Please check the examination details below before entering your candidate information

Candidate surname	Other names
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Pearson Edexcel Level 3 GCE

Centre Number	Candidate Number

Monday 8 June 2020

Morning (Time: 2 hours)	Paper Reference **9EC0/03**

Economics A

Advanced

Paper 3: Microeconomics and Macroeconomics

You do not need any other materials.

Total Marks

Instructions

- Use **black** ink or ball-point pen.
- **Fill in the boxes** at the top of this page with your name, centre number and candidate number.
- There are two sections in this question paper.
- In Section A, answer **all** questions 1(a) to 1(c) and **one** question from 1(d) or 1(e).
- In Section B, answer **all** questions 2(a) to 2(c) and **one** question from 2(d) or 2(e).
- Answer the questions in the spaces provided
  – *there may be more space than you need.*

Information

- The total mark for this paper is 100.
- The marks for **each** question are shown in brackets
  – *use this as a guide as to how much time to spend on each question.*
- Calculators may be used.

Advice

- Read each question carefully before you start to answer it.
- Check your answers if you have time at the end.

Turn over ▶

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SECTION A

Read Figures 1 and 2 and the following extracts (A, B and C) before answering Question 1.

Answer ALL Questions 1(a) to 1(c), and EITHER Question 1(d) OR 1(e).

Write your answers in the spaces provided.

You are advised to spend 1 hour on this section.

Question 1

Turkey – an emerging economy

Figure 1: Turkey's central bank lending rate, percent, 2013–2018

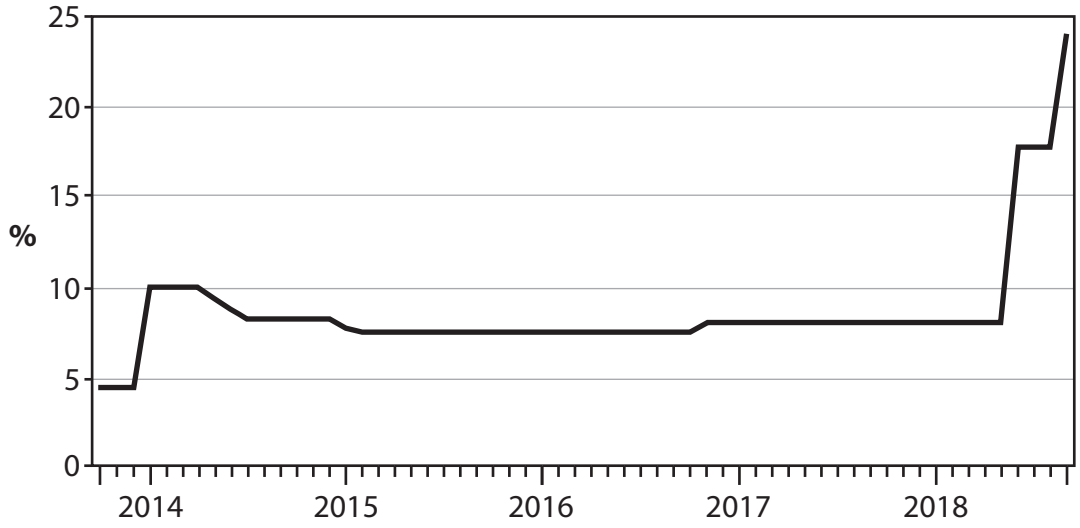
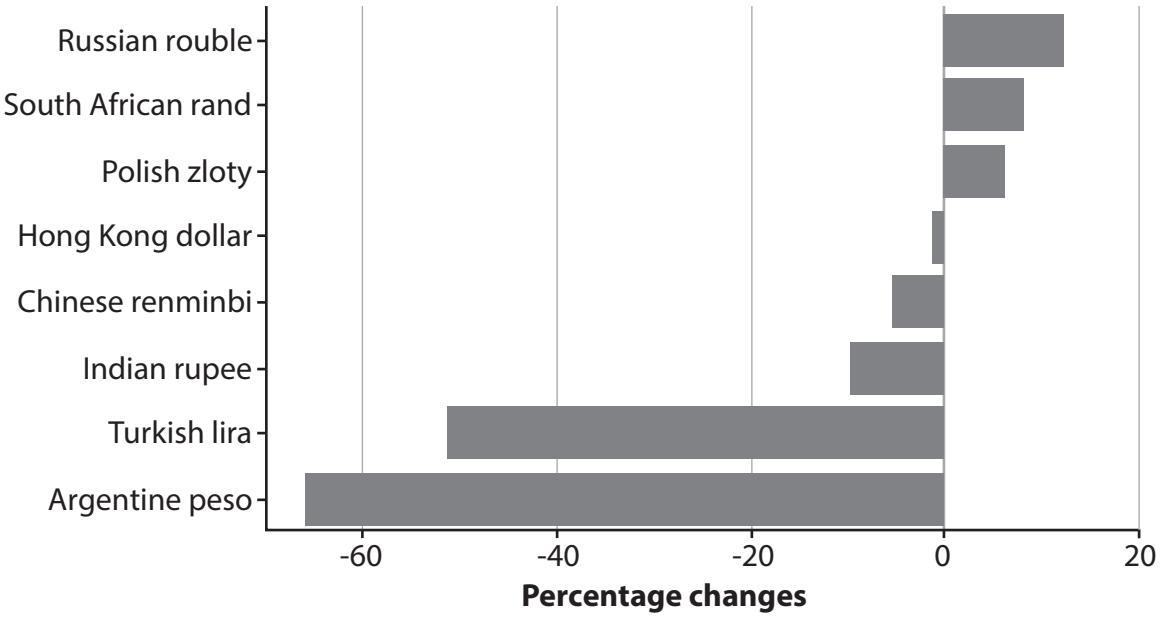


Figure 2: Selected emerging economy exchange rates, percentage change against the US dollar: January 2018 compared to January 2016.



(Source adapted from: FT.com)

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Extract A

Can Turkey's central bank avoid another rate rise?

At an annual rate of 25%, Turkey's inflation is alarming. However, it may have peaked. This may be a turning point for the economically struggling country, whose currency (the Turkish lira) has lost nearly a third of its value against the US dollar in 2018. The central bank may be able to avoid tightening monetary policy further, as a severe economic adjustment is already well under way. Turkey is highly indebted in foreign currency. The Turkish government takes measures against excessive appreciation or depreciation of the Turkish lira to reduce financial stability risks. The financial market faces difficulties in trying to restore foreign investors' confidence.

Consumer prices increased by 2.7% in October 2018, a much lower rate than the 6.3% recorded in September 2018. The lira has stabilised, having risen 16% since the central bank raised interest rates by 6.25 percentage points. However, the government wants lower borrowing costs to fuel credit growth and economic expansion. Timothy Ash at a London investment bank says at this point it's "illogical" to raise interest rates again in Turkey. That's because Turkey's economy is already experiencing a severe slowdown.

In the long term Turkey's economic growth is expected to be above that of other emerging markets such as Brazil, Russia and China. Turkey's private sector is resilient. Between 2018–50 we expect Turkey to grow by an annual average of 3.1%. Brazil is expected to grow by an annual average of 2.1%, Russia by 1.6% and China by 2.8%. GDP growth will nevertheless be well below that recorded in 2004–07 and 2010–15. Average growth in GDP per head will be substantially lower, mainly reflecting the expected rise in the total population.

(Source adapted from: https://ftalphaville.ft.com/2018/11/06/1541508141000/Can-Turkey-s-central-bank-avoid-another-rate-hike-/. 6 Nov 2018 Colby Smith
and one sentence The president wants lower borrowing costs to fuel credit growth and economic expansion from https://www.theguardian.com/world/2018/aug/07/turkey-urged-to-announce-emergency-interest-rate-hike Larry Elliott 7/8/18 and
http://country.eiu.com/article.aspx?articleid=157174199&Country=Turkey&topic=Economy&subtopic=Long-term+outlook&subsubtopic=Summary)

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Extract B

Turkey aims to bin the plastic bag

You get a free plastic bag whenever you go to a shop, even if it is just to buy a loaf of bread or a chocolate bar. In Turkey, plastic bags are everywhere, with millions being thrown away, and their use is causing a growing environmental problem.

In Istanbul, the country's biggest city with about 12 million people, around 10 000 tonnes of waste are being collected every day. Plastic bags and other plastic waste make up 950 tonnes, or almost 10%, of the total waste.

The Turkish government said it was looking at ways to discourage the consumption of single-use plastic bags. One possible step currently under review is a ban of the black bags that are said to contain carcinogens. Another is that the state may raise taxes on plastic products, which could lead to supermarkets charging consumers for the bags. In Corlu, a town north-west of Istanbul, a local environmental group distributed 20 000 canvas bags to shoppers in one month. In some parts of Turkey, plastic bags are completely banned, with heavy fines for both firms and consumers who use them.

(Source adapted from: tseibert@thenational.ae
https://www.thenational.ae/world/europe/turkey-aims-to-bin-the-plastic-bag-1.530059 accessed 11/11/18)

Extract C

Istanbul's third airport set to be the busiest in the world

Istanbul's third airport is being constructed over an area of 76.5 million square metres, to the north of Istanbul. When complete, the new airport will have six runways and have an annual passenger capacity of up to 200 million people, making it potentially the world's busiest airport. "This airport is going to be the most important hub between Asia and Europe," said one business leader.

The airport design includes high vaulted ceilings and spacious, modern and efficient design – and its tulip-shaped air traffic control tower won the 2016 International Architecture Award. It uses mobile applications and artificial intelligence for customers, is energy efficient and has a high-tech security system. The site employs 36 000 people and is estimated to cost the equivalent of £10 billion. However, the rush to meet the deadline set by the Turkish government is a major cause of accidents on the construction site, according to the construction workers' union.

(Source adapted from: https://www.lonelyplanet.com/news/2018/08/08/istanbuls-huge-new-airport/ and
https://www.voanews.com/a/istanbul-to-unveil-new-airport-seeks-to-be-world-s-biggest/4632308.html)

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1 (a) Explain how the Turkish central bank intervenes in the currency market to prevent 'excessive appreciation or depreciation of the Turkish lira' (Extract A, lines 7–8).

(5)

(b) Examine **two** reasons why the Turkish government may want to avoid a significant fall in the exchange rate of the Turkish lira.

(8)

(c) Discuss the likely success of policies to reduce the consumption of single-use plastic bags in cities such as Istanbul.

(12)

EITHER

(d) Evaluate the likely microeconomic and macroeconomic effects of a rise in interest rates in Turkey.

(25)

OR

(e) Evaluate the microeconomic and macroeconomic impact of large infrastructure projects such as the building of a third airport in Istanbul.

(25)

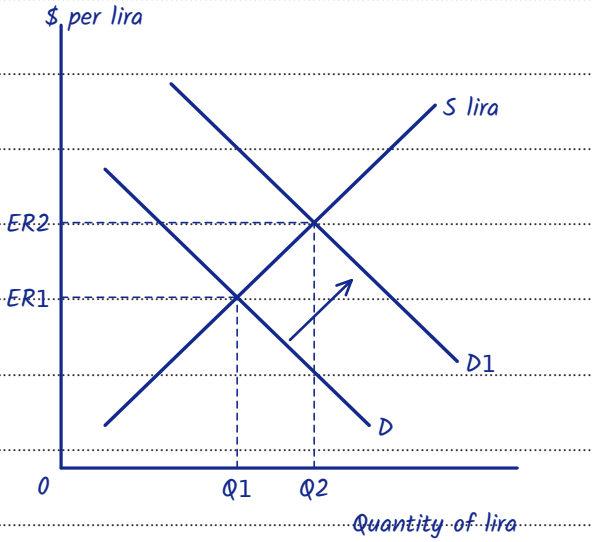
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1 (a) Explain how the Turkish central bank intervenes in the currency market to prevent 'excessive appreciation or depreciation of the Turkish lira' (Extract A, lines 7–8).

(5)

The central bank can intervene in two main ways. First, it can buy or sell foreign currency reserves. To prevent excessive depreciation it sells US dollars from its reserves and buys lira, which increases the demand for lira on the foreign exchange market, so the exchange rate rises. To prevent excessive appreciation it does the opposite, selling lira and buying dollars, which increases the supply of lira.

Second, it can change interest rates. Raising interest rates increases the return on lira deposits, attracting hot money inflows, so demand for lira shifts right from D to D1 in the diagram and the exchange rate rises from ER1 to ER2. Figure 1 shows the lending rate rising from about 8% to 24% in 2018, and Extract A says the lira has risen 16% since the central bank raised rates by 6.25 percentage points, after losing nearly a third of its value against the dollar in 2018. Cutting rates would cause hot money outflows and lower the exchange rate.



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(b) Examine **two** reasons why the Turkish government may want to avoid a significant fall in the exchange rate of the Turkish lira.

(8)

First, a significant fall in the lira causes cost-push inflation. A depreciation raises the lira price of imports such as oil, gas, raw materials and components, so firms' costs of production rise and they pass these on as higher prices, shifting SRAS to the left. Imported consumer goods also become dearer. Inflation in Turkey is already alarming at an annual rate of 25% (Extract A), and the lira fell by about 50% against the dollar between January 2016 and January 2018 (Figure 2), so a further fall would push inflation even higher, reduce real incomes and living standards and worsen the terms of trade, as export prices fall relative to import prices.

Second, a fall in the lira increases the burden of debt held in foreign currency. Extract A states that Turkey is highly indebted in foreign currency. If the lira falls by a third, Turkish firms, banks and the government need about 50% more lira to repay each dollar of debt and interest, so repayment costs rise sharply. Some firms may default, banks face bad loans and there is a risk of financial instability, which is why the government acts against excessive depreciation 'to reduce financial stability risks'. This also damages foreign investors' confidence, which the financial market is already struggling to restore, so FDI and hot money flow out, reducing investment and shifting AD to the left, which could push the lira down even further.

However, inflation may have peaked: monthly price rises fell from 6.3% in September to 2.7% in October 2018, so a fall in the lira may be less damaging to inflation than feared. A weaker lira also brings benefits: exports and tourism become more price competitive, which could support export-led growth and jobs while the economy is in a severe slowdown, and in the long run the current account should improve if the Marshall-Lerner condition holds, although the J-curve means it may first worsen. On balance, with inflation at 25% and heavy foreign currency debt, the risks of a large

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fall outweigh the benefits.

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(c) Discuss the likely success of policies to reduce the consumption of single-use plastic bags in cities such as Istanbul.

(12)

Single-use plastic bags create negative externalities: waste, litter and pollution impose external costs on third parties, so the marginal social cost exceeds the marginal private cost and bags are over-consumed. In Istanbul plastic makes up 950 tonnes, or almost 10%, of the 10,000 tonnes of waste collected every day (Extract B). Because shops give bags away free, the price is zero and consumption is very high.

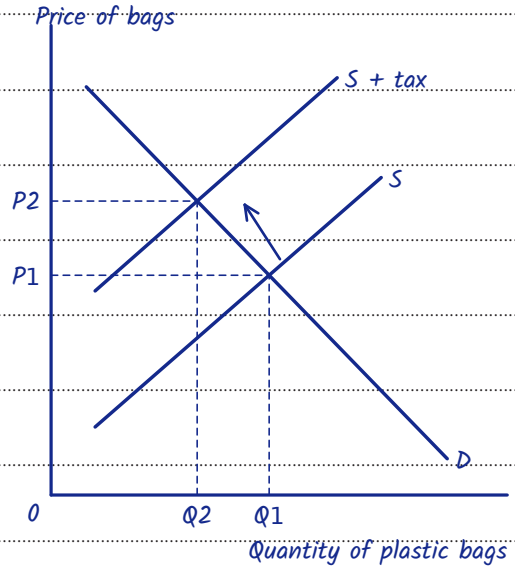
One policy is an indirect tax on plastic products, which could lead supermarkets to charge for bags. As the diagram shows, a specific tax shifts supply from S to S + tax, so the price rises from P1 to P2 and consumption falls from Q1 to Q2, internalising the externality and moving towards the socially optimal level. The tax revenue could fund recycling or clean-ups. Even a small charge can have a large effect: when the UK introduced a 5p charge, use of bags in large supermarkets fell by over 80%, because it changes habits and nudges consumers, a behavioural effect that is larger than the price alone suggests.

A second policy is regulation, such as a ban on the black bags said to contain carcinogens, or a complete ban with heavy fines for firms and consumers, as in some parts of Turkey. A ban limits supply directly, so consumption of these bags falls close to zero, and fines create a strong incentive to comply. A third policy is state provision of alternatives: in Corlu an environmental group distributed 20,000 canvas bags to shoppers in one month, reducing the need for single-use bags.

However, success is uncertain. Demand for bags may be price inelastic, as the charge is a tiny proportion of income and plastic bags are 'everywhere' and used out of habit, so consumption may fall only slightly from Q1 to Q2. A ban requires enforcement: in a city of about 12 million people with many small shops and street markets, monitoring is costly and fines may be evaded. In an emerging economy, charges are regressive and fall

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hardest on poorer households, which may make them politically unpopular. There are also unintended consequences: bags for life contain more plastic and are only better for the environment if reused many times, and people may simply buy bin liners instead. Giving away 20,000 canvas bags has an opportunity cost, so it may not be socially efficient. Finally, bags are only a small part of plastic waste.



Overall, a charge combined with a ban on the most harmful bags is likely to succeed in sharply reducing bag use, as in the UK, but it will only partly reduce Istanbul's wider plastic waste problem.

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EITHER

(d) Evaluate the likely microeconomic and macroeconomic effects of a rise in interest rates in Turkey.

(25)

OR

(e) Evaluate the microeconomic and macroeconomic impact of large infrastructure projects such as the building of a third airport in Istanbul.

(25)

Indicate which question you are answering by marking a cross in the box ☒. If you change your mind, put a line through the box ☒ and then indicate your new question with a cross ☒.

Chosen question number: **Question 1(d)** ☒ **Question 1(e)** ☒

Write your answer here:

Question 1(d)

Interest rates are the cost of borrowing and the reward for saving. Turkey's central bank lending rate rose from about 8% to 24% in 2018 (Figure 1), including a rise of 6.25 percentage points, in order to reduce inflation of 25% and stop the fall in the lira.

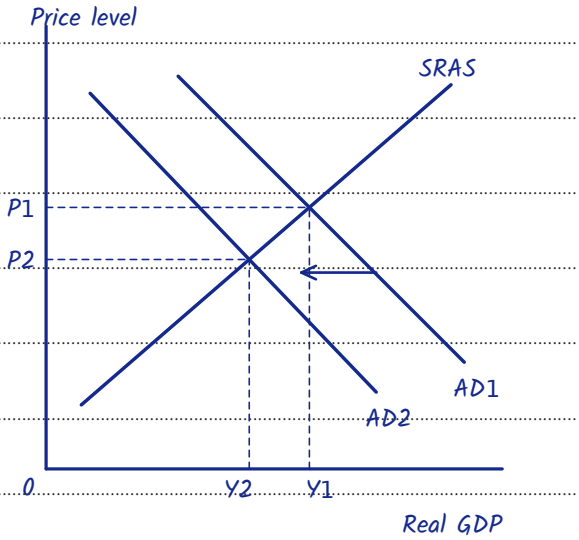
At a micro level, higher interest rates raise firms' costs. Interest on loans is a fixed cost for many firms, so average total costs rise and profits fall; highly indebted firms may make losses and shut down, especially as the economy is already in a severe slowdown. Firms also cut investment because fewer projects earn a return above the cost of borrowing, so there is less spending on R&D and new technology, reducing dynamic efficiency and future competitiveness. Consumers face higher repayments on credit cards, loans and variable-rate mortgages, so their disposable income falls, and saving becomes more attractive, so demand for normal goods and especially credit-financed durables such as cars and housing falls, shifting AR to the left for firms. House prices may fall as mortgages become more expensive.

At a macro level, lower consumption and investment shift AD to the left, from AD1 to AD2 in the diagram, and the negative multiplier means real GDP falls by more than

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the initial fall in spending, from Y1 to Y2, raising unemployment. The price level falls from P1 to P2, or in practice inflation slows, which is the main aim: there are signs this is working, as monthly price rises fell from 6.3% in September to 2.7% in October 2018. Higher rates attract hot money inflows, so the lira appreciates, and it has risen 16% since the rate rise. This reduces import prices, lowering cost-push inflation, and reduces the lira cost of repaying foreign currency debt, improving financial stability. However, a stronger lira makes exports less price competitive and imports cheaper, so the current account worsens and AD falls further.

Higher rates also redistribute income from borrowers to savers, and from younger households with debts to older households with savings. The government faces higher costs of servicing its debt, which has an opportunity cost: less can be spent on education, health care or infrastructure, or taxes must rise.



Higher interest rates also affect sectors unequally. Exporters suffer twice, from weaker demand at home and a stronger lira abroad, while importers benefit from cheaper inputs. In the housing market, higher mortgage costs reduce demand, so house prices and construction activity fall, causing a negative wealth effect that reduces consumption further. Banks may gain wider margins but face more bad debts as borrowers default. In the long run, lower investment means productive capacity grows more slowly, so LRAS shifts out less, which could reduce Turkey's expected long-term growth of 3.1% a year.

However, the size of these effects depends on several factors. Monetary policy is already very tight after a rise to 24%, so a further rise may have only a small extra

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effect and Timothy Ash calls it 'illogical' given the severe slowdown. Inflation appears to have peaked, so a further rise may be unnecessary and may simply deepen the recession. The effect on firms depends on how significant interest costs are compared with wages, raw materials and imported inputs, and on whether loans are at fixed or variable rates. Turkey's private sector is described as resilient, so widespread shut downs may be less likely. The effect on households depends on whether they own homes with variable-rate mortgages or rent.

There is also a trade-off between objectives, shown by the short-run Phillips curve: lower inflation is achieved at the cost of higher unemployment and slower growth, which is why the government wants lower borrowing costs to fuel credit growth and expansion. Time lags of up to two years mean the full effects will only appear later, when inflation may already be falling. The effect on the lira also depends on interest rates in other countries, such as the USA: if US rates rise too, the hot money inflow will be smaller. Confidence matters as well; if investors doubt the central bank's independence, raising rates may not restore confidence at all.

The magnitude of the change matters too: Figure 1 shows a very large rise, from about 8% to 24%, so the effects are likely to be significant. However, with inflation at 25%, the real interest rate is still close to zero, so policy may be less tight than it appears.

In conclusion, a rise in interest rates is likely to reduce inflation and stabilise the lira, protecting firms with foreign currency debt, but at the cost of lower investment, consumption, growth and jobs. Since inflation seems to have peaked and the economy is slowing, the costs of a further rise probably outweigh the benefits in the short run, although Turkey's strong long-term growth prospects of 3.1% a year suggest the damage need not be permanent.

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Question 1(e)

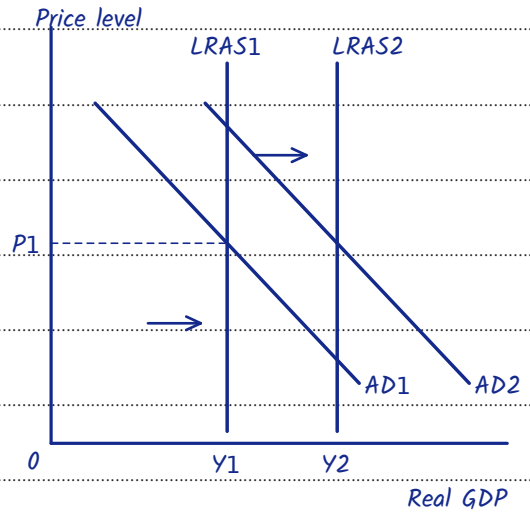
Infrastructure is the basic physical capital of the economy, such as transport, energy and communications networks. Istanbul's third airport will have six runways, capacity for up to 200 million passengers a year, cost the equivalent of £10 billion and employ 36,000 people (Extract C).

At a micro level, the project creates jobs and raises wages in construction, and later in airlines, hotels, retail and logistics. Better infrastructure reduces firms' costs: faster, more reliable transport lowers transport and travel costs and time, so variable costs fall, and firms locating near the hub gain external economies of scale, such as a pool of skilled labour and specialist suppliers. Tourism and export firms gain new markets as Istanbul becomes 'the most important hub between Asia and Europe'. The investment boosts business confidence, leading to further private investment. However, there are external costs, such as noise, air pollution and carbon emissions from 200 million passengers, loss of 76.5 million square metres of land and habitats, and accidents on the construction site caused by the rush to meet the deadline, as well as external benefits like reduced congestion at the old airports.

At a macro level, infrastructure spending is an injection of government spending (G) or investment (I) into the circular flow, so AD shifts right from AD1 to AD2 in the diagram, and the multiplier effect means real GDP rises by more than the initial £10 billion, raising employment and incomes. In the long run it raises the productive capacity of the economy, shifting LRAS from LRAS1 to LRAS2, so growth is sustainable without inflation, from Y1 to Y2. More tourists and transit passengers increase service exports, improving the current account, and the project may attract FDI. If it is financed by borrowing rather than taxes, the budget deficit and national debt rise; if taxes are raised instead, disposable incomes fall. Spending may redistribute income towards construction workers and the Istanbul region.

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The airport may also change market structure. As the world's busiest hub it could give Turkish airlines economies of scale, lowering average costs and fares for consumers, but it may also strengthen their monopoly power. Land prices and rents near the site will rise, benefiting landowners but raising costs for local households. Classical economists stress the long-run shift in LRAS, while Keynesians emphasise the multiplier effect on AD when there is spare capacity; with Turkey in a severe slowdown, this demand boost could be helpful now.



However, the impact depends on several factors. There is an opportunity cost: £10 billion could have been spent on schools, hospitals or reducing debt, or would require higher taxes. Crowding out may occur, as government borrowing raises interest rates, already 24% in Turkey, reducing private investment, and resources such as labour are diverted from other projects. The multiplier may be small because Turkey must import much of the high-tech equipment, such as the security systems and artificial intelligence. With inflation at 25%, extra AD in the short run may mainly raise prices rather than output. Long time lags mean the supply-side benefits come only after completion.

The size of the multiplier depends on the marginal propensity to withdraw: with high inflation and weak confidence, households may save more of any extra income. The state of the financial sector also matters, since banks burdened by foreign currency debts may not lend for the private projects that the airport is supposed to attract. There is a risk that the airport becomes a white elephant: whether it reaches its 200 million capacity depends on relations with the EU and other countries, demand for air

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travel and competition from hubs such as Dubai. It is hard to place a monetary value on externalities, so cost-benefit analysis may understate the true costs, and government failure is possible if projects are chosen for prestige. Large projects require a lot of coordination, and getting behind schedule puts lives at risk. Debt financed in foreign currency is also risky when the lira is weak.

In conclusion, large infrastructure projects such as the third airport can raise both short-run demand and long-run capacity and make Istanbul a global hub, but the net benefit depends on the airport being used near capacity, on the size of the multiplier and on whether the external and financing costs are controlled. Given Turkey's current inflation and debt problems, the macroeconomic benefits are likely to be long term rather than immediate.

(Total for Question 1 = 50 marks)

TOTAL FOR SECTION A = 50 MARKS

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SECTION B

Read Figures 3 to 5 and the following extract (D) before answering Question 2.

Answer ALL Questions 2(a) to 2(c), and EITHER Question 2(d) OR 2(e).

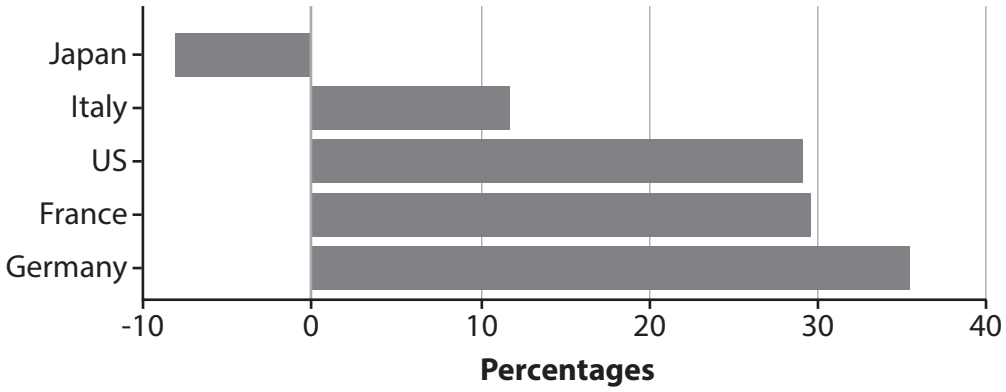
Write your answers in the spaces provided.

You are advised to spend 1 hour on this section.

Question 2

The UK economy

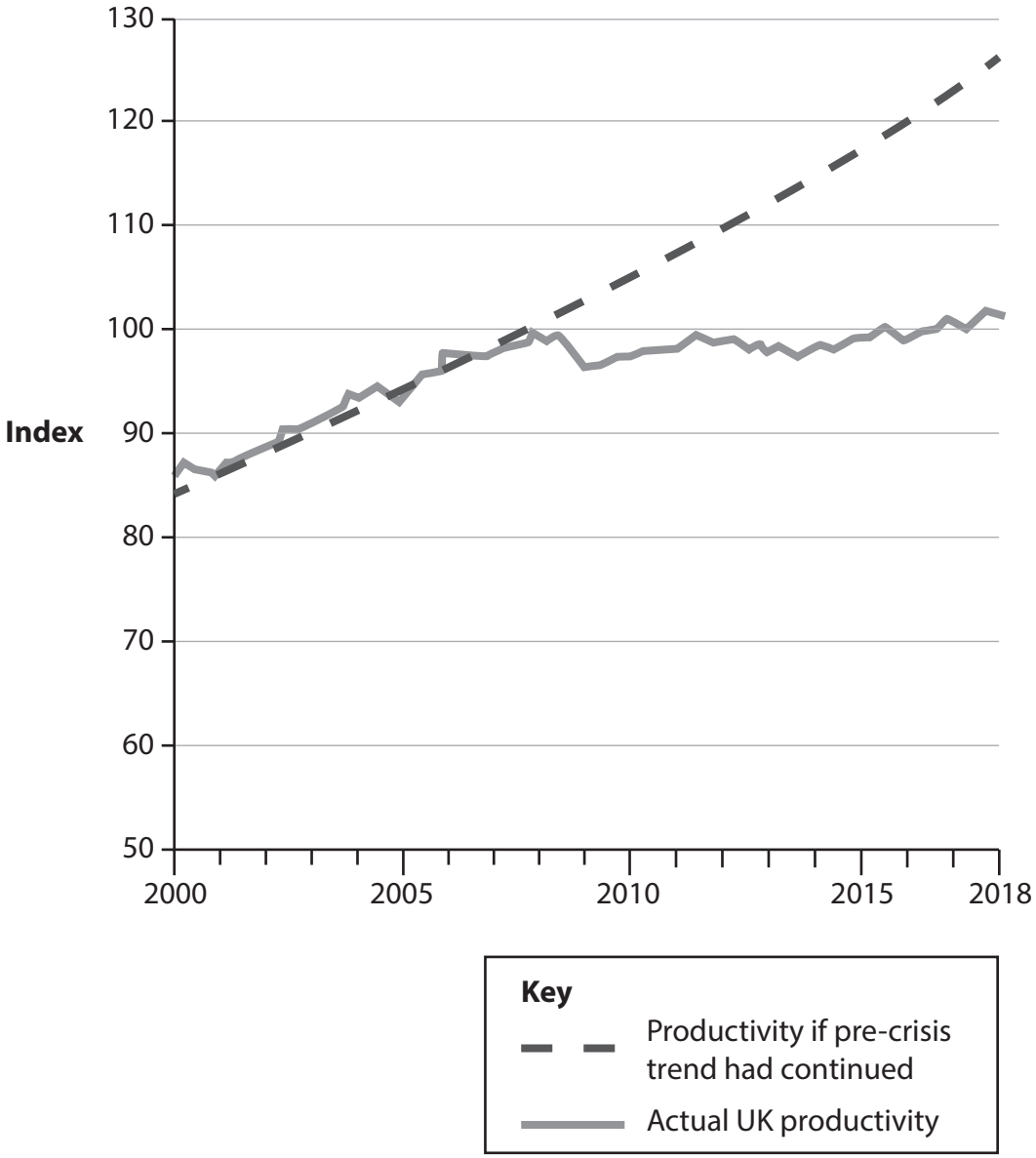
Figure 3: GDP per hour worked, nominal values at PPPs, percentage above or below UK level, 2018



(Source adapted from: ONS.gov.uk)

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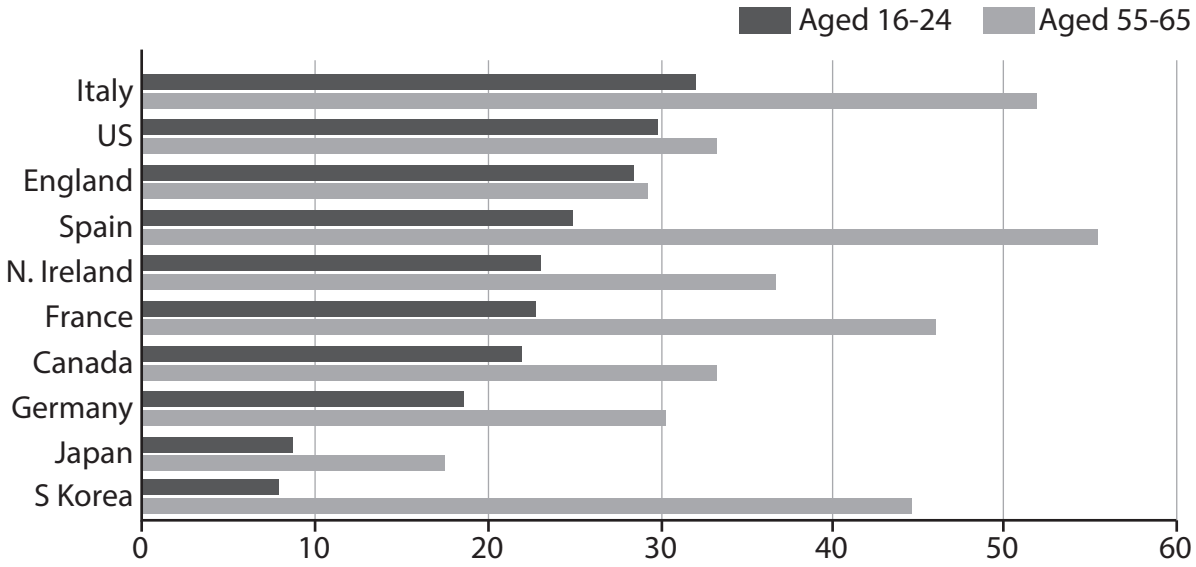
Figure 4: UK index of output per hour worked, base year 2016 = 100



(Source adapted from: ONS.gov.uk)

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Figure 5: Proportion of adults with low literacy and/or numeracy skills, by age, selected countries



(Source adapted from: OECD.org)

(Figures 3, 4 and 5 Source: FT.com 2016 data published https://www.ft.com/content/6ada0002-9a57-11e8-9702-5946bae86e6d 2018)

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Extract D

The end of the High Street?

Homebase, the UK's second-largest do-it-yourself (DIY) retailer, made £20–40 million a year profit up to 2016. The Australian conglomerate Wesfarmers bought Homebase for £340 million in 2016, and began to rebrand 24 stores under its own name. It scaled back on curtain, cushion and other homeware sales in favour of power tools and building materials. In 2018 Wesfarmers sold the DIY chain for £1, in the face of "extremely challenging" market conditions and excess store space. The chain was bought by restructuring specialist Hilco, which had also rescued the music chain HMV in 2013, and the stores have gone back to using the Homebase name. Over 70% of Homebase stores are currently losing money and the new owner wants to exit loss-making stores and agree to rent reductions, as sales fell 10% in 2018. Homebase has gone back to popular products and brands dropped by its previous owner Wesfarmers.

The closures will add to the mounting job losses on Britain's high streets. About 25 000 jobs have gone in the first seven months of 2018, according to analysis by an economics thinktank. A further 8 300 jobs are under threat at suppliers, with the multiplier effect meaning that GDP is £1.5 billion less than projected.

Several Marks & Spencer clothing stores closed their doors for the last time as the high-street chain pushes ahead with a transformation plan. It plans to close 100 stores by 2022. Toys R Us, Poundworld and Maplin have shut down completely, while New Look, Mothercare and Carpetright have plans to close hundreds of stores as losses rise sharply. Increasing rents and higher business rates have occurred at the same time as falling consumer confidence. Meanwhile, House of Fraser employees and pensioners are nervously awaiting more details about their future. The £90 million rescue deal by Sports Direct, the sportswear chain controlled by Mike Ashley, will protect 16 000 jobs for the time being.

(Source adapted from: https://www.ft.com/content/00d0bb9e-a6ee-11e8-8ecf-a7ae1beff35b 24 August 2018 and https://www.theguardian.com/business/2018/aug/13/homebase-close-80-stores-high-street-job-losses-mount Patrick Collinson 13 Aug 2018)

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2 (a) With specific reference to Figure 3, explain why productivity is measured by 'GDP per hour worked, nominal values at PPPs'.

(5)

(b) Apart from literacy and numeracy skills in young workers, examine **one** reason for the trend in productivity in the UK, over the period shown in Figure 4.

(8)

(c) Discuss factors that are causing many high street retailers in the UK to close some branches or shut down completely. Use a cost and revenue diagram to support your answer.

(12)

EITHER

(d) Evaluate possible microeconomic and macroeconomic policies which could be used to improve UK competitiveness.

(25)

OR

(e) Evaluate the microeconomic and macroeconomic effects of a decline in the literacy and numeracy skills of a country's young workers.

(25)

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2 (a) With specific reference to Figure 3, explain why productivity is measured by 'GDP per hour worked, nominal values at PPPs'.

(5)

Productivity is output per unit of input. Measuring GDP per hour worked, rather than total GDP, shows output relative to the labour input, giving a sense of how efficiently labour is used; it also allows for differences in working hours and in the size of the workforce between countries.

Nominal values are measured at current prices, so inflation is included, which is acceptable because all countries are compared in the same year, 2018. PPPs (purchasing power parities) adjust the figures for differences in the relative cost of living and convert them into a common currency, so the comparison reflects real purchasing power rather than distorted market exchange rates. This makes comparisons across countries meaningful.

Figure 3 therefore shows that the US produces about 29% more per hour worked than the UK, France about 30% more and Germany about 35% more, whereas Japan produces about 8% less per hour than the UK.

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(b) Apart from literacy and numeracy skills in young workers, examine **one** reason for the trend in productivity in the UK, over the period shown in Figure 4.

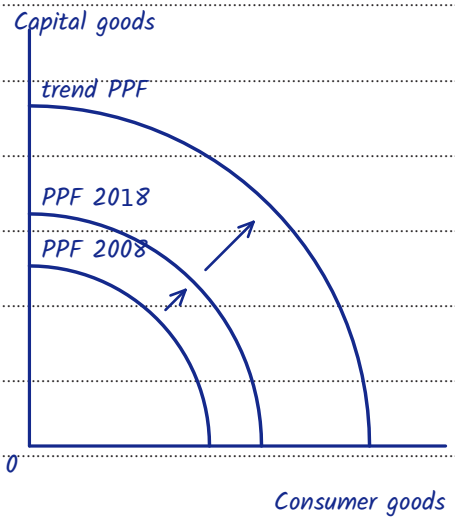
(8)

One reason for the trend is weak business investment since the 2008 financial crisis. Figure 4 shows that UK output per hour grew steadily from about 86 in 2000 to about 100 in 2008, roughly 2% a year, but then fell to about 96 in 2009 and had only recovered to about 101 by 2018. Had the pre-crisis trend continued, the index would have reached about 126, so actual productivity is around 25 index points, or about 20%, below trend: the 'productivity puzzle'.

After the financial crisis, banks were unwilling to lend and firms faced great uncertainty about future demand, later increased by Brexit, so they postponed investment in new machinery, technology and research and development. With less capital per worker, and slower adoption of new technology, each hour of labour produces little more output than before. Firms also held on to workers rather than investing, so output per hour stagnated. As the diagram shows, the economy's capacity has grown only from PPF 2008 to PPF 2018, rather than to the trend PPF, so potential output is lower than it would have been.

However, the data may be misleading: productivity is hard to measure in services and the digital economy, where many products are free, so part of the gap may be measurement error. The pre-crisis trend was itself boosted by an unsustainable financial sector boom, so the size of the gap may be exaggerated. The trend may also reverse when the economy recovers from the downturn and investment returns. Nevertheless, the magnitude of the gap, and the fact that the UK is far behind Germany, France and the US (Figure 3), is a real cause for concern.

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(c) Discuss factors that are causing many high street retailers in the UK to close some branches or shut down completely. Use a cost and revenue diagram to support your answer.

(12)

Firms close branches or shut down when revenue falls or costs rise so much that they cannot cover their costs. In the short run a firm will continue trading as long as price (average revenue) covers average variable cost, since it makes a contribution to fixed costs; it shuts down if P < AVC. In the long run it leaves the market if it cannot cover average total cost.

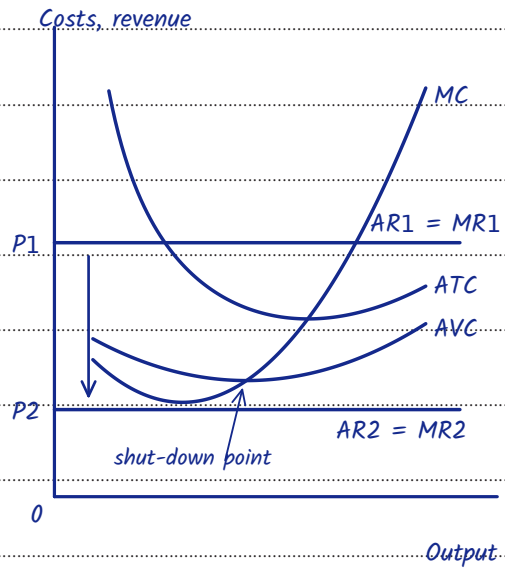
One factor is falling revenue. Online retailers such as Amazon have lower costs and offer more choice and convenience, so demand for high street shops has fallen. Maplin could not compete with online sellers of similar electronic products, and Toys R Us, Poundworld and Maplin have shut down completely. Falling consumer confidence (Extract D) has also reduced spending on non-essential items such as DIY goods and homeware. Homebase's sales fell 10% in 2018, partly because Wesfarmers dropped popular products and brands. In the diagram, price falls from P1 to P2, which is below minimum AVC, so the firm cannot even cover its variable costs and closes.

A second factor is rising costs. Increasing rents and higher business rates (Extract D) raise fixed costs, while the National Living Wage raises wage costs, which are variable. This shifts ATC up, so loss-making branches close: over 70% of Homebase stores are losing money and Marks & Spencer plans to close 100 stores by 2022. Many high streets are saturated, with excess store space, and some chains suffer from X-inefficiency or poor management, for example Wesfarmers' failed rebranding, which led to it selling Homebase for just £1 after buying it for £340 million.

However, not all high street retailers are struggling: coffee shops, cafes, barbers and discount stores are doing well, and high streets can be regenerated with leisure and services. Many firms are responding by extending their online presence, using stores for click and collect. Closures depend on whether costs also fall: Homebase is seeking rent

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reductions, which lowers fixed costs, so branches making a contribution to fixed costs (P > AVC) may stay open in the short run. Rescues such as Hilco's purchase of Homebase and Sports Direct's £90 million deal for House of Fraser show that new owners believe some stores can be profitable. Overall, structural change towards online shopping is the main long-run cause, with high rents and business rates the trigger for closures.



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EITHER

(d) Evaluate possible microeconomic and macroeconomic policies which could be used to improve UK competitiveness.

(25)

OR

(e) Evaluate the microeconomic and macroeconomic effects of a decline in the literacy and numeracy skills of a country's young workers.

(25)

Indicate which question you are answering by marking a cross in the box ☒. If you change your mind, put a line through the box ☒ and then indicate your new question with a cross ☒.

Chosen question number: **Question 2(d)** ☒ **Question 2(e)** ☒

Write your answer here:

Question 2(d)

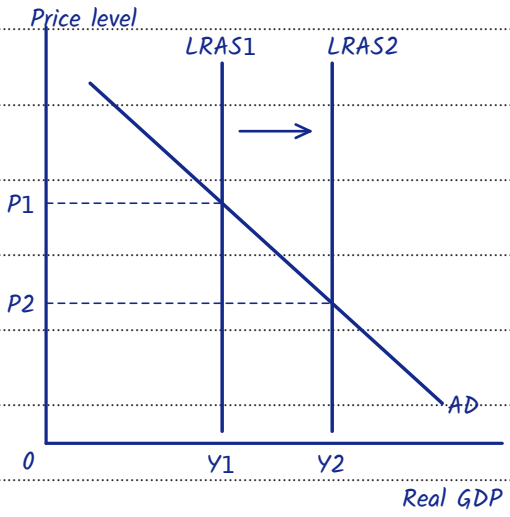
International competitiveness is the ability of a country's firms to sell goods and services in world markets on the basis of price and quality. It depends largely on relative unit labour costs, which depend on wages and productivity. The UK's productivity is weak: Germany produces about 35% more per hour and the US about 29% more (Figure 3), and UK output per hour is about 20% below its pre-crisis trend (Figure 4).

A key microeconomic policy is investment in education and skills. Figure 5 shows that about 28% of 16 to 24 year olds in England have low literacy and/or numeracy, compared with under 10% in Japan and South Korea. Spending on schools, apprenticeships and vocational training, or cutting university fees, raises human capital and labour productivity, reducing unit labour costs and improving the quality of goods and services. Labour market policies also matter: keeping the labour market flexible, and setting the national minimum wage so that it does not rise faster than productivity, prevents unit labour costs rising.

Firms could be encouraged to invest through subsidies, investment allowances or R&D tax credits, making investment more profitable, which raises capital per worker and innovation, improving both price and non-price competitiveness. Infrastructure spending,

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such as Crossrail or faster broadband, cuts firms' transport and communication costs. Joint ventures with global companies such as Dyson bring in new technology. Competition policy and deregulation force firms to cut costs and innovate, reducing X-inefficiency. Reforming planning and housing policy, and improving transport links, would increase the geographical mobility of labour so that workers can move to where productivity is highest. Privatisation and deregulation of industries such as energy and rail could raise efficiency, lowering costs for the firms that rely on them.



Macroeconomic policies include cutting corporation tax, which raises post-tax profits, encourages investment and attracts FDI, bringing new technology and management skills. Trade liberalisation, through new trade agreements after Brexit, lowers tariffs on imported components and opens export markets. Keeping inflation low and stable, for example by ending QE, prevents UK prices rising faster than competitors'. Lower interest rates reduce firms' borrowing costs and tend to weaken sterling, making exports cheaper. As the diagram shows, supply-side policies shift LRAS from LRAS1 to LRAS2, so the price level falls from P1 to P2 relative to trading partners, while real output rises.

However, the success of these policies depends on several factors. Education and infrastructure have long time lags; today's pupils will not raise productivity for many years, and it is difficult to measure the quality of education. All involve an opportunity cost: with a large national debt, more spending on training means less on health or higher taxes. Government failure is possible, as the government lacks the information to know which firms or skills to target, and subsidies may go to firms that would have

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invested anyway. Cutting corporation tax may simply raise dividends rather than investment, and may lead to a 'race to the bottom' with other countries.

Competitiveness is also relative: if Germany, France and the US raise productivity faster, the UK may still fall behind. The exchange rate cannot be directly controlled and a depreciation only gives a temporary price advantage, as it raises import costs and inflation. The UK's relationship with the EU after Brexit will affect trade costs far more than many domestic policies. Lowering the minimum wage would cut costs but worsen inequality and in-work poverty, a conflict of objectives. Some policies, such as protectionism, may protect UK firms in the short run but reduce competitive pressure and invite retaliation.

Policies can also conflict. Cutting interest rates may weaken the pound and help exporters, but it raises import prices and inflation, eroding the gain in price competitiveness. A fiscal expansion focused on capital spending raises both demand and capacity, but it adds to the national debt. Non-price factors also matter: Japan produces about 8% less per hour than the UK (Figure 3), yet it is highly competitive in high-quality manufactured goods, so quality, design and reliability are as important as unit costs.

In conclusion, the most effective approach combines microeconomic supply-side policies, especially education, skills and investment incentives, with stable macroeconomic policy and open trade. These address the root cause, low productivity, rather than offering a short-term price advantage, although their success depends on how quickly they work and on what other countries do.

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Question 2(e)

Literacy and numeracy are basic skills that form part of human capital, the skills and knowledge that make workers productive. Figure 5 shows that about 28% of 16 to 24 year olds in England have low literacy and/or numeracy, almost the same as those aged 55 to 65, whereas in South Korea only about 8% of young people do, compared with about 45% of older adults. A decline in these skills among young UK workers would have serious effects.

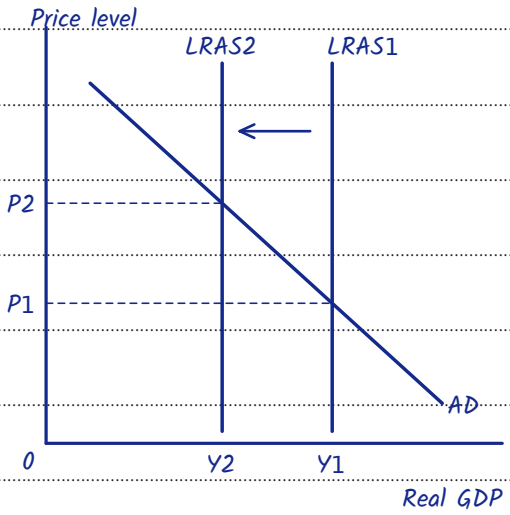
At a micro level, workers with poor skills have lower productivity, so their marginal revenue product and therefore their wages are lower, reducing their incomes and welfare. They are more likely to suffer structural unemployment, especially as technology replaces routine jobs, and they are occupationally immobile. Firms find it harder to fill vacancies, so skills shortages raise wages for skilled staff, and firms must spend more on training to upskill workers, raising costs. Lower productivity raises unit labour costs, so prices rise or profits fall. Errors and poor service reduce quality. Firms may employ migrant workers to fill the gaps. Falling incomes also mean reduced sales for firms.

Young people with weak basic skills are also less able to benefit from further training, so the gap widens over their careers, reducing lifetime earnings and, often, health and wellbeing. Consumers may face lower quality services where staff make mistakes.

At a macro level, lower productivity and higher costs shift SRAS to the left, raising the price level, while a less skilled workforce reduces the productive capacity of the economy, shifting LRAS to the left from LRAS1 to LRAS2 in the diagram, or slowing its growth, so real GDP falls from Y1 to Y2. This worsens the productivity gap already shown in Figure 4, where output per hour is about 20% below trend. UK goods and services become less competitive, so exports fall and imports rise, worsening the current account. Lower incomes reduce tax revenues while spending on benefits and remedial education rises, increasing the fiscal deficit. Income inequality widens and inward

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investment falls, as multinationals choose countries with better-skilled workforces.



However, the size of these effects depends on several factors. Data on skills are difficult to measure, and a test of literacy may not capture the creative, digital and practical skills that firms value. Recent reforms to Key Stage 2, GCSEs and A levels focus more on literacy and numeracy, so the decline may be reversed, and the 2016 data still show that over 70% of young people in England do not have low literacy or numeracy. There will always be demand for low-skilled workers in sectors such as retail, care and hospitality, so not all will be unemployed, and some people with poor literacy and numeracy have become highly successful entrepreneurs, although these examples are rare.

The effect also depends on the structure of the economy. The UK is service-based, and most service jobs require good communication and numeracy, so the impact may be larger than in an economy dominated by manual work. Technology such as spell-checkers and calculators may reduce the importance of basic skills for some tasks, although new digital jobs require higher skills, not lower. Higher youth unemployment would also waste scarce resources, leaving the economy inside its PPF.

The impact also depends on migration: after Brexit it may be harder to fill vacancies with skilled EU labour, so the shortage would hurt more. The effect is long term: today's young workers will be in the labour force for 40 years, so the damage compounds over time. Government can respond by increasing funding for education and adult training, but this has an opportunity cost and long time lags.

In conclusion, a decline in young workers' literacy and numeracy would reduce wages, productivity and competitiveness, damaging both individuals and the macroeconomy, so it

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should be a priority for policy. The scale depends on how large the decline is and on how quickly education reforms, training and migration fill the gap.

(Total for Question 2 = 50 marks)

TOTAL FOR SECTION B = 50 MARKS
TOTAL FOR PAPER = 100 MARKS

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