

Please write clearly in block capitals.

Centre number

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Candidate number

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Surname *StemUp Model Solution*

Forename(s)

Candidate signature

I declare this is my own work.

INTERNATIONAL AS ECONOMICS

Unit 2 The National Economy in a Global Environment

Friday 19 May 2023

07:00 GMT

Time allowed: 1 hour 45 minutes

Materials

For this paper you must have:

- the Source Booklet, provided as an insert (enclosed)
- a calculator, which you are expected to use where appropriate.

Instructions

- Use black ink or black ball-point pen. Pencil should only be used for drawing.
- Fill in the boxes at the top of this page.
- Answer **all** questions.
- You must answer the questions in the spaces provided. Do **not** write outside the box around each page or on blank pages.
- Do **not** write in the Source Booklet.
- If you need extra space for your answer(s), use the lined pages at the end of this book. Write the question number against your answer(s).
- Do all rough work in this book. Cross through any work you do not want to be marked.

Information

- The marks for questions are shown in brackets.
- The maximum mark for this paper is 80.
- You may use a bilingual dictionary for this exam.
- You may **not** use an English dictionary.

For Examiner's Use	
Question	Mark
1–15	
16	
17	
18	
19	
20	
21	
TOTAL	



Section AAnswer **all** questions in the spaces provided.Only **one** answer per question is allowed.

For each question completely fill in the circle alongside the appropriate answer.

CORRECT METHOD



WRONG METHODS



If you want to change your answer you must cross out your original answer as shown.



If you wish to return to an answer previously crossed out, ring the answer you now wish to select as shown.

**0 1**

A central bank reduces the base rate of interest. The bank hopes aggregate demand will rise as a result.

This is an example of

[1 mark]**A** contractionary fiscal policy.☐**B** contractionary monetary policy.☐**C** expansionary fiscal policy.☐**D** expansionary monetary policy.☒**0 2**

Which one of the following is an example of frictional unemployment?

[1 mark]**A** A bus driver loses their job because of a recession.☐**B** A farm worker is replaced by a new machine.☐**C** A hotel worker does not have a job for part of the year.☐**D** A teacher starts a job two months after leaving their old job.☒

0 3

Table 1 shows the impact of a rise in national income of \$100m in an open economy with a government sector.

Table 1

Items in the circular flow of income	Increase
Saving	\$10m
Imports	\$8m
Tax	

If the economy has a multiplier of 4, what is the increase in tax?

[1 mark]**A** \$4m☐**B** \$7m☒**C** \$18m☐**D** \$82m☐**0 4**

Table 2 shows an index that measures a country's exchange rate compared to other currencies.

Table 2

Year	2019	2020	2021	2022
Exchange rate index	102	97	96	92

All other things being equal, what is the most likely impact on inflation of the changes shown in **Table 2**?

[1 mark]**A** Cost-push inflation will decrease.☐**B** Cost-push inflation will increase.☒**C** Demand-pull inflation will decrease.☐**D** There will be no effect on inflation.☐**Turn over ►**

0 5

Which one of the following is an example of secondary income on the current account of the balance of payments?

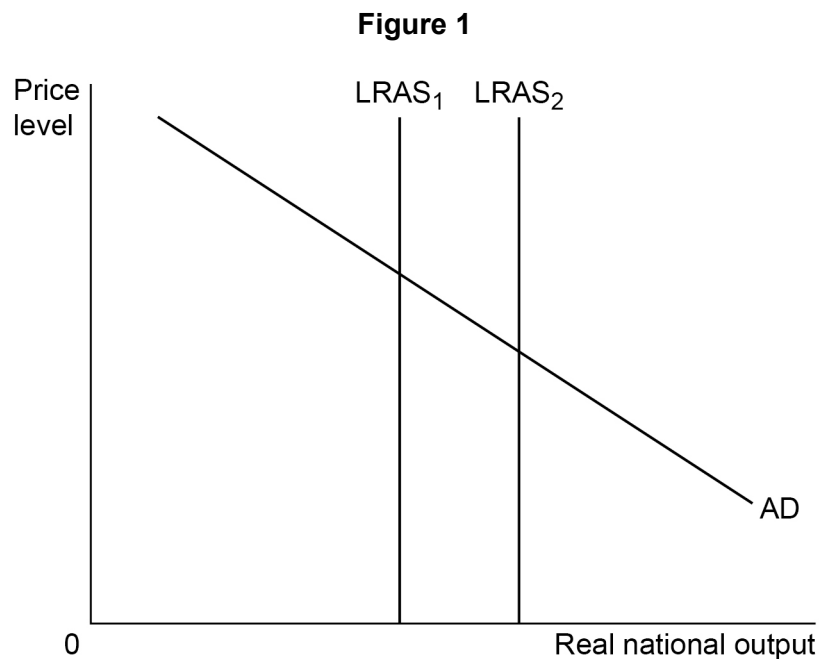
[1 mark]

- A** Aid received from foreign countries
- B** Interest people earn on their savings abroad
- C** Profits earned in another country by firms
- D** Revenue from exports of manufactured goods

☒☐☐☐

0 6

Figure 1 shows aggregate demand (AD) and long-run aggregate supply (LRAS) curves in an economy.



Which one of the following is the most likely cause of the shift from LRAS₁ to LRAS₂?

[1 mark]

- A** A fall in the marginal propensity to save
- B** A rise in indirect taxes
- C** The discovery of oil in the country
- D** The rate of unemployment has fallen

☐☐☒☐

0 7

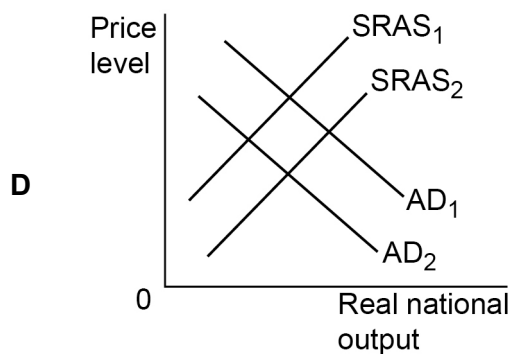
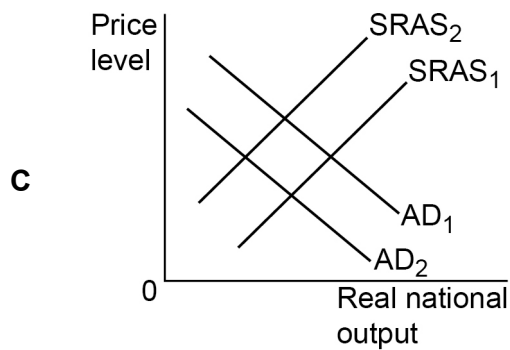
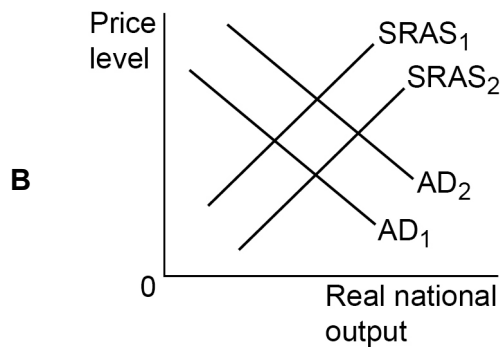
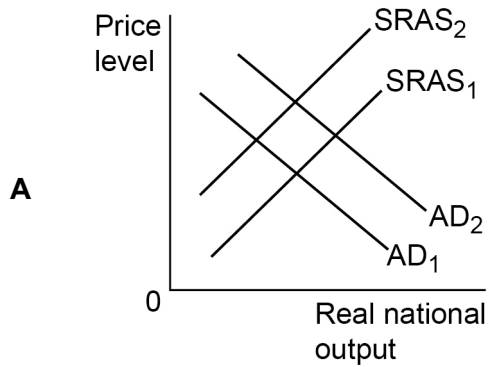
Which one of the following is an injection into the circular flow of income?

[1 mark]**A** Consumption☐**B** Exports☒**C** Profits☐**D** Savings☐**Turn over for the next question****Turn over ►**

0 8

The diagrams show aggregate demand (AD) and short-run aggregate supply (SRAS) curves in an economy.

There has been a fall in energy prices and a cut in interest rates. All other things being equal, which diagram is most likely to show the impact of these changes?

[1 mark]

0 9**Table 3** shows real GDP per capita and the Gini coefficient for four countries.All other things being equal, which country has the most **unequal** distribution of income?**[1 mark]****Table 3**

	Country	Real GDP per capita (\$)	Gini coefficient	
A	A	10 000	0.4	☐
B	B	12 000	0.6	☒
C	C	14 000	0.3	☐
D	D	22 000	0.2	☐

1 0

A government cuts income tax rates as part of its supply-side policy.

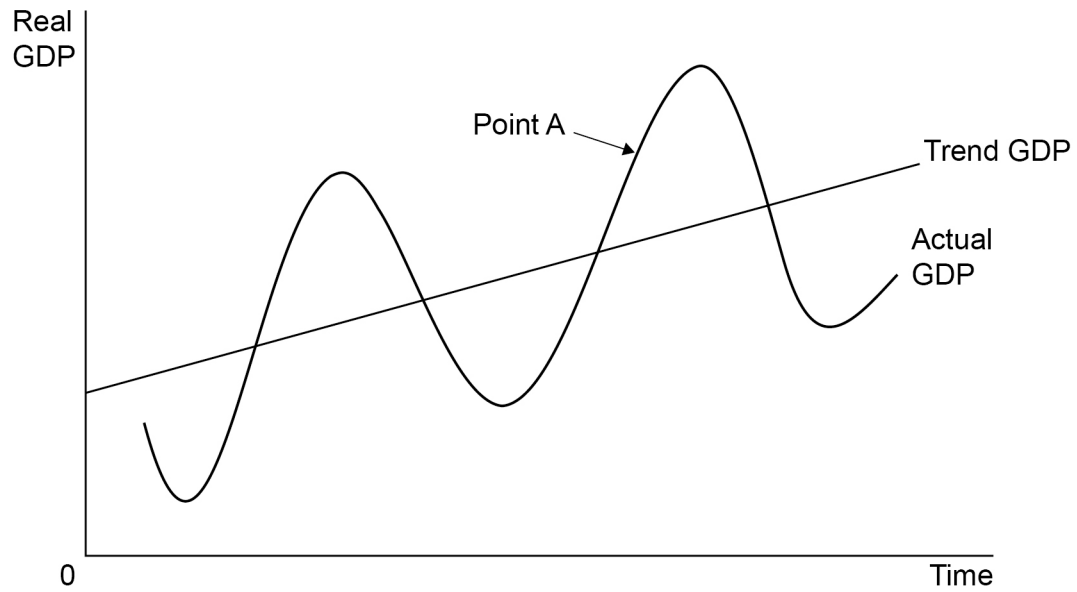
Which one of the following is most likely to be the objective of this policy?

[1 mark]

- A** A fall in demand-pull inflation ☐
- B** A larger budget deficit ☐
- C** An increased incentive to work ☒
- D** More spending on imports ☐

Turn over for the next question**Turn over ►**

1 1

Figure 2 shows a diagram of the economic cycle.**Figure 2**

All other things being equal, at Point A the economy is most likely to experience

[1 mark]**A** consumption rising and employment falling.☐**B** imports falling and exports rising.☐**C** inflation rising and incomes falling.☐**D** unemployment falling and investment rising.☒

1 2

Table 4 shows the proportion of income spent on a good by different groups of the population.

Table 4

	Low-income group	Middle-income group	High-income group
Proportion of income spent on the good	10%	5%	2%

The government puts a new tax on the good.

Which one of the following best describes the tax?

[1 mark]**A** Direct☐**B** Progressive☐**C** Proportional☐**D** Regressive☒**1 3**

Which one of the following is most likely to be a macroeconomic policy objective for a government?

[1 mark]**A** Falling average price level☐**B** High level of taxation☐**C** Low unemployment☒**D** Positive output gap☐

Turn over for the next question

Turn over ►



1 4

Which one of the following explains how a rise in national income leads to a rise in investment?

[1 mark]**A** Accelerator process☒**B** Demand-side shock☐**C** Multiplier process☐**D** Supply-side shock☐**1 5**

Table 5 shows real GDP growth, government spending and total tax revenue for an economy, for the years 2018 to 2022.

Table 5

	2018	2019	2020	2021	2022
Real GDP growth (%)	2.3	−1.7	−1.5	1.5	1.8
Government spending (\$bn)	115	120	125	130	135
Total tax revenue (\$bn)	103	104	105	106	107

It can be concluded from **Table 5** that the country has

[1 mark]**A** a rising structural budget deficit.☒**B** a worsening current account deficit.☐**C** an improving current account deficit.☐**D** an increasing cyclical budget deficit.☐**15**

Section B

Look at the Source Booklet and answer **all** questions in the spaces provided.

Do **not** write in the Source Booklet.

1 6 . 1 Define 'inflation' (**Extract B**, line 4).

[3 marks]

Inflation is a persistent (sustained) increase in the general (average) price level of goods and services in an economy over a period of time, usually measured by the annual percentage change in the consumer price index, so the purchasing power (value) of money falls.

1 6 . 2 Define 'investment' (**Extract C**, line 12).

[3 marks]

Investment is (planned) spending by firms or the government on capital goods, such as machinery, equipment, factories and infrastructure, which adds to the capital stock and so increases the economy's capacity to produce goods and services in the future.

6

Turn over for the next question

Turn over ►



1 7

Extract A shows the balance of payments on current account, as a percentage of GDP, and productivity for selected countries.

You are advised to show your working for the calculations.

1 7 . 1

In 2020, Argentina's GDP was \$389.59bn.

Use **Extract A (i)** to calculate the value of Argentina's balance of payments on current account in 2020.

Give your answer in \$bn to **two** decimal places.

[3 marks]

$$\text{Current account balance} = 0.85\% \text{ of GDP (surplus, Extract A (i))}$$

$$= \$389.59\text{bn} \times (0.85 \div 100)$$

$$= \$3.311515\text{bn}$$

$$\text{Answer} = \$3.31\text{bn (surplus)}$$

1 7 . 2

An index of productivity for Kenya has 2016 as the base year.

Use **Extract A (ii)** to calculate the value of this index in 2018.

Give your answer to **one** decimal place.

[3 marks]

$$\text{Index (2018)} = (\text{productivity in 2018} \div \text{productivity in base year 2016}) \times 100$$

$$= (\$9833 \div \$9244) \times 100$$

$$= 106.3717...$$

$$\text{Answer} = 106.4 \text{ (index points, 2016} = 100)$$



1 8

Extract B (lines 3–4) states: ‘Higher productivity can improve a country’s balance of payments on current account.’

1 8 . 1

Explain how higher productivity can lead to an improvement in a country’s balance of payments on current account.

[6 marks]

Productivity is output per worker (or per unit of input) in a given time period.

The balance of payments on current account records trade in goods and services plus income flows.

Higher labour productivity means each worker produces more output, so, if wages do not rise by as much, unit labour costs (cost per unit of output) fall.

Firms can then cut their prices, making the country's exports more price competitive abroad. If demand for exports is price elastic, export volumes and the value of exports rise. At the same time domestic goods become cheaper relative to imports, so households and firms switch from imports to home-produced goods and the value of imports falls. With exports rising and imports falling, the trade balance, and so the current account balance, improves.

Lower costs also raise profit margins, which helps firms to cover the costs of entering export markets. However, productivity must rise faster than in trading partners.

Question 18 continues on the next page

Turn over ►



1 8 . 2

To what extent do the data suggest that higher productivity leads to an improvement in a country's balance of payments on current account?

Use the data in **Extract A** to help support your answer.

[6 marks]

Some data support the link. India's productivity per worker rose in every year, by 49.6% from \$13 399 to \$20 047 between 2012 and 2020, and its current account moved from a deficit of 5% of GDP to a surplus of 1.23%. Kenya's productivity rose by 17.0% from \$8527 to \$9974, and its deficit narrowed from 7.48% to 4.75% of GDP; Kenya still has the lowest productivity and is the only one of the three countries still in deficit in 2020.

Other data contradict it. Argentina's productivity fell in every year, by 8.9% from \$57 897 to \$52 736, yet its current account went from a deficit of 0.39% of GDP in 2012 to a surplus of 0.85% in 2020, improving in 2019 and 2020 despite its biggest fall in productivity (about 6%) from 2018. India's current account also worsened in 2017 and 2018 while productivity rose.

So productivity cannot explain all the changes: exchange rates, relative inflation, time lags, changes in GDP and income flows also matter, and there are only three countries with productivity data for every other year. Overall the data give some but limited support.

12

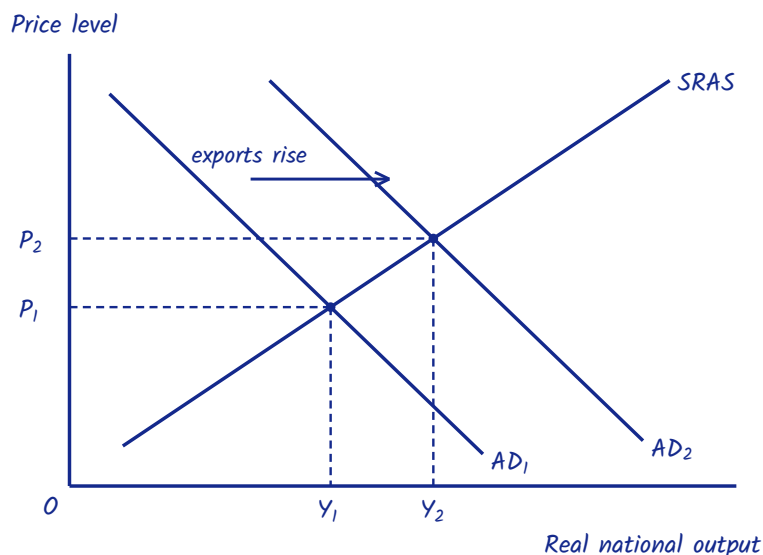


1 9

Extract B (lines 1–2) states: ‘Argentina’s 10 years of fast economic growth at the start of this century was helped by high demand for the country’s farm exports’.

With the help of a diagram, explain how rising exports could increase a country’s short-run economic growth.

[9 marks]



Exports are goods and services produced in one country and sold to buyers abroad, such as Argentina's farm exports. Short-run economic growth is an increase in real GDP (actual output), using spare capacity in the economy.

Aggregate demand is $AD = C + I + G + (X - M)$, so higher demand for exports raises net exports and shifts AD right from AD_1 to AD_2 . Firms respond by increasing output, an extension along SRAS, so real national output rises from Y_1 to Y_2 : short-run growth. The price level rises from P_1 to P_2 ; if there is a negative output gap the rise in prices is small.

Exports are an injection into the circular flow of income. Exporters such as farmers
 Extra space earn more revenue and profit and take on more workers, so
employment and incomes rise. Workers spend part of this extra income, creating
further rounds of spending: the multiplier effect, so AD rises by more than the
initial rise in exports. Higher sales and profits may also lead exporters to invest in
more capital through the accelerator, raising AD and output further, which helps to

Turn over ►



explain Argentina's 10 years of fast growth.

The size of the effect depends on spare capacity. With a large negative output gap, rising exports increase real output and employment with little inflation, but near full capacity SRAS becomes steep and most of the effect is on the price level rather than on growth.

9

2 0

Extract C (lines 6–7) states: ‘Higher saving can provide more funds for businesses to borrow and invest.’

Analyse the determinants of saving in an economy.

[12 marks]

Saving is the part of disposable income that is not spent on consumption ($S = Y_d - C$). It is a withdrawal from the circular flow of income, but as Extract C states, savings deposited in banks provide funds that firms can borrow to invest.

The main determinant is the level of household disposable income. As incomes rise, households can save a larger amount and usually a larger proportion of their income, since basic needs are already met, so the average propensity to save rises.

Income distribution therefore matters: the more income goes to high earners, who have a higher marginal propensity to save, the higher total saving. Personal taxes and welfare matter too: higher income tax reduces disposable income and saving, while generous state pensions and benefits reduce the need to save.

The reward for saving, mainly the real rate of interest, is also important. A higher interest rate set by the central bank raises the return on savings and makes borrowing more expensive, so households save more and spend less. If expected inflation is higher than the interest rate, the real return is negative and saving falls, as people buy goods now before prices rise.



Confidence about the future affects precautionary saving. If people fear unemployment, for example after an external shock such as a pandemic or a recession, they save more; when confidence is high, saving falls. The availability of credit and the level of household debt matter: easy credit reduces the need to save for large purchases, while high debt means households use income to repay loans. The age structure of the population matters. People of working age save for retirement, often through pensions, while retired people run down savings, so an ageing population may reduce saving. Finally, social and cultural attitudes towards saving, and a trusted, effective financial system with long-term saving products,

Extra space *increase the saving ratio.*

These determinants interact, and economic agents can influence them. A central bank can raise interest rates to reward saving; a government can offer tax-free savings accounts or compulsory workplace pensions; and banks can develop new saving products and widen access to accounts. However, the effect of a change in one determinant, such as a rise in interest rates, may be outweighed by others, such as falling confidence or rising debt. Higher saving raises funds for investment, but if saving rises sharply it reduces consumption and AD (the paradox of thrift), which may lower incomes and so reduce total saving again.

Turn over for the next question

Turn over ►



2 1

Extract C (lines 14–15) states: ‘However, governments can use supply-side policies to improve an economy’s macroeconomic performance’.

Use the extracts and your knowledge of economics to assess the extent to which supply-side policies are likely to improve an economy’s macroeconomic performance.

[20 marks]

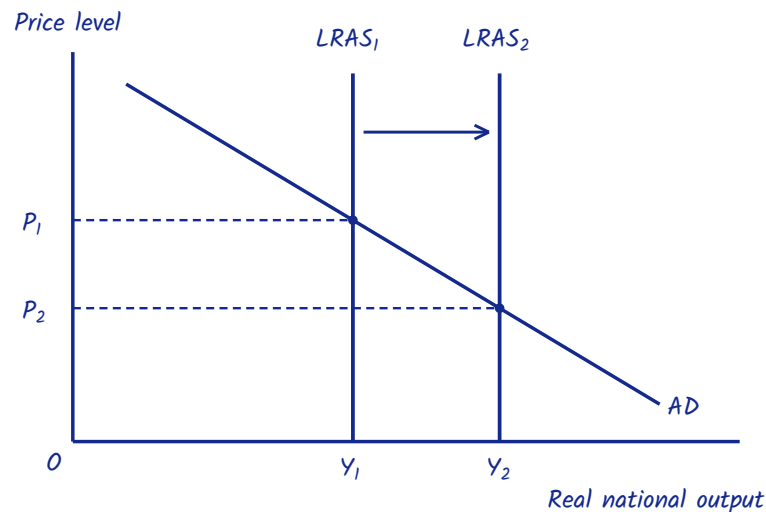
Supply-side policies are government policies that aim to increase the productive capacity of the economy by improving the quantity, quality and productivity of factors of production and making markets work more efficiently, shifting LRAS to the right. Macroeconomic performance is judged by the government's objectives: strong, sustainable economic growth, low and stable inflation, low unemployment and a stable balance of payments on current account.

Extract C refers to cutting taxes. Lower income tax raises the reward from working, increasing the incentive to work and the size of the labour force, while lower taxes on profits leave firms more retained profit to invest. Reducing business regulations (Extract C) lowers firms' costs and encourages enterprise. Measures to make labour markets more flexible, and spending on education and training to improve human capital, raise labour productivity and reduce structural unemployment by giving workers the skills firms need.

Interventionist policies can be powerful too. Extract B describes subsidies for investment in specific industries and investment in transport infrastructure and new ports to encourage exporting, and Extract C mentions infrastructure and housing. Better transport reduces firms' costs and makes it easier for workers to reach jobs, while more housing improves labour mobility.

As the diagram shows, these policies shift LRAS from $LRAS_1$ to $LRAS_2$. Potential output rises from Y_1 to Y_2 , allowing long-run economic growth, and the price level falls from P_1 to P_2 , so growth can occur without demand-pull inflation. Unlike demand-side policy, supply-side policy can therefore improve several objectives at once, avoiding the usual trade-off between inflation and unemployment. Higher





productivity lowers unit costs, so exports become more competitive and the current account improves, and more jobs reduce unemployment.

However, the effectiveness of supply-side policies is limited. First, there are long time lags: infrastructure projects such as Argentina's ports take years to plan and build, and education takes many years to raise productivity, so these policies do little in a recession, when demand-side policies are needed to close a negative output gap. The benefits of a larger capacity are only realised if aggregate demand rises to use it.

Second, the response of economic agents is uncertain. Tax cuts may lead some people to work fewer hours because they can earn the same income with less work (the income effect), and firms may use lower taxes on profits to pay higher dividends rather than invest, especially if business confidence is low. Deregulation may cause unintended consequences such as lower safety standards, pollution or exploitation of workers, and labour market flexibility may reduce job security.

Third, there is an opportunity cost. Large infrastructure projects and housing programmes, and tax cuts, must be financed through higher borrowing or lower spending elsewhere, which may worsen the budget deficit and raise interest rates. Government failure is also possible: the government may lack the information to choose the right industries to subsidise, and money may be wasted on projects

Turn over ►



that do not raise productivity. Tax cuts mostly benefit high earners, increasing inequality, a trade-off with equity.

Also, while the economy is growing quickly, investment in infrastructure adds to aggregate demand before it adds to capacity, which may increase inflation and imports in the short run. The impact also depends on the starting point: in a developing economy with poor infrastructure and low skills, gains from investment may be large, while in an economy with low taxes and few regulations further cuts may achieve little.

In conclusion, supply-side policies are likely to improve macroeconomic performance in the long run, since they are the main way to achieve sustained non-inflationary growth, lower structural unemployment and better international competitiveness. However, the extent depends on the time scale, how firms and workers respond, the cost and how it is financed, and whether the policies are well targeted. They are most effective when combined with demand-side policies that keep aggregate demand growing in line with the new productive capacity.

END OF QUESTIONS



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