

ECONOMICS

Paper 0455/11
Multiple Choice

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

General comments

4808 candidates sat this paper. The mean mark was 20.5 which is higher than the mean of 19.4 in 2015 but similar to both the mean of 20.7 in June 2014 and the mean of 20.4 in June 2013.

The questions for which most candidates selected the correct answer were **2, 4, 6, 8, 9, 11, 22, 25, and 29**. These questions were answered correctly by 80 per cent or more of the candidates. They covered different parts of the syllabus and were set to test different skills.

The questions for which the fewest candidates selected the correct answer were **15, 21, 24 and 30**. These questions were answered correctly by fewer than 45 per cent of the candidates.

There were no questions which were answered incorrectly by candidates who scored well on the test overall. (If this were to be the case then it may indicate that those who scored well on the test overall might have seen an alternative, and possible, interpretation of the question which could possibly indicate a fault in the question).

Comments on specific questions

Question 15 was answered correctly by 34 per cent of the candidates who chose option A. 28 per cent chose option B, 23 per cent chose option C and 15 per cent chose option D. A rise in costs would move the supply curve up (towards B) and then it is likely that with the rise in price there would be a switch to government schools with good results and demand for private schools would decrease, ending at A.

Question 21 was answered correctly by 41 per cent of the candidates who chose option C. 9 per cent chose option A, 35 per cent chose option B and 14 per cent chose options D. Candidates muddled the effect of rising prices on those who owed money, and those to whom the money was due.

Question 24 was also answered correctly by 41 per cent of the candidates who chose option C. 23 per cent chose option A, 21 per cent chose option B and 14 per cent chose option D. Subsistence farming would not have a value apportioned to it for the GDP accounts and, therefore, the accounts would not accurately reflect the country's output.

Question 30 was answered correctly by 24 per cent of the candidates who chose option B. 12 per cent chose option A, 50 per cent chose option C and 13 per cent chose options D. It is uncertain why those who chose C thought that a rise in prices would result in a fall in the goods and services account without any information about the effect on demand. It may be that they confused the 'quantity' of goods and the 'value' of goods.

The rest of the questions gave results which were well within the levels expected.

ECONOMICS

Paper 0455/12
Multiple Choice

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

General comments

8388 candidates sat this paper. The mean mark was 20.7 which was almost the same as the mean of 20.5 in 2015, but slightly lower than both the mean of 21.2 in June 2014 and the mean of 21.9 in June 2013.

The questions for which most candidates selected the correct answer were **4, 6, 12, 22 and 24**. These questions were answered correctly by 85 per cent or more of the candidates. They covered different parts of the syllabus and were set to test different skills.

The questions for which the fewest candidates selected the correct answer were **8, 13, and 18**. These questions were answered correctly by fewer than 45 per cent of the candidates.

There were no questions which were answered incorrectly by candidates who scored well on the test overall. (If this were to be the case then it may indicate that those who scored well on the test overall might have seen an alternative, and possible, interpretation of the question which could possibly indicate a fault in the question).

Comments on specific questions

Question 8 was answered correctly by 41 per cent of the candidates who chose option A. 9 per cent chose option B, 31 per cent chose option C and 19 per cent chose option D. This was a knowledge question rather than a question that required manipulation of economic data.

Question 13 was answered correctly by 39 per cent of the candidates who chose option A. 32 per cent chose option B, 4 per cent chose option C and 25 per cent chose option D. While it is possible that options B, C and D may happen, the only option that would *definitely* occur with integration is option A referring to the ownership structure.

Question 18 was answered correctly by 41 per cent of the candidates who chose option C. 9 per cent chose option A, 34 per cent chose option B and 16 per cent chose option D. It is more likely that option B would occur when there is a trade union rather than when there is no trade union – but it is not guaranteed in either case. Reducing restrictive practices will increase the possibility of competition.

The rest of the questions gave results which were well within the levels expected.

ECONOMICS

Paper 0455/13
Multiple Choice

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

General comments

109 candidates sat this paper. The mean mark was 20.5 which is slightly higher than the mean of 19.3 of June 2015.

The questions for which most candidates selected the correct answer were **4, 6, 22 and 29**. These questions were answered correctly by 85 per cent or more of the candidates. They covered different parts of the syllabus and were set to test different skills.

The questions for which the fewest candidates selected the correct answer were **2, 15, and 17**. These questions were answered correctly by fewer than 45 per cent of the candidates.

Comments on specific questions

Question 2 was answered correctly by 12 per cent of the candidates who chose option A. 63 per cent chose option B, 9 per cent chose option C and 15 per cent chose option D. Land is limited; the farm already uses an extensive range of fields. It is likely that this would be the *most difficult* of the factors to increase.

Question 15 was answered correctly by 44 per cent of the candidates who chose option A. 38 per cent chose option B, 12 per cent chose option C and 6 per cent chose option D. In option A the quantity of each of the factors doubles and the resulting output doubles. This is an example of constant returns to scale.

Question 17 was answered correctly by 37 per cent of the candidates who chose option D. 27 per cent chose option A, 15 per cent chose option B and 22 per cent chose option C. Those who chose options other than D confused monetary and fiscal policy with supply side policy.

The rest of the questions gave results which were well within the levels expected.

ECONOMICS

Paper 0455/21

Written

Key messages

Six of the part questions in **Question 1** required candidates to use information in the extract as the basis of their answer. In this exam there was an increase in the number of candidates who relied mainly on their general knowledge and understanding to answer some of these questions. While they may have provided correct information, e.g. about a monopoly, they did not score marks because the assessment objective is to make use of relevant information *from the extract*. Candidates who did not do so found it had a detrimental effect on their overall mark.

Responses to questions in this paper also identified that there are a number of important concepts and economic terms which many candidates do not understand, although they are clearly in the syllabus and have been tested in previous examinations. The key ones in this paper are exchange rate in **Question 3(d)**, price inelasticity in **Question 4(b)**, market failure in **Question 5(a)** and regulation in **Question 5(b)**.

One essential element for success in this paper is careful consideration of the structure of an answer. This structure is indicated by the *command word* in the question and, in Questions 2-7 parts b, c and d, there are essentially three of these words: *explain*, *analyse* and *discuss*.

In *explain* questions (typically worth 4 marks) it is necessary to do more than simply state answers. For example, in **Question 5(b)**, it was important to explain *how* government regulation might *reduce* market failure, such as by the government making laws to fine firms that create external costs like air pollution. *Not* to explain what government regulation and market failure are. In *analyse* questions (typically worth 6 marks) it is often tempting to 'look at both sides' but that is not required in this Economics paper. In **Question 2(c)**, for example, analysis of *removing* an indirect tax was required but adding one was not. In *discuss* questions (usually worth 8 marks) both sides are required, and full marks cannot be obtained if a one-sided discussion is produced. The requirement for both sides of the argument is often further emphasised by an *adverb* in the question, such as the word 'always' in **Questions 4(d)** and **7(d)**.

General comments

There were few rubric errors again this year. However, there are an increasing number of candidates who answer parts of questions out of sequence. For example, answering Question 5(a) followed by Question 6(c) followed by Question 4(d). Candidates can answer questions in a different sequence but the Principal Examiner would strongly advise them to answer all of one question together, in the correct order, i.e. from **(a)** to **(d)**. This is for two reasons. One is because there is a logical sequence in the sub questions so that, for instance, answering part **(b)** may help candidates to form their answer to part **(c)**. The other reason is that answering questions out of sequence risks candidates missing out some sub questions or committing rubric errors.

Comments on specific questions

Section A

Question 1

- (a) Most candidates were able to identify two of the three characteristics of a monopoly shown in the extract. However, some did not make reference to the extract and gave other examples from their own knowledge about monopolies. Whilst these may have been correct characteristics of a monopoly, they gained no marks as the assessment objective was selecting correct information from the extract.
- (b) Answers were equally split between US\$396 bn or US\$397 bn, the right answer, and US\$157.5 bn, the wrong answer, as many candidates used an incorrect method of calculation. If US\$250 bn is only 63% of the total output of car part sales in 2013; then 100% would be greater, not less than US\$250 bn.
- (c) The majority of candidates correctly identified that recession was the reason that wages in the UK car industry fell in 2009. Slightly fewer explained that this resulted in lower demand for cars, or lower demand for car workers, which in turn led to lower wages as car producers cut costs of production. Some candidates referred to labour being replaced by machines, which is mentioned in the extract, but does not account for lower wages.
- (d) This answer was generally well done with many candidates explaining two merits of the market system. The extract provided information on consumer sovereignty and how firms compete with each other. Here again, some candidates did not use information in the extract and wrote about other features of a market system e.g. lack of government involvement.
- (e) Most candidates were able to identify that some less skilled workers lost their jobs and that some were replaced with capital equipment. However, only a few answers analysed why this would raise labour productivity. A common response, but not a reason given in the extract and therefore gaining no marks, was that remaining workers would be motivated to work harder in order to keep their jobs. Some answers showed that candidates were unclear about the distinction between production and productivity.
- (f) Three reasons for protecting a declining car industry were often identified and discussed – the most common ones being to save jobs/prevent unemployment/government having to pay higher unemployment benefits, the loss of tax revenue to the government, and a positive effect on the balance of payments. Candidates were less clear on why the government should not support a declining car industry. The opportunity cost of using resources that could otherwise be used to support education, health and the general infrastructure of the country was the main reason given. Many referred to negative externalities, such as air pollution caused by cars, but this would not be a factor taken into account by a government in these circumstances.
- (g) Candidates were generally able to explain that commercial banks offered loans and saving accounts to their customers. However, fewer used other information in the extract e.g. that loans were used to buy cars. Equally, a few made reference to correct functions of commercial banks not included in the extract e.g. use of credit cards.
- (h) Most candidates recognised that large car manufacturing firms benefited from economies of scale, were often multinational companies, and had brand loyalty which made it difficult for small car manufacturing companies to compete. Candidates also explained that small firms did not suffer from diseconomies of scale, and often served a niche market e.g. offered specialist sports cars where economies of scale were less important. A few misinterpreted the question to be one about small cars and big cars.

Section B

Question 2

- (a) An indirect tax was correctly defined by nearly all candidates although a few gave the example of a direct tax. Long answers are not required for a definition.
- (b) A few candidates incorrectly explained that corporation tax affected consumer income. However, most were able to explain that a cut in corporation tax left firms with greater profit/lower costs which could lead to greater output and/or lower prices. If this increased sales, governments would gain additional tax revenue from indirect taxes e.g. sales tax. Quite a few candidates also explained that lower corporation tax might encourage new domestic firms or multinational companies to open which would also raise tax revenue from corporation tax.
- (c) The diagram drawn by many candidates was wrong as it showed a shift in the demand curve to the right. The removal of an indirect tax will shift the supply curve to the right, thereby lowering cost of production and prices which results in a movement along the demand curve. A few candidates showed a shift in both the demand and supply curves. For many candidates their written comments only explained the diagram drawn and did not analyse that the effect was a reduction in costs of production and that the greater supply would lower prices. There are no marks for simply describing the diagram.
Note: Candidates do not always take as much care as they should in labelling the axes and curves of their diagrams accurately however, regardless of how accurate the diagram is, full marks cannot be achieved without written comments *analysing the effect* of what is happening in the diagram.
- (d) Different taxes have different effects upon different types of inflation and so it was important that candidates were clear about which type of tax and inflation they were discussing. Therefore, general answers which did not specify a tax or identify whether inflation was demand-pull or cost-push were not as good as those that did. Most candidates were able to explain that an increase in income tax would reduce consumer income and lead to lower demand but did not always identify that this reduced demand-pull inflation. Equally most candidates were able to explain that an increase in an indirect tax or corporation tax could result in higher prices, thereby increasing cost-push inflation. Good answers also commented upon wage-price spiral and that an increase in indirect taxes could reduce demand-pull inflation.

Question 3

- (a) Most candidates were able to correctly identify two functions of money, although some were confused with characteristics of money such as portability and durability.
- (b) Candidates were required to explain reasons why household borrowing may increase which meant explaining how a factor influencing household borrowing had changed. Stating that if interest rates fell this would mean that it was cheaper to borrow and therefore household borrowing would increase would be a good explanation. However, in quite a few cases, simply mentioning inflation or low income did not explain why household borrowing would change. Other common factors identified included greater confidence in the economy and the increase in family size.
- (c) Answers to this question were often descriptive rather than analytical. Many answers just described how international trade was between countries rather than within a country and resulted in imports and exports. Good answers would have analysed how international trade was different from internal trade e.g. the impact of using different currencies, trade regulations and languages. Trade restrictions would also affect the nature of international trade. Some candidates correctly analysed how international trade could result in a wider range of goods and services, often at a cheaper price, giving consumers greater choice.
- (d) Many candidates were unable to develop a full response to this question since it was clear that a significant proportion of them did not understand what was meant by an exchange rate. Often comments referred to physical exchange of goods, e.g. more exports rather than the value of a currency, which incorrectly resulted in a discussion about exports and imports and the impact of trade on a country. A few did understand that the exchange rate was the price of a currency and were able to discuss how increased exports would result in increased demand for the currency resulting in a higher price or value for the currency. Good answers considered the impact of other factors e.g. what was happening to imports and whether the exchange rate was floating or fixed.

Question 4

- (a) Nearly all candidates understood the concept of opportunity cost, but fewer were able to explain that land has competing uses and therefore if more land was needed for milk production, less was available for wheat and therefore wheat production was the best alternative forgone.
- (b) Candidates continue to be confused on inelasticity of supply. Many answers related to factors affecting elasticity of demand. It is possible that they may have misread the question. The most common reasons for supply being inelastic related to factors such as the time taken to make a product and the availability of resources used to make the product e.g. skilled labour or natural resources. Questions on elasticity of supply in recent years do not show a positive trend in understanding this concept.
- (c) Candidates were generally able to analyse how an increase in exports could lead to higher output resulting in higher employment within the exporting country. However, analysis of how it increased the inflation rate was less well done. Few candidates were able to differentiate between demand-pull and cost-push inflation. A common response was to state that higher employment would mean greater demand within the exporting country and this would lead to higher inflation, which was already in the question. Some very good answers explained that increased exports meant less goods available in the exporting country and that this led to excess demand causing demand-pull inflation.
- (d) Answers to this question fell into two categories. Some made no mention of economies and diseconomies of scale and simply wrote about factors that could result in higher or lower costs as firms increased output e.g. the need for more workers or bigger factories. Others explained how as output rose fixed costs remained unchanged and therefore average costs fell. Generally speaking this approach did not explain why average costs changed. Quite a few candidates gave full answers explaining, with correct examples, how firms could benefit from economies of scale which resulted in lower average costs, but might also suffer from diseconomies of scale, with examples, where average costs of production could rise.

Question 5

- (a) Market failure is still not well understood, although quite a few were able to explain that it related to inefficiencies in the allocation of resources. A few did correctly identify social costs being greater than social benefits and gave examples of an external cost.
- (b) Most candidates did not understand what was meant by the term 'regulation', even though it is stated in the syllabus. This meant that answers were generally about the use of taxation and subsidies to reduce market failure. However, taxes and subsidies are not forms of regulation. For those who did understand that regulation was about rules and laws, examples given included banning consumption of goods with high external costs e.g. smoking in public places and fining firms that created high levels of air pollution.
- (c) To do well, candidates need to understand what were the main government economic objectives. Most candidates were able to analyse that fewer resources meant lower production which could impact on one or more of government objectives relating to balance of payments, level of employment and inflation. A few mistakenly wrote mainly about the impact on government revenues and therefore on government expenditure e.g. education and health.
- (d) The majority of candidates understood the difference between social benefits and social costs, some giving clear explanations. Most candidates were able to give some relevant examples relating to building flood defences although they were not always clear on whether these were benefits or costs. In some cases, answers were more of a list than an explanation of why they were a social cost or social benefit. Few were able to distinguish between private and external costs and benefits.

Question 6

- (a) This was well answered by nearly all candidates with poor pay and poor working conditions the most popular reasons identified.
- (b) Disadvantages arising from a reduction in export revenue were generally well understood. The negative effect on the balance of payments and employment were the most common effect explained. However, some candidates also explained how it could affect GDP and economic growth. A few described a direct effect on government tax revenue and then explained how this could lead to less government expenditure. The implication here was that governments collected tax from exports, rather than lower employment meant lower tax revenue from income tax and sales tax.
- (c) Most candidates made the link between less revenue resulting in less spending on capital goods, but were not able to analyse why. A few were able to explain that less revenue meant less profit and as capital goods were usually funded from profits, this would reduce the ability of firms to invest in new capital goods. Some good answers stated that lower profits could result in greater expenditure on capital goods, funded by borrowing, if this led to an improvement in productivity and quality of good produced.
- (d) Most candidates were unable to show how an increase in a country's labour force would change income per head. Most believed that a larger labour force was linked to higher wages without explaining why. Where they thought that an increase in a country's labour force would not change income per head, responses often centred on an argument around a growth in the labour force due to the influx of low skilled immigrants. Few looked at reasons why the labour force may have expanded and even fewer recognised that an increase in the size of the labour force might not mean increased employment. The fact that most candidates did not look at demand and supply factors affecting the labour market meant that they were unable to discuss why income per head would increase or decrease.

Question 7

- (a) A production possibility curve (PPC) was understood by a high proportion of candidates. Quite a few drew a PPC to illustrate the points they were making, but this was not required.
- (b) Most candidates were able to identify two factors of production and give examples from the tourism industry e.g. labour and tourist guides.
- (c) This question required candidates to understand market forces of demand and supply for labour and then to apply this to doctors and nurses. Most candidates were able to do this, but often did not relate the comparative demand and supply for doctors and nurses. Thus a common answer was to state that doctors had higher demand than nurses because of the skills they offered and that supply of doctors was more limited because of the greater number of years of education and training than nurses. This in itself does not explain why doctors are paid more. Some candidates also had negative misconceptions about the role and skills required to be a nurse which detracted from the economic reasons given for why doctors are paid more.
- (d) The majority of candidates were able to give full answers on why living standards are lower in developing countries when compared to developed countries; citing reasons why levels of income, quality of education and healthcare would be lower. However, few candidates were able to give reasons why some people in developed countries might have a lower living standard. Where this was commented upon, it was usually in the context of pockets of absolute poverty in developed countries or a few rich people in undeveloped countries.

ECONOMICS

Paper 0455/22
Written

Key messages

- Candidates need to ensure that they include relevant economics in their answers. Some candidates sought to answer some of the questions on the basis of general knowledge rather than applying economic concepts.
- It is important that candidates provide depth of analysis in their answers to the **(c)** part of optional **Questions 2-7**. A number of candidates jumped stages and did not establish the points they made.
- Candidates need to pay careful attention to all the words in the questions to ensure that their answers are addressing the specific question set.
- Drawing diagrams is an essential skill for economists. There was evidence in **Q2(c)** that not all candidates had mastered drawing and labelling demand and supply diagrams accurately.
- As mentioned in previous reports, it is advisable for candidates to sit mock examinations to gain experience of answering questions under exam conditions and to avoid rubric errors.
- Candidates should always indicate clearly which question they are answering. A number of candidates wrote the wrong question number.
- The first question may require candidates to undertake a calculation and/or to interpret statistical data. For these reasons, it is advisable that candidates have a calculator with them in the examination.

General comments

There was a full range of performance on this paper. There were some excellent answers which revealed not only a strong knowledge and understanding of economics but also the ability to apply that knowledge and understanding to specific issues and to provide the basis for evaluation. There were also some sketchy/vague answers, some long answers which lacked the application of economics, and some scripts which were stronger on some topics of the syllabus than on other topics. The majority of candidates were able to gain most of the marks on the **(a)** questions in **Section B** and some marks on the **(b)** questions. As expected, the performance on the **(c)** and **(d)** parts was more varied.

The majority of candidates did answer **Q1** and three questions from **Section B**. There were, however, a minority of candidates who answered all the questions. This mistake meant that they did not have the time to answer the required number of questions in sufficient depth.

There were a number of candidates who answered parts of questions out of sequence. For example, answering Question 5(a) followed by Question 6(c) followed by Question 4(d). Candidates can answer questions in a different sequence but the Principal Examiner would strongly advise them to answer all of one question together, in the correct order, i.e. from **(a)** to **(d)**. This is for two reasons. One is because there is a logical sequence in the sub questions so that, for instance, answering part **(b)** may help candidates to form their answer to part **(c)**. The other reason is that answering questions out of sequence risks candidates missing out some sub questions or committing rubric errors.

Most candidates did follow the command words but not all read the other words of the questions carefully enough. For example, not all candidates picked up on the word 'producers' in **Q1(h)** and the word 'consumers' in **Q4(d)**. Candidates should not rush their answers. Taking time to consider the questions helps to ensure that the answers directly address the question. Some candidates find it useful to highlight or underline the key words in the question.

Comments on specific questions

Section A

Question 1

Most, but not all, candidates answered this question first. The general performance on this question was pleasing. The majority of candidates made good use of the information in the extract. They paid careful attention to the command words and most recognised the need to provide two-sided answers to the 'discuss' questions.

- (a) Most candidates were able to identify a rise in incomes and an increase in doctors per head as indicators of improved living standards in Indonesia. A small proportion of candidates wrote at greater length than was required. Indeed, while the use of time was good on the paper, this was the question where some candidates did devote more time than the marks available justified.
- (b) A high proportion of candidates made good and accurate use of the information that demand for chocolate is addictive to determine the degree of price elasticity of demand possessed by chocolate.
- (c) Most candidates were able to identify two relevant reasons why cocoa farmers do not use much capital equipment. The two most common reasons identified were the small size of cocoa bean farms and the low incomes of cocoa bean farmers. The strongest answers explained the links between the reasons identified and the type of production process employed. There were strong answers which, for instance, explained how the older workers might not be able to make full use of capital equipment. Some candidates, however, just stated points without explaining them. For example, a number of candidates stated that the farmers do not use much capital equipment as they are labour intensive but they failed to go on to explain why the farms employ mostly labour.
- (d) A small proportion of candidates did not attempt the question. Some of those candidates who did attempt the question did not appreciate that the inflation rate is the change in the price level divided by the initial price level. A pleasing proportion of candidates did, however, succeed in undertaking an accurate calculation.
- (e) Not all candidates analysed the benefits of specialisation that were referred to in the extract. Those who did tended to be stronger on the benefit of higher output arising from concentrating on what the country is best at producing rather than on the quality aspect.
- (f) The vast majority of candidates did 'discuss' both why the price of chocolate may increase and why it might not. There were some particularly pertinent comments about the effects of rising costs of production and concerns about the effects on health resulting from eating chocolate. Some candidates included diagrams but then did not always refer to what the diagrams were showing.
- (g) This was a well answered question. Most candidates were able to recognise that the extract suggests that the main goal of chocolate producers is profit maximisation. They were able to support this conclusion with relevant evidence drawn from the extract.
- (h) There was some good discussion of the advantages of a larger market for the sale of the producers' products and for the purchase of imported raw materials. A relatively high proportion of candidates also made some strong comments on the possible disadvantages of increased foreign competition. The knowledge and understanding of the practice of dumping was impressive. A number of answers, however, lacked focus on producers. Some candidates wrote about the effects on consumers or on the economy as a whole.

Section B

Question 2

This was the most popular question. Candidates performed particularly well on **Q2(d)** but less well on **Q2(b)** and some of the diagrams drawn in **Q2(c)** lacked accuracy.

- (a) This was generally well answered with some relevant examples given. A small proportion of candidates showed some confusion by defining a sales tax as a direct rather than an indirect tax.
- (b) There were some strong answers to this question which revealed a good awareness of the nature of private costs and social costs. As in previous sessions, however, a relatively high proportion of candidates confused social costs with external costs. This is one of the most common confusions that candidates make.
- (c) There was a mixed performance on this question. Some candidates did draw accurate and well labelled diagrams and explained in their written comments how the imposition of a tax raises firms' costs, decreasing supply and raising price. Some candidates, however, shifted the demand curve rather than the supply curve and some transposed the demand and supply curves. A small proportion of candidates mistakenly labelled the axes as demand and supply rather than price and quantity. It was surprising to note that even some candidates who performed strongly overall made mistakes on the diagram. In terms of written comments, some candidates just described what the diagram showed rather than *analysing the cause and consequence* of the shift in the supply curve.
Note: Candidates do not always take as much care as they should in labelling the axes and curves of their diagrams accurately however, regardless of how accurate the diagram is, full marks cannot be achieved without written comments *analysing the effect* of what is happening in the diagram.
- (d) There were some excellent answers to this question which showed a strong awareness of how a country could be affected by multinational companies moving out. There were pertinent comments about the effects on the country's GDP, unemployment, position on the current account of the balance of payments and tax revenue. A pleasing proportion of candidates discussed the factors that would influence whether the overall effect would be positive or negative. Unfortunately, a number of candidates answered a rather different question; what are the effects of multinational companies setting up in a country. A small proportion of candidates did not explain the points they made.

Question 3

This question was selected by a high proportion of candidates. Some candidates struggled with their answers to **Q3(b)** and **Q3(c)**.

- (a) The majority of candidates were able to identify two relevant economic aims. The two most popular economic aims stated were full employment and low inflation.
- (b) Some candidates did not recognise that the labour force consists of both the employed and the unemployed. This resulted in them writing about the different causes of unemployment rather than why someone of working age may not be working or seeking work. Those candidates who did appreciate the nature of the labour force wrote particularly well about people staying in education and people being homemakers.
- (c) Some candidates' answers lacked focus and concentrated on the causes of a reduction in unemployment. There were, nevertheless, some good answers particularly on immigration, changes in population size, changes in the age of retirement, and school leaving age. There were some perceptive comments on how these causes would affect the size of the country's labour force over time. There were also some interesting answers about the changing attitudes towards women working in particular countries.
- (d) There was the full range of performance on this question. What distinguished between candidates' answers was the extent to which they included economics. Some answers were based on general knowledge and included some unsupported statements. Other answers did apply relevant economic concepts, including productivity, costs of production and geographical and occupational mobility of labour. A number of these answers strengthened their comments by establishing what might have caused the average age of the labour force to fall.

Question 4

Some candidates provided strong answers to all the sub parts of this question. The quality of the answers, however, varied particularly in terms of **Q4(c)** and **Q4(d)**.

- (a) Most candidates were able to define 'capital intensive' accurately by making reference not only to the proportion of capital employed but also to the proportion of other factors of production, particularly labour employed.
- (b) The two most popular characteristics identified were many buyers and sellers, and free entry and exit. Some candidates were confused about the nature of perfect competition; writing about variations in the products produced under conditions of perfect competition. A number of other candidates wrote about firms in perfect competition earning only normal profits without mentioning that this characteristic occurs in the long run.
- (c) Some candidates appeared uncertain about the nature of internal diseconomies of scale. Others provided good answers particularly in terms of managerial and communication diseconomies of scale. A relatively high proportion of those candidates who did understand internal diseconomies of scale were able to analyse them in depth.
- (d) Most candidates were able to analyse how consumers could benefit from an increase in imports. Candidates' answers on the possible disadvantages of an increase in imports were not so strong. A number of candidates wrote about the effects associated with a decrease rather than an increase in imports. The strongest answers on the disadvantages tended to focus on the long run impact on the price and quality of products available to consumers. Some answers wandered off the central point of the question and discussed the effects of an increase in imports on producers and on the economy as a whole rather than specifically on consumers.

Question 5

This was the least popular question on the paper. The best answered sub questions were **Q5(b)** and **Q5(c)**. A number of candidates struggled with **Q5(a)** and **Q5(d)** but some candidates showed an excellent grasp of a weighted price index and how a cut in the rate of interest might affect deflation.

- (a) There were some accurate answers to this question but a number of candidates did not show an understanding of the term.
- (b) This was generally well answered, with a high proportion of candidates able to explain two relevant ways in which the two types of banks are different. A small proportion of candidates revealed a misunderstanding of the ownership of a central bank and which type of bank households use.
- (c) Most candidates recognised how a fall in the value of a currency would affect export and import prices and so demand for exports and imports. What distinguished the answers was the depth of the analysis. The strongest answers went on to examine the effects on export revenue and import expenditure and some referred to trade in goods and trade in services.
- (d) There were some intelligent answers to this question with strong application of relevant economic theory. A number of answers were stronger on why a cut in the rate of interest might end deflation than on why it might not. Some candidates got into difficulty by trying to explain how a cut in the rate of interest might reduce total supply – whereas it would be likely to increase it. Those candidates who concentrated on the impact of a cut in the rate of interest on total demand produced stronger answers.

Question 6

This was the second least popular question. Some candidates struggled with **Q6(c)** but a relatively high proportion produced good answers to **Q6(d)**.

- (a) Candidates showed a good understanding of the economic problem with statements linking the different qualities of wants and resources. Only a small proportion of candidates mentioned examples of *an* economic problem rather than *the* economic problem.
- (b) Most candidates were able to identify two relevant reasons why workers specialising could reduce the average cost of production. Not all, however, went on to explain them. A small number wrote about why specialisation might increase average cost of production – this was not required.
- (c) There were some good answers to this question which provided links from increased bank lending via higher consumer expenditure and investment to higher output. There were also perceptive comments about the possible effects that higher borrowing to finance spending on education and training might have on productivity and output. A number of candidates, however, jumped from an increase in bank lending to higher output without providing the links in between. Some stated that an increase in bank lending would mean a lower interest rate without establishing why. A number of candidates mistakenly thought that the only cause of higher output would be the result of an increase in the rate of interest paid.
- (d) There were some excellent answers to this question. These explored the possible effects that economies and diseconomies of scale and changes in market power might have on consumers. Not all answers, however, were so well focused. A number of candidates wrote about whether producers rather than consumers would benefit from horizontal mergers. A small proportion of candidates wrote in very general terms and some confused an increase in total cost with an increase in average cost.

Question 7

This was quite a popular question with most candidates performing particularly well on **Q7(b)**.

- (a) Most candidates stated what is meant by 'scarce' linked to resources but only a minority stated what is meant by 'resources'.
- (b) There were some excellent answers to this question. Most candidates identified and explained two relevant reasons why someone may be willing to do a low-paid job with little job security. The two most popular reasons explained were lack of skills and fringe benefits. There were also some particularly good answers which explained that during a recession a person may have to accept any job on offer in order to gain some income. A small number of candidates did not read the question carefully enough. Ignoring the word 'little'. These candidates wrote about why someone may be willing to do a low paid job which has job security – missing the point of the question.
- (c) Many candidates wrote at some length on this question but some did not apply economic theory. There were some generalised comments on the behaviour of young and older people. Not all candidates picked up on the word 'workers' and wrote about the spending, saving and borrowing behaviour of retired people. The stronger answers explored the different financial pressures on the two groups, possible differences in their earnings and how the groups might be regarded by banks when they apply for a loan.
- (d) There were some strong answers to this question. These assessed the effects that foreign tourism might have on the country's trade performance, output, employment and living standards. There were some intelligent contrasts made between, for instance, the creation of more jobs and the quality of those jobs and the advantages and disadvantages of the change in the exchange rate that might result from foreign tourism. A number of candidates gave some interesting examples of how tourism industry affects their own economy. Some candidates, however, only touched on one or two effects and did not explain the points they made. There were also a number of unsubstantiated statements made about foreign tourists.

ECONOMICS

Paper 0455/23

Written

Key messages

One essential element for success in this paper is careful consideration of the structure of an answer. This structure is indicated by the *command word* in the question and, in the longer question parts (Questions 2-7 parts b, c and d), there are essentially three of these words: *explain*, *analyse*, and *discuss*.

In *explain* questions (worth 4 marks) it is necessary to do more than simply state answers. For example, in **question 1(c)**, it was important to explain *how* traffic congestion would impose a cost upon third parties, such as delays for residents in getting to work. In *analyse* questions (6 marks) it is often tempting to 'look at both sides' but that is not required, as for example in question 4c, where social benefits were required but social costs were not indicated by the question. In *discuss* questions (8 marks) both sides are required, and no more than five marks can be obtained if a one-sided discussion is produced. The requirement for both sides of the argument is often further emphasised by an *adverb* in the question, such as the word 'always' in question 7d.

On this paper, there were two questions which required calculations, **1(a)** and **1(d)**. There are two important points to note with regard to such questions: firstly answers must have the correct units (e.g. \$) in order to score full marks, and secondly it is advisable to show workings. In the case of question **1(d)**, for instance, an answer that shows the correct workings but which made a mistake at the end could score 2 marks whereas an incorrect answer without any workings would not have gained any marks.

General comments

The vast majority of candidates follow the rubric instructions correctly however there are still those who do not answer four questions in total (one compulsory from Section A plus three optional from Section B) as requested. Answering all seven questions severely handicaps a candidate, because there is nowhere near sufficient time available to produce answers of any depth. It is also not acceptable to adopt a 'pick and mix' approach whereby various parts from all seven questions are answered at random.

There are some candidates who answer parts of questions out of sequence. For example, answering Question 5(a) followed by Question 6(c) followed by Question 4(d). Candidates can answer questions in a different sequence but the Principal Examiner would strongly advise them to answer all of one question together in order from **(a)** to **(d)**. This is for two reasons. One is because there is a logical sequence in the sub questions so that, for instance, answering part **(b)** may help candidates to form their answer to part **(c)**. The other reason is that answering questions out of sequence risks candidates missing out some sub questions or committing rubric errors.

In the same way that it is essential to read the general examination instructions carefully, it is also vital to read specific question instructions carefully. In particular, for many parts of **Question 1**, *use of the extract* is required, and those candidates who give answers which ignore the extract will not tend to score marks, even if the information they have provided is correct. For example, in **Question 1(c)**, answers were required to explain the two examples of external costs from the extract; noise pollution and traffic congestion, not just any external costs.

Comments on specific questions

Section A

Question 1

- (a) Most candidates could produce a successful answer to this question. The main reason why some candidates did not score both marks was omission of the \$ sign and/or the word 'million'. Common sense would also help some candidates to achieve marks – a ship is unlikely to cost as little as \$130.
- (b) The organisation in question here was a public limited company because of the reference *in the extract* to shareholders and the stock exchange. Those candidates who specified a private limited company had failed to realise that such companies are not listed on stock exchanges, or had not read the extract.
- (c) It was disappointing to note that very few candidates had a good understanding of the nature of external costs. Most assumed that social costs and external costs are the same thing, thus ignoring the influence of private costs. They were however usually able to identify the two external costs in the extract – noise pollution and traffic congestion.
- (d) As noted in the key messages above, the main reason marks were dropped in this question was not showing correct workings. Thus an answer of 23.96 million scored zero with no workings shown, but could have scored two marks if those workings had been given.
- (e) Answers to this question were relatively straightforward when the candidate stuck to the appropriate references from the extract (responding to change and subsidies) but those who gave answers other than this could not possibly score marks.
- (f) The key to a good answer to this question was the realisation that a merger will increase the size of a firm, thus opening up the possibility of economies of scale. Only a small proportion of candidates appreciated this and the corresponding downside which the firm faces in terms of diseconomies of scale. Weaker answers looked at 'more money' available to the merged firm and this approach is not appropriate because it is far too vague.
- (g) It was encouraging to see the majority of candidates looking closely at the information given in the extract to conclude that the value of the Korean won had risen because fewer won had to be exchanged for a dollar. To obtain four marks however, it was necessary to go beyond this data and use other information from the extract, but very few candidates managed this.
- (h) Weak answers to this question tended to look at marginal issues such as the types of protection available to a government. Good answers however focused on key issues such as shipbuilding's contribution to GDP, employment and the current account. This was a discuss question however and the 'other side' was required, looking at issues such as opportunity cost and lack of competition.

Section B

Question 2

- (a) There were few problems apparent in answers to this question, other than the use of vague terminology such as 'go hand in hand'. Complements in economics are items which are consumed together, but many things which go 'hand in hand', such as insufficient revision and low marks in examinations, are not economic concepts.
- (b) Most candidates could give two appropriate reasons for inelastic demand. Some candidates however misread the question and gave many substitutes as a reason for elastic demand.
- (c) It was encouraging to see diagrams drawn correctly by a large number of candidates however there are also those who unnecessarily add a shifted supply curve, thus confusing the answer.
Note: Candidates do not always take as much care as they should in *labelling* the axes and curves of their diagrams accurately however, regardless of how accurate the diagram is, full marks cannot be achieved without written comments *analysing the effect* of what is happening in the diagram.
- (d) The main problem encountered in answers to this question was vagueness. Increased demand in general was not sufficient to explain how the current account could improve. Candidates needed to specify increased demand **abroad** increasing exports and increased demand **at home** reducing imports of coffee. Then obtaining five marks was relatively straightforward. The key to increasing this to full marks was an understanding of other factors involved, such as the relative importance of coffee in the current account figures.

Question 3

- (a) Most candidates could score one mark on this question for the risk of losses, but many could not find a second risk for entrepreneurs, such as falling demand and rising costs.
- (b) It was fairly straightforward for candidates to score four marks here, with local knowledge and better communication given by many candidates as reasons why firms may prefer to employ local managers.
- (c) This question often proved difficult for candidates. In particular, confusion about the role of interest rates was apparent in answers. It is not likely that interest rates will fall at times of rapid economic growth; in fact central banks are more likely to raise interest rates in such circumstances because of the danger of inflation. In addition, there was a tendency for candidates to write about reasons why households might borrow more, in general, ignoring the full wording of the question, which required consideration of times of rapid economic growth.
- (d) The standard of answer to this question was generally good, with candidates able to discuss reasons why unions might promote growth, such as training and motivation, and reasons why they might obstruct growth, such as strikes and higher wages. There are, however, candidates who confused trade unions with customs unions such as the EU, and sadly this mistake meant that no marks were possible.

Question 4

- (a) Most candidates could identify two influences on a country's birth rate, although answers which gave 'standard of living' were too vague because a more specific aspect of standard of living, such as income, was required.
- (b) As in the previous question, the main issue was answers from candidates which were too vague. GDP is not a measure of comparative living standards because it does not take population size into account. Similarly, an explanation of HDI must be accurate, explaining that it includes income, education and life expectancy measures. Finally, individual measures of living standards needed to be specific rather than general, and so 'healthcare' is too vague whereas 'doctors per head' is appropriate in this context.
- (c) As in **question 1(c)**, candidates often wrongly equated the social with the external (benefits in this case). It must be stressed that social benefits include private benefits in addition to external benefits, but it was rare to see this acknowledged in answers. As a result, there were a lot of general answers

on the benefits of vaccinations which did not use economic concepts. The best answers analysed private benefits and external benefits separately, and were therefore usually able to score maximum marks on this question.

There were also a considerable number of candidates who analysed the social costs of vaccinations, emphasising the need to read questions with great care, because this approach could not possibly score any marks.

- (d) Many answers to this question were written as arguments for and against public provision of healthcare. Whilst this approach went some way towards answering the question, it was unlikely to score full marks because it ignored the specific reference to the private sector given in the question. Most candidates could explain that the public sector ensured that the poor could afford healthcare but very few answered the question in terms of the external benefits healthcare provides. In addition, there was a widespread assumption that private healthcare would somehow be 'better' than public provision without evidence being provided to support this view. It is debatable whether or not standards and efficiency will be higher with private sector provision, not least because the resources available to the public sector are often so much greater, but the argument that private provision is preferable rests upon ideas such as greater competition and the profit motive, and these needed to be specified in such answers.

Question 5

- (a) There were few problems for candidates when answering this question. The main reason marks were dropped was the tautological answer – people keeping their money in a savings account in order to save.
- (b) Answers to this question were split between those who understood the question and those who confused state-owned commercial banks with central banks, wrongly indicating that state-owned commercial banks set monetary policy. Good responses looked at service provision and the different motives of the two bank types.
- (c) The best answers here used the concept of economies of scale to explain how costs and prices could be lower for commercial banks which are growing. Unfortunately, however, few candidates saw this as a potential way to answer the question, concentrating instead on more general points such as more branches and greater security.
- (d) This question was answered well on the whole. Most candidates were able to discuss health and education provision as in a mixed economy, and the profit motive, competition and choice in a market economy. As in earlier questions however, it was disappointing to see very little discussion of external benefits and costs arising in these two types of economy, issues which could have gained the candidate several marks.

Question 6

- (a) Very few candidates demonstrated sufficient understanding to score two marks on this question. Most could explain that inflation is the price level increasing but they were then unable to develop this into an explanation of accelerating inflation i.e. the price level increasing at a faster rate.
- (b) The main problem which occurred in answers to this question was lack of reference to particular taxes such as income tax and sales tax. Instead candidates tended to discuss taxes in general, rather than their rates, thus limiting the range of answers they could give. The most successful approach was to explain how unemployment rising and income falling would lead to lower tax revenues through direct taxes on income and indirect taxes on spending.
- (c) Answers to this question were generally of a good standard, and it was encouraging to see candidates demonstrating a sound understanding of the links between falling unemployment, increased incomes, total demand, and demand-pull inflation. It is important to note however that the terms cost-push and demand-pull had to be specified for marks to be given, rather than just the general term inflation.
- (d) This question proved difficult for those who attempted it and it was necessary to read the question very carefully to be able to answer it satisfactorily. Most candidates misread the question however and ignored the last five words: 'than it raises in taxation'. Consequently answers tended to focus on the

arguments for and against government spending in general, such as health, education and welfare benefits. The question however was about expansionary fiscal policy and the way in which raising total demand would increase output and economic growth. On the 'should not' side of the argument answers were often too vague, merely indicating that a budget deficit was somehow a bad thing. There were also candidates who incorrectly confused a budget deficit with a balance of payments deficit.

Question 7

- (a) Most candidates demonstrated a good understanding of absolute poverty when answering this question and were thus able to gain full marks.
- (b) The definition of opportunity cost was correctly given by most candidates and the best answers followed this up with an explanation of how being a sole proprietor involved giving up the opportunity to work with others in a partnership or improving their education.
- (c) Very few candidates were able to answer this question successfully and general understanding of production possibility curves was poor. It was rare to see three marks awarded for the diagram because candidates often labelled the axes incorrectly, or drew the curve without it touching both axes. PP curves do not have price and quantity on the axes, nor do they have technology and labour. PP curves have two types of product on the axes, with the curve showing the maximum possible output of both products. Strictly the curve should be concave to the origin, but straight line curves were acceptable here. Because the diagram tended to be inadequate or incorrect, it was rare to see many marks awarded for a written explanation of the effect of advances in technology.
- (d) There were many good answers to this question with candidates examining both sides of the question well. It was encouraging to see clear links made between education, skills, jobs, incomes and the purchase of essential goods and services. Additionally, many candidates were able to make intelligent arguments about the ineffectiveness of education spending in areas where it might not benefit poorer people, for reasons such as lack of transport or the poor quality of education in those areas. It was also encouraging to see good use being made of the concept of opportunity cost – the idea that spending on education might be better utilised in other areas such as housing and healthcare.