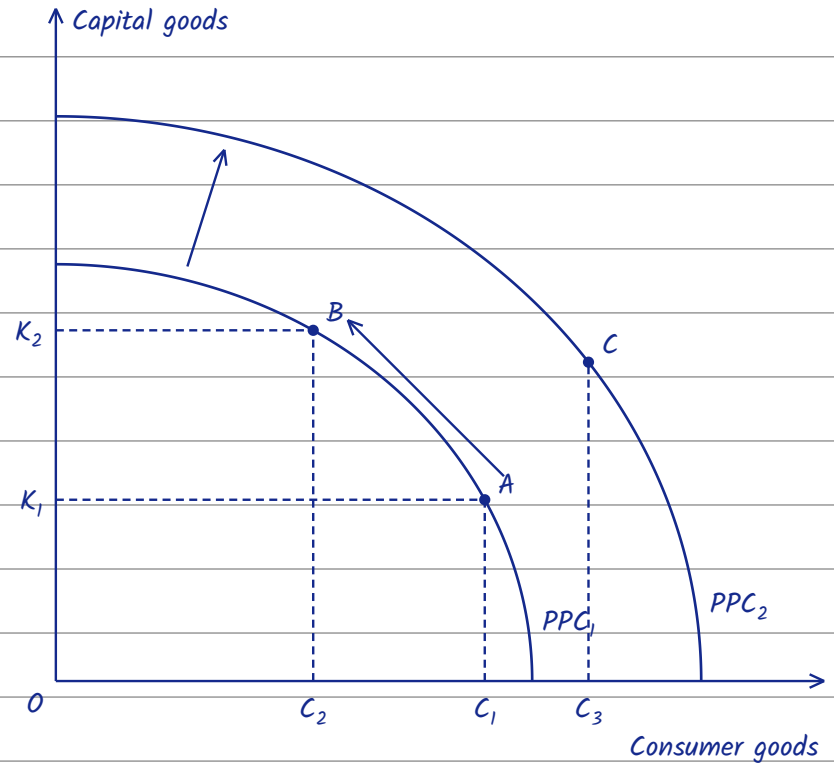


The outcome depends on several things. Turkey already has inflation of around 11% to 12% and a negative real interest rate, and a weaker lira raises import prices, adding cost-push inflation even with spare capacity. On the other hand, if confidence is low after the pandemic, households and firms may not borrow even at lower rates, and the rate has already fallen from 24% to 8%, so a further cut may have only a small effect, and only after a time lag.

Overall, while there is spare capacity a further cut is more likely to speed up the recovery in the short run, but because inflation is already high and the lira is weak, it is likely to generate inflation as well, and increasingly so as the economy approaches full capacity.

2(a) A production possibility curve (PPC) shows the maximum combinations of two types of goods an economy can produce when all its resources are fully and efficiently employed, with a given state of technology. Capital goods (machinery, factories, infrastructure) are used to produce other goods, while consumer goods are bought by households for their own satisfaction.

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Short run: the decision moves the economy along PPC1 from A to B. Capital goods output rises from K1 to K2, but consumer goods output falls from C1 to C2. The fall in consumer goods is the opportunity cost. Consumers have fewer goods and services available, so they have less choice, and the reduced supply may push up prices. Current consumption and living standards fall.

Long run: the extra capital goods increase the economy's productive capacity. More and better machinery raises the productivity of labour, so the PPC shifts outwards from PPC1 to PPC2. The economy can now produce at a point such as C, with more consumer goods (C3) than before the reallocation (C1), as well as more capital goods. Consumers gain more choice, lower prices as costs fall, and higher living standards.

So consumers make a sacrifice in the short run in return for higher consumption in the long run, provided the capital goods are used productively.

2(b) In a planned economy the state owns resources and decides what, how and for whom to produce. In a market economy these decisions are made by the price

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mechanism, through the interaction of consumers and private firms.

The transition can benefit consumers. In a market economy there is consumer sovereignty: consumers' spending signals what they want, and rising prices give firms the incentive to supply it, so resources move to the goods consumers value. Planners lack information, so planned economies often had shortages, queues and surpluses of unwanted goods. Competition and the profit motive also give firms an incentive to cut costs, innovate and improve quality, so consumers gain more choice, better products and lower prices.

However, the transition can harm consumers. Market prices replace state-controlled prices, so prices of basic goods such as food, energy and housing may rise sharply, and price liberalisation has often caused high inflation. Privatised industries may become private monopolies that restrict output and raise prices. The market will not provide public goods because of the free rider problem, and with imperfect information merit goods such as healthcare and education are underconsumed while demerit goods are overconsumed. Income is distributed by the market, so inequality rises and poorer consumers may be unable to afford essentials, while unemployment rises as inefficient state firms close.

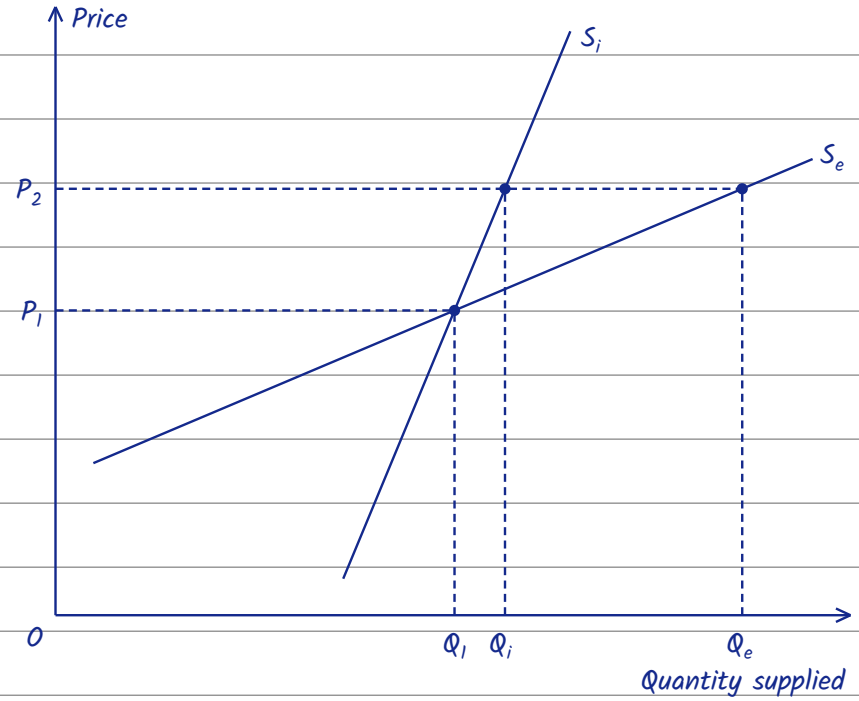
So the transition will not always benefit consumers. It depends on the speed of transition: rapid 'shock therapy' can cause inflation and unemployment in the short run, while a gradual transition gives time to adjust. It depends on whether competition is created and regulated, because a private monopoly may be no better than a state one. It also depends on whether the government keeps a role, providing public goods, subsidising merit goods and giving a safety net, which is a mixed economy rather than a pure market. It also differs between consumers: higher income consumers usually gain more choice, while poorer groups such as pensioners on fixed incomes may lose.

In conclusion, the transition is likely to benefit most consumers in the long run through greater choice, quality and efficiency, but it will not always do so,

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especially in the short run and for low income consumers, unless the government regulates markets and corrects market failures.

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



The diagram shows that for the same rise in price from P1 to P2, quantity supplied rises a lot to Qe with elastic supply (Se) but only a little to Qi with inelastic supply (Si).

Manufactured goods such as T-shirts or plastic toys usually have price elastic supply. One reason is that they can be stored: firms hold stocks of finished goods, so when price rises they can release them onto the market quickly. Another is that firms often have spare capacity and the factors of production (unskilled labour, widely available materials) are mobile, so output can be increased quickly and cheaply.

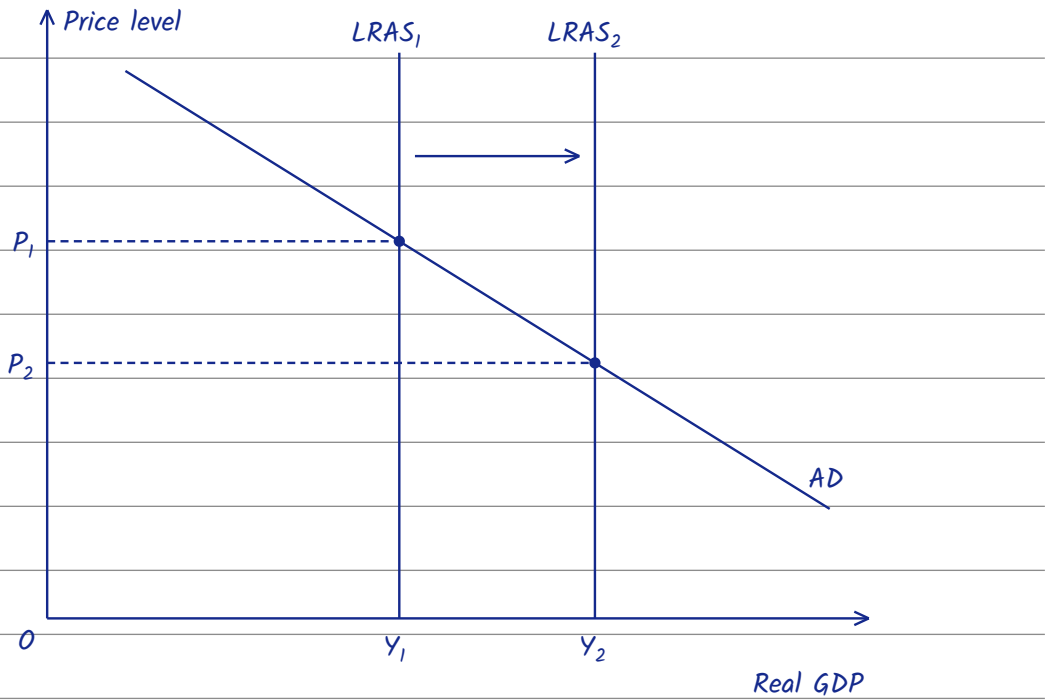
Agricultural products such as coffee or wheat usually have price inelastic supply, at

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least in the short run. The main reason is the length of the production period: crops take months (or years for coffee trees) to grow, so after a price rise farmers cannot quickly increase the quantity supplied. Products such as fresh fruit are also perishable, so stocks cannot be held. Similarly, the supply of highly skilled services such as surgeons is inelastic because training takes many years and the factors are immobile.

Time also matters: supply becomes more elastic in the long run as firms can expand capacity.

3(b) Fiscal policy is the use of government spending and taxation to influence the economy. Aggregate supply (AS) is the total output that producers are willing and able to supply at each price level; supply-side fiscal measures aim to shift the long run aggregate supply (LRAS) curve to the right.



Taxation: cutting income tax increases the reward from working, so more people enter the labour force and work longer hours. Cutting corporation tax raises post-tax profits, giving firms more funds and an incentive to invest in new capital, and tax allowances can encourage training and research and development. The

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quantity and productivity of resources rise, so LRAS shifts from LRAS1 to LRAS2, real GDP rises from Y1 to Y2 and the price level falls from P1 to P2. However, a tax cut may not work: people may prefer more leisure (the income effect), firms may pay higher dividends rather than invest, and lower tax revenue may increase the budget deficit.

Government spending: spending on education and training improves labour skills and productivity; spending on infrastructure such as roads, ports and broadband cuts firms' costs; and subsidies for research and development encourage innovation. All of these increase productive capacity. The difficulties are the opportunity cost and the budget deficit, and long time lags: an education programme may take ten years to raise productivity.

Whether fiscal policy is effective depends on several things. Higher spending and lower taxes also raise AD, so if the economy is near full capacity there may be demand-pull inflation before the extra capacity arrives. Effectiveness depends on how well the spending is targeted (government failure may lead to wasted projects), on how responsive workers and firms are to tax incentives, and on the state of public finances: a highly indebted government may not be able to afford it. Supply-side fiscal policy is also slow compared with demand-side measures.

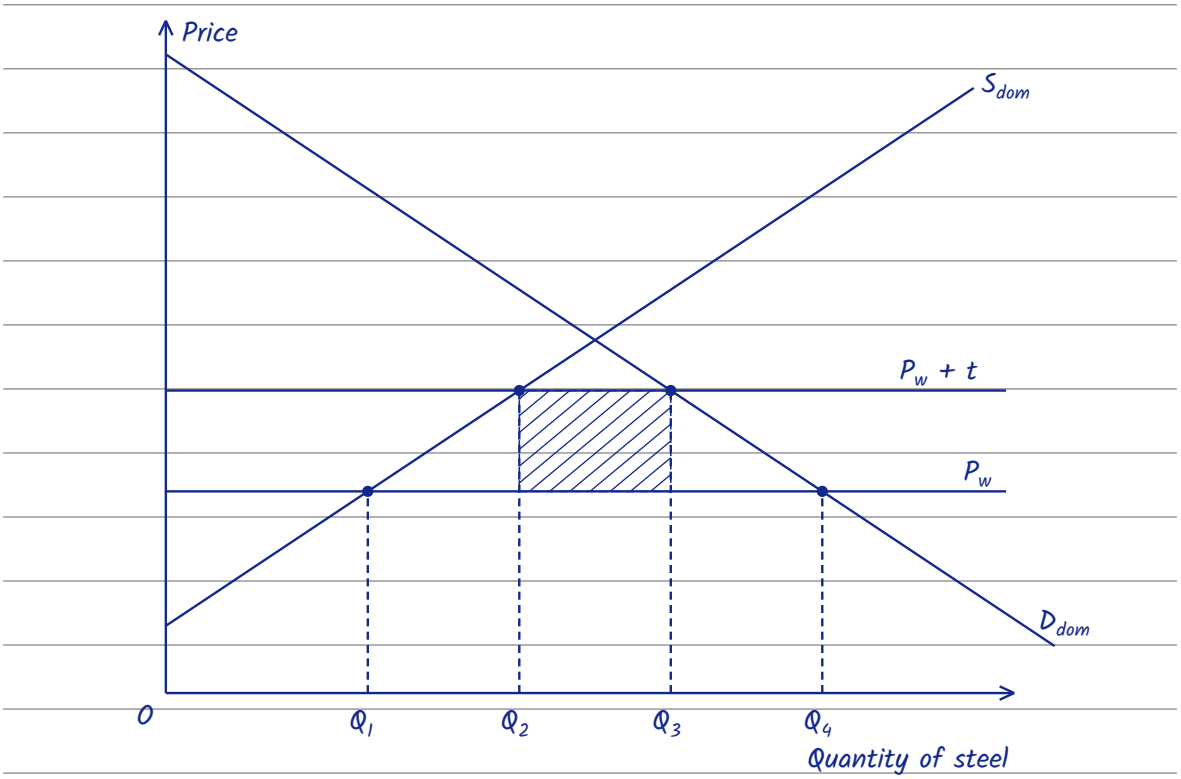
In conclusion, fiscal policy can increase aggregate supply, and well targeted spending on education and infrastructure is likely to be effective in the long run, but tax cuts are less certain, and the approach works only slowly and at a significant budgetary cost.

4(a)

Protectionism is the use of government measures to restrict free trade, in order to give domestic industries an advantage over foreign competitors, for example by raising the price of imports or limiting their quantity so that domestic producers become more price competitive.

One method is a tariff, a tax on imported steel.

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Before the tariff, steel is imported at the world price Pw: domestic firms supply Q1 and imports are Q1Q4. A tariff raises the price of imports to Pw + t. Domestic consumers buy less (Q3) and domestic steel firms can now sell more, Q2, at the higher price, so imports fall to Q2Q3. Domestic firms gain revenue and output, which protects jobs, and the government gains the tariff revenue shown by the hatched area.

A second method is an import quota, a physical limit on the quantity of steel that can be imported, eg 1 million tonnes a year. Once the quota is filled, any further demand must be met by domestic producers. The reduced supply of imports also raises the price of steel in the domestic market, so domestic firms can sell more steel at a higher price without being undercut by cheap foreign imports, keeping the industry open. Unlike a tariff, a quota gives certainty about the maximum level of imports.

4(b) Protecting the steel industry has advantages. It protects employment: steel plants are often concentrated in one region, so a shutdown would cause structural

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unemployment and a negative multiplier effect on local businesses. If the cheap imports are the result of dumping (selling below cost, often with foreign government subsidies), protection corrects unfair competition. Steel may also be a strategic industry needed for defence and infrastructure, so self-sufficiency is valuable. Fewer imports also improve the current account, and a tariff raises government revenue. If domestic steel firms are modernising, an infant (or 'sunset') industry argument can justify temporary protection.

There are also disadvantages. Consumers and steel-using industries such as car makers and construction pay higher prices, as shown by the tariff diagram in 4(a), which raises their costs and makes them less competitive, so jobs may be lost in those industries instead. Protection distorts comparative advantage: resources stay in inefficient steel production instead of moving to their most efficient use, causing a deadweight welfare loss. Protected firms face less competition, so they have little incentive to cut costs or innovate. Trading partners may retaliate with their own tariffs, hurting the economy's exporters, and protection may break WTO rules.

Whether protection is of overall benefit depends on why imports are cheap. If foreign producers are dumping, temporary anti-dumping duties are justified and beneficial. If foreign producers are simply more efficient, protection merely delays an inevitable decline at a cost to consumers. It also depends on the size of the industry and the number of jobs involved compared with the number employed in steel-using industries, on whether other countries retaliate, and on whether the protection is temporary and linked to the industry becoming more efficient. Alternatives such as retraining workers may help the economy more.

In conclusion, protection is likely to benefit the economy overall only if it is temporary, targeted at unfair competition such as dumping, and used to give the industry time to become competitive; long term protection of an inefficient industry is likely to cost the economy more than it gains.