

ECONOMICS

Paper 0455/12
Multiple Choice

Question Number	Key	Question Number	Key	Question Number	Key
1	D	11	C	21	C
2	C	12	D	22	D
3	A	13	B	23	D
4	A	14	B	24	D
5	C	15	C	25	B
6	B	16	C	26	B
7	D	17	A	27	B
8	D	18	B	28	A
9	B	19	B	29	A
10	B	20	B	30	C

Key messages

To earn a high mark on this paper, students need to demonstrate a wide-ranging understanding of the topics covered in the syllabus. The depth of understanding is particularly important when questions involve interpreting graphical, numerical, or diagram-based data, as the general topic may be known, but the context in which it appears is likely to be unfamiliar. This is shown by the fact that 3 of the 5 questions that candidates performed least well on involved the application of numeracy skills alongside economic knowledge. Careful reading of each question is essential, and students should also pay close attention to instructions and especially to any text that is highlighted or in bold before choosing their answer.

General comments

The questions for which most candidates selected the correct answer were **2, 4, 9, 12, and 26**. These questions covered different parts of the syllabus and were set to test a range of different skills. The questions for which the fewest candidates selected the correct answer were **7, 14, 20, 27, and 30**.

Comments on specific questions

Question 7

Question 7 was answered correctly by 45 per cent of the candidates who chose option **D**. 28 per cent chose option **B**, 19 per cent chose option **A** and 8 per cent chose option **C**. When demand is price elastic ($PED = -2.0$) a decrease in price will lead to a proportionally larger increase in quantity demanded and an increase in total revenue. 45 per cent of candidates realised this. 28 per cent of candidates incorrectly thought that demand (rather than quantity demanded) would increase by 5 per cent; this could have been the case if the $PED = 0.5$. 19 per cent of candidates incorrectly thought that demand (rather than quantity demanded) would decrease by 20 per cent, demand would not decrease when prices decreased. 8 per cent of candidates incorrectly believed that supply was independent of this change in the market. However, when the quantity demanded changes, there will be an associated shift in supply to the new equilibrium price.

Question 14

Question 14 was answered correctly by 50 per cent of the candidates who chose option **B**. 27 per cent chose option **D**, 14 per cent chose option **A** and 9 per cent chose option **C**. The output per worker before specialisation was 5 cars, after specialisation the output per worker was 10 cars ($30 / 3 = 10$). Therefore, labour productivity doubled from 5 cars to 10 cars: this is an increase of 100 per cent. 27 per cent of candidates misread the information and thought the total cars washed increased from 5 to 30 and then saw this as a 600 per cent increase in productivity. 14 per cent of candidates saw an increase in cars washed of 15 to 30 in a day as a 50 per cent increase, presumably because the increase of 15 is 50 per cent of the new total of 30. 9 per cent of candidates saw an increase in cars washed of 15 to 30 in a day as a 200 per cent increase, presumably because of the doubling of the number of cars washed.

Question 20

Question 20 was answered correctly by 39 per cent of the candidates who chose option **B**. 42 per cent chose option **A**, 16 per cent chose option **D** and 4 per cent chose option **C**. The data is in millions of workers. This allows us to calculate the number of workers employed in the primary, secondary, and tertiary sectors in each year of a two-year period. In year 1 there were 11 million people employed in the secondary sector (engineering 6 m and motor vehicle production 5 m). In year 2 this had increased to 13 million people (engineering 8 m and motor vehicle production 5 m). Thus, fewer people were employed in the secondary sector in year 1 than year 2 and option **B** is correct. 42 per cent incorrectly chose option **A**, misreading the data in the table as output produced rather than the number of workers employed. 16 per cent of candidates miscalculated the number of workers employed in the tertiary sector to be more in year 2 than year 1. In year 1 the total was 16 m (education 4 m, finance 8 m, and healthcare 4 m) whilst in year 2 there were fewer at 14 m (education 3 m, finance 6 m, and healthcare 5 m). 4 per cent of candidates miscalculated the number of workers employed in the primary sector to be more in year 2 than year 1. In year 1, the total was 4 m (farming 2 m, oil extraction 2 m) whilst in year 2 there were fewer at 3 m (farming 1 m, oil extraction 2 m).

Question 27

Question 27 was answered correctly by 38 per cent of the candidates who chose option **B**. 25 per cent chose option **D**, 22 per cent chose option **C** and 15 per cent chose option **A**. 38 per cent of candidates realised option **B** is not an acceptable reason in support of producing a wider range of goods. Decreased specialisation will reduce not increase the benefit of free trade. 25 per cent incorrectly chose option **D**. Volatility in the price of oil is an acceptable reason in support of producing a wider range of goods. Avoidance of uncertainty in the price of a specialised product is an acceptable reason to diversify. 22 per cent incorrectly chose option **C**. Avoiding dependence on other countries is an acceptable reason in support of producing a wider range of goods. Avoiding reliance on other countries for vital goods and services is an acceptable reason to diversify. 15 per cent incorrectly chose option **A**. Avoiding the rapid depletion of a non-renewable resource is an acceptable reason in support of moving to produce a wider range of goods.

Question 30

Question 30 was answered correctly by 37 per cent of the candidates who chose option **C**. 27 per cent chose option **A**, 23 per cent chose option **B** and 12 per cent chose option **D**. 38 per cent of candidates correctly realised that increasing existing import quotas would allow a greater quantity of imports into the country. This would increase the value of imports relative to exports and so reduce the current account surplus on its balance of payments. 27 per cent incorrectly selected option **A** making a common mistake of thinking the current account of the balance of payments is part of the government's financial position. 23 per

cent of candidates incorrectly thought that a devaluation of the currency would reduce the surplus on the current account. However, this would make the country's exports appear relatively less expensive and imports more so. This would increase the value of net exports and increase the surplus on the current account. 12 per cent of candidates incorrectly thought that increasing import duties would reduce the surplus on the current account of its balance of payments. However, this would reduce the quantity of imports and therefore increase the surplus on the current account of its balance of payments further.

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<p>Paper 0455/22 Structured Questions</p>

Key messages

- In answering the **(b)** parts of the optional questions, it is important that candidates pay attention to the command word 'Explain'. It is not sufficient just to state points – they must be explained.
- Candidates need to consider questions carefully before they start writing their answers. In this session, not all candidates concentrated, for example, on the effects of inflation on firms in the case of **Question 4(d)** and some candidates wrote about a current account deficit rather than a government budget deficit in the case of **Question 5(d)**.
- In analysis and discussion questions, candidates do better if they do not jump stages. This helps them to provide depth to their answers. For example, in discussing whether inflation will harm a country's firms, a strong answer will not jump from inflation may cause workers to press for wages rises and this will reduce firms' profits. The strong answer will explain that if higher wages are paid, this may increase costs of production unless productivity rises in line with the higher wages. As a result, the gap between revenue and costs will be narrowed and profits will fall.
- It is important that candidates can distinguish between price elasticity of demand and price elasticity of supply. While candidates often show a good understanding of price elasticity of demand, there appears to be less understanding of price elasticity of supply.

General comments

It was pleasing that very few candidates answered more than the required three optional questions and only a small number of candidates failed to answer all the required questions. In addition, very few candidates this session misidentified the questions they answered.

There were some candidates who gave excellent answers. These made good use of relevant economics to answer questions in an accurate and clear way. There were also, however, some candidates who wrote long answers which were repetitive and were based on general knowledge rather than economics. A proportion of candidates also did not appear to consider the questions carefully before starting to answer them, possibly thinking that long answers would ensure high marks regardless of their quality.

There was a relatively even spread on the optional questions with **Question 3** being slightly less popular. Most candidates allocated their time well.

Comments on specific questions

Section A

Question 1

- (a) Most candidates answered this question accurately. Some candidates, however, got into difficulties by confusing how many zeros were in the answer. Expressing the number as \$27 bn rather than \$27 000 000 000 reduced the chance of this happening.
- (b) A number of candidates showed confusion over how a fall in the death rate would affect population size. The majority, however, were able to identify a fall in the birth rate and emigration as the reasons why Romania's population fell between 1990 and 2022.

- (c) Most candidates identified from the source material that Romania's high economic growth rate was the reason why immigration may increase in the future. The majority of these candidates went on to explain why a higher economic growth would attract people to come to live in Romania.
- (d) There was a mixed performance on this question. Some candidates wrote about the consequences rather than the causes of the increase in household spending. Most of those who did focus on the causes produced good explanation particularly of how lower interest rates may encourage higher borrowing and reduced saving.
- (e) There were a pleasing number of good diagrams showing how a maximum price would impact the market for electricity. The strongest ones showed the quantity demanded and the quantity supplied at the maximum price. Some candidates, however, showed the demand or supply curve shifting. A small number of candidates got the demand and supply curve round the wrong way. An even smaller number of candidates drew a production possibility curve.
- (f) This was generally well-answered. Most candidates analysed the nature of the relationship, provided relevant supporting evidence, explained it and noted the exception. However, some candidates confused GDP per head with GDP. A number of candidates just described the data in the table without interpreting it.
- (g) There were some perceptive answers to this question which developed the comment in the source material and also explored other ways foreign MNCs may affect poverty in their host countries. The answers tended to be stronger on the side of why foreign MNCs may reduce poverty in their host countries. The vast majority of candidates mentioned that the MNCs would be likely to reduce unemployment by creating jobs. Other possible effects mentioned including contributing to tax revenue which could be spent on measures to reduce poverty.

On the other side, there were some good comments particularly in terms of how foreign MNCs may gain monopoly power and then drive domestic firms out of business and raise prices. However, some candidates made statements which they did not explain. For example, some wrote that MNCs might pay lower wages. They did not consider whether the wages, whilst possibly being lower than those paid in the home country, might still be higher than those in the host country. They also did not explain why people would choose to work for the MNCs if they were not receiving a higher income than before.

An example of a good answer, in which the candidate considered both sides in a relatively brief but clear and coherent manner:

'MNCs are multinational companies, they set up plants and firms in different countries. An MNC could reduce the poverty in a host country as it creates more job opportunities for the people when opening a plant. By giving the people employment opportunities, they can earn income that they can spend on basic necessities thus reducing poverty. Furthermore, MNCs can teach workers new skills when employing them which broadens their future job opportunities and help them gain jobs that provide higher pay for their skills.'

However, MNCs can also increase poverty by using their comparative advantage to drive out local businesses and cause unemployment, MNCs may gain monopoly power and charge high prices which the people may not be able to afford and so increase poverty. They may also increase prices by using up the country's non-renewable resources.'

- (h) It was pleasing that candidates approached this question in an objective way based on economics. The quality of the answers varied. Some candidates just quoted the reference in the source material to 'There is a range of influences as to whether women enter the labour force. These include social attitudes, female education and whether childcare facilities and part-time work are available' without interpreting it. A number of candidates produced rather limited answers, considering just one or two influences and not explaining, for example, why discrimination may discourage some women from joining the labour force. Others, however, produced good answers which examined both sides and which explained clearly the points they made. An example of a good answer:

'A higher proportion of women may enter Romania's labour force if a greater proportion of females seek out education and gain proper skills and qualifications to enable them to work. The higher the number of females are educated, the more the number of women enter the labour force.'

Moreover, more women may have greater access to work and be a part of the labour force if the social attitudes towards working women become positive. The more it is socially acceptable for women to work, the more number of women will enter the workforce of Romania.

On the contrary, if childcare facilities and part-time work are not available to women, it may prohibit them from becoming a part of the labour force as it will make it difficult for them to manage their maternal duties as well.

Furthermore, if women are discriminated at work, they may not be encouraged to join the labour force. Discrimination may include lower pay or even being given different, relatively 'easy' tasks.'

Section B

Question 2

- (a) A small proportion of candidates revealed confusion between the economic definition of a free good and the everyday meaning of a free good. Some candidates gave an example of an economic good and a free good. This was not required and did not carry any marks. However, most candidates did show a clear understanding of the difference between an economic good and a free good.
- (b) A good level of understanding of opportunity cost was shown with most candidates bringing out its meaning and its importance to a government deciding whether to spend tax revenue on a large infrastructure project. There was some good explanation in terms of tax revenue being limited and which choice might have to be given up.
- (c) There were some excellent answers which analysed the key influences on whether the supply of a product is elastic or inelastic. However, some candidates identified some relevant influences but showed confusion over whether these are likely to make supply elastic or inelastic. Other candidates analysed what could cause changes in supply and a disappointing proportion of candidates analysed the influences on price elasticity of demand.
- (d) Most candidates were able to examine both why a government should and why it should not ban the burning of wood. What distinguished candidates' answers was the depth to which they examined the two sides. An example of a Level 2 answer:

'The government may ban the burning of wood to heat homes because it causes pollution as burning of wood produces greenhouse gases which contribute to global warming. This would cause the health of workers to deteriorate as they may inhale these greenhouse gases and fall sick, reducing production of the economy as the workers will take more sick leave.

However, the government should not ban the burning of wood to heat homes as it is cheap alternative to heaters. Since heaters are not available in all households, low income households may not have a way of staying warm without burning wood. Then, banning the burning of wood to heat homes may cause firms to see a massive decrease in the consumption of wood, reducing profits which may cause relative poverty.'

In this case, both sides are considered in a relatively clear way. These take into account the context given. However, more effects could have been considered, for example, the possible effect of pollution on tourism. More depth was also needed. For example, the candidate could have explained how pollution causes market failure by creating external costs. It was not established whether the decrease in the consumption of wood would be 'massive'. The candidate might have considered the effect of lower demand for wood on unemployment and the price of alternative sources of heat in both the short term and the long term.

Question 3

- (a) A high proportion of candidates named the four factors of production rather than providing a definition of factor of production. Others recognised the role of a factor of production in producing goods and services and some provided a full definition by referring to a resource or input.

- (b) There were some good answers to this question which identified and explained two relevant reasons. However, a disappointing proportion of candidates identified one or two reasons but did not explain them or identified and explained only one reason.
- (c) There were some good answers to this question which explored several reasons why small firms may be able to compete successfully with a large firm in the same industry. Some candidates, however, lost focus and explained either why small firms may become large firms, by for example merging, or the disadvantages of small firms.
- (d) A number of candidates made unexplained statements and built their answers on these. For example, some candidates stated that an increase in the money supply would cause a fall in the country's foreign exchange rate without explaining why this may be the case. A proportion of these then concentrated on the advantages and disadvantages of a lower foreign exchange rate. They effectively turned it into a different question.

The strong answers linked an increase in the money supply to higher total demand, often with a reason given for the increase in the money supply.

An example of a good Level 3 answer which explored both sides in depth:

'An increase in the money supply of the country may be part of expansionary monetary policy which is designed to boost total demand in the economy.'

An increase in the money supply would mean that households and firms will have more money available to spend and consumer expenditure would rise. Firms may invest more. Higher consumer expenditure and investment will increase total demand, which may result in a rise in GDP and economic growth. Moreover, higher government spending on capital may mean that productivity, employment and output will rise as well as the quality of the products, making them more internationally competitive, allowing an improvement in the country's balance of trade.

On the other hand, an increase in the money supply may raise inflationary pressure, especially monetary inflationary as there will be more consumer spending which may encourage producers to raise their prices to earn greater profit margins which may cause the general price level of goods and services to rise. This may reduce confidence in the economy. Inflation will occur if the increase in total demand is not matched with an increase in the output of products.

An increase in the money supply may also cause households to spend more on imports. This may cause the value of imports to exceed the value of exports. This may lead to a current account deficit.'

Question 4

- (a) This was well answered with a loss of output, higher government spending on unemployment benefits and poverty being the most popular causes identified.
- (b) Some candidates identified the key resource allocation decisions but did not explain how these are made in a mixed economy. However, most did recognise that in a mixed economy, these decisions are made by both the private and public sector. The strongest answers explained on what basis these decisions are made in the two sectors.
- (c) It was pleasing how well this question was answered. In the past candidates have struggled with questions on the foreign exchange rate but these time there were many good answers. These included some particularly good analysis of the effects of an increase in the interest rate and foreign direct investment.
- (d) This was reasonably well answered. Most candidates did show some awareness of the possible effects of inflation on a country's firms. In some cases, however, candidates wrote about the general effects of inflation on an economy rather than specifically on a country's firms.

An example of a Level 1 answer:

'Inflation is when there is continuous rise in the price of the goods and services. Inflation can harm a country's firms since there will be a continuous rise in the price of goods and services. This can

decrease output, decrease demand, decrease GDP, decrease economic growth, cause unemployment and a decrease in aggregate demand.

It might not since the government can increase taxes on certain goods. The government can increase interest rates.'

The candidate repeated a definition of inflation in the first two lines. In the first paragraph, the candidate lists a number of possible effects without explaining them. In the brief second paragraph, the candidate is stating how a government might eliminate inflation, as well as explaining the effects in the first paragraph, the candidate should have explained how contractionary fiscal and monetary policy, designed to reduce inflation could harm firms.

Question 5

- (a) Most candidates were able to identify a difference between an export and an import. Unfortunately, a small proportion of candidates confused the two.
- (b) There was a variety in the quality of answers to this question. There were some strong answers often linked to a rise in profit if more interest can be earned from lending and a central bank encouraging or instructing commercial banks to lend more. Some candidates, however, did not explain the reasons they identified.
- (c) There were some strong answers to this question with some clear analysis of relevant effects that an ageing population may have on economic growth. However, some candidates confused retirement with unemployment. There were other candidates who examined how an ageing population may cause an increase in demand for some products while reducing demand for other products rather than focusing on total demand and economic growth.
- (d) Despite the stem of this question stating 'Finland's Government had a budget deficit with government spending exceeding tax revenue' some candidates confused a government budget deficit with a deficit on the current account of the balance of payments. This result in them answering a different question.

There were also some strong answers which analysed how supply-side policy measures may affect government spending and tax revenue and so the government budget balance.

An example of a strong Level 3 answer:

'Supply-side policy measures like increased spending on education and training will lead to a more skilled labour force who are more likely to get employed. This will increase the productivity of firms, allowing them to expand and increase profits with lower costs of production from higher productivity and economies of scale. This will lead to higher collection of corporation tax, reducing the budget deficit. Moreover, skilled labour force will have higher incomes, leading to higher collection from direct taxes imposed on the income of individuals. Furthermore, higher incomes will increase spending. Hence this will increase revenue from indirect taxes imposed on consumer expenditure. Lastly, subsidies given to firms will reduce their costs of production, leading to higher profits and hence higher corporation tax paid.

However, supply-side policy may increase budget deficit, as government will have to pay to implement the policies like giving education. This will increase government spending, By training labour, workers may become skilled and may emigrate. This will reduce the tax base as people emigrate in search of high-paying jobs.

If the supply increases but the demand of goods and services doesn't increase, then the government would not be able to take advantage of indirect tax so tax revenue may not increase. If there are fewer laws and regulation, then firms may avoid paying tax. So, the budget deficit will increase if spending remains unchanged.'