

# **EXAMINATIONS**

April 2004

**Subject 107 — Economics**

## **EXAMINERS' REPORT**

### **Introduction**

The attached subject report has been written by the Principal Examiner with the aim of helping candidates. The questions and comments are based around Core Reading as the interpretation of the syllabus to which the examiners are working. They have however given credit for any alternative approach or interpretation which they consider to be reasonable.

J Curtis  
Chairman of the Board of Examiners

22 June 2004

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### General comment

*There were a few instances where the candidates' answers to some questions were totally illegible - accordingly it was impossible to award any marks in these instances. The overall standard was generally good with many candidates exhibiting high marks.*

### Multiple choice Section

*Generally well answered although questions 3,6,11,13,19,23 and 24 caused most problems for candidates.*

<b>1</b>	B
<b>2</b>	B
<b>3</b>	D
<b>4</b>	B
<b>5</b>	B
<b>6</b>	D
<b>7</b>	C
<b>8</b>	D
<b>9</b>	C
<b>10</b>	D
<b>11</b>	D
<b>12</b>	A
<b>13</b>	D
<b>14</b>	B
<b>15</b>	A
<b>16</b>	D
<b>17</b>	D
<b>18</b>	C
<b>19</b>	B
<b>20</b>	C
<b>21</b>	B
<b>22</b>	C
<b>23</b>	C
<b>24</b>	B
<b>25</b>	D
<b>26</b>	B

- 27**
- (1) An increase in the number of close substitutes.
  - (2) An increase in the proportion of the consumer's income spent on the good.
  - (3) A reduction in the degree of necessity of the good.
  - (4) An increase in the time period under consideration.
  - (5) A reduction in the volatility of the price of the product.
  - (6) A reduction in the brand loyalty for the product.
  - (7) Other relevant factors correctly described.

*References to broadness of product description tended to be confused. Many people stated the general factors, but not which way in it should move to increase elasticity.*

- 28** (i)

<i>Output per week</i>	<i>Total Cost (£'s)</i>	<i>Marginal Cost (£'s)</i>	<i>Average Variable Cost (£'s)</i>
0	5	—	—
1	45	40	40
2	78	33	36.5
3	99	21	31.33
4	114	15	27.25
5	132	18	25.4
6	162	30	26.16
7	210	48	29.28

- (ii) 5 or 6 units

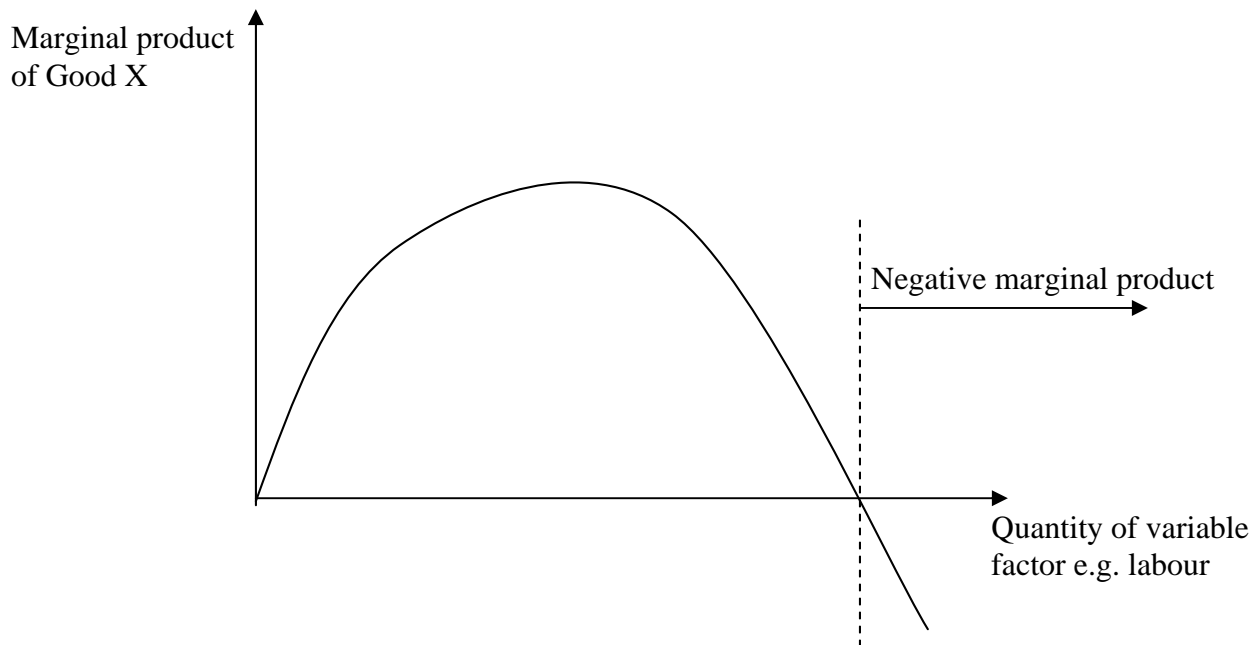
- (iii) £18

*Entries for marginal cost were frequently wrong.*

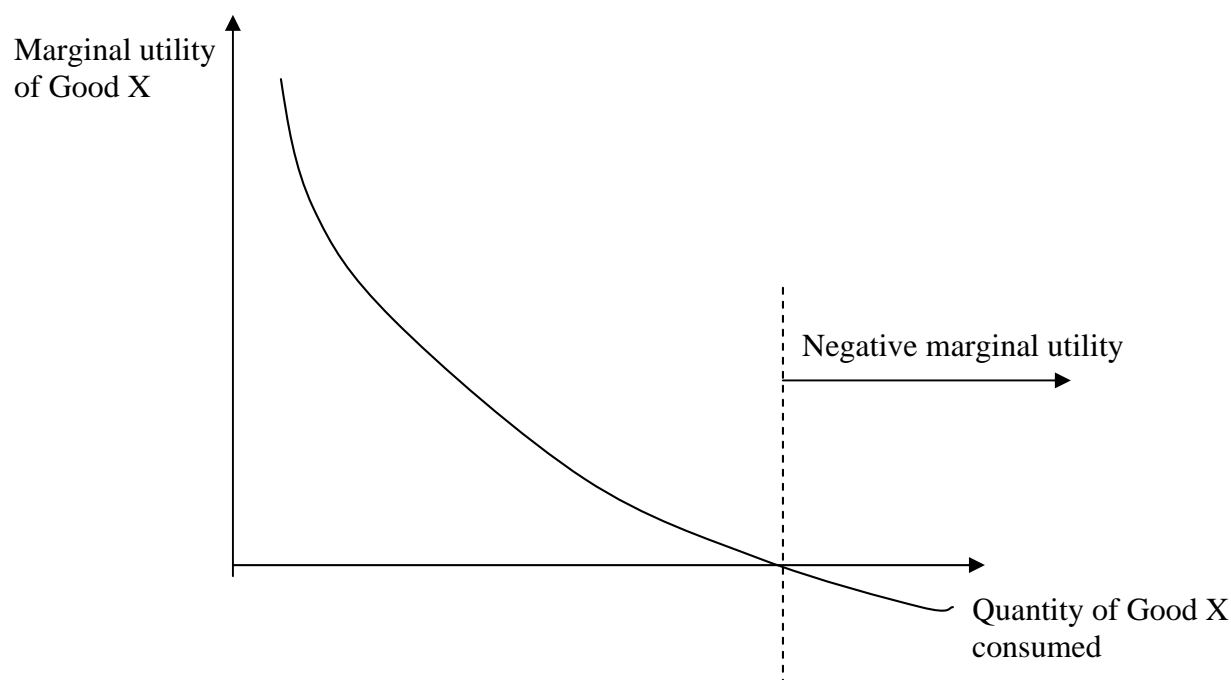
- 29** (i) The law of diminishing returns applies to the short run production process. It states that as you add increasing amounts of a variable factor of production to a given amount of a fixed factor of production then after a certain point the marginal product of the variable factors will decline.

By contrast the law of diminishing marginal utility applies to consumption. It states that as a consumer consumes increasing amounts of a given product then the marginal utility derived from the product will decline.

(ii)

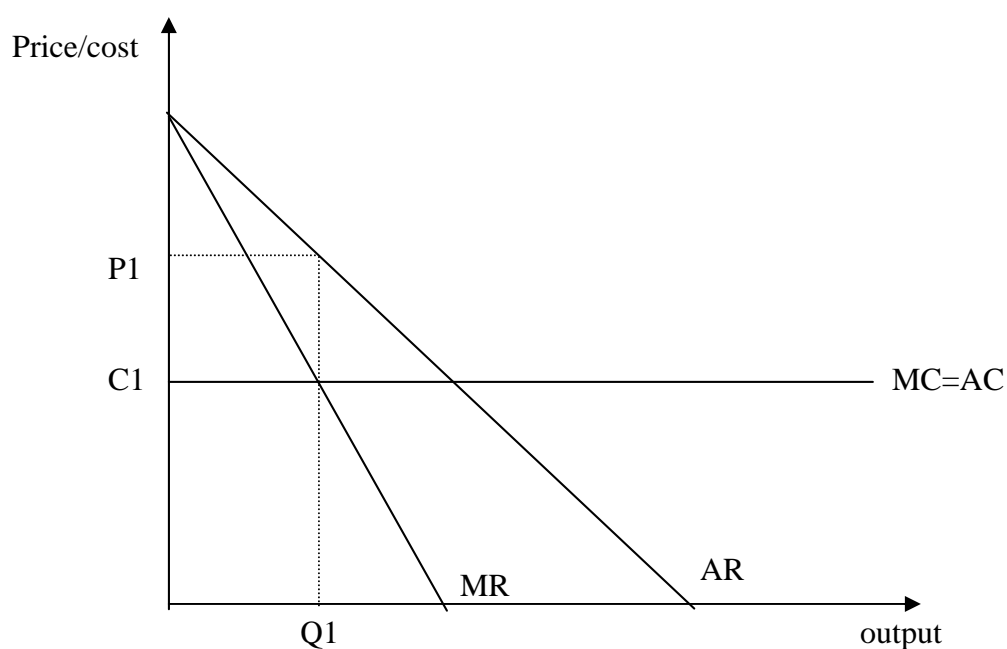


(iii)



*In part (i) the short run (or capital factors fixed) was rarely mentioned; relatively few candidates correctly charted the marginal amounts. Some candidates confused marginal product and total product. Parts (ii) and (iii) were poorly answered with a significant number of candidates labelling the axes incorrectly.*

30



*Despite using a constant Average Cost line, many candidates incorporated an increasing Marginal Cost curve. Some candidates did not label axes and curves as requested in the question.*

- 31** The key factor that distinguishes monopolistic competition from perfect competition is that under monopolistic competition the firms sell similar but differentiated products whereas under perfect competition all the firms sell identical products. This means that firms under monopolistic competition have some pricing power (e.g. brand loyalty) and can raise their price without losing all their customers. The firm faces a downward sloping demand curve for its product. Under perfect competition since firms are selling identical products they have no pricing power and are “price takers”. Each firm therefore faces a horizontal demand curve for its product.

*Generally well answered - some candidates failed to bring out product differentiation.*

- 32** (i) In economics resources are divided into three broad types.

Land: All natural resources  
Labour: All human effort  
Capital: All man-made resources used in production.

Sometimes “entrepreneurs” (i.e. people who own business) is added to this list.

- (ii) A resource is scarce if there would not be enough of it to satisfy all the people who would want to make use of it if it had a zero price.
- (iii) Allocation refers to how resources are used. There are three main allocation questions:

Which goods and services should be produced?  
How should the goods and services be produced?  
Who should consume the goods and services which have been produced?

*Generally well answered - many simply stated the elements in (i) and few candidates mentioned entrepreneurial resource. Part (ii) was very well answered and part (iii) was also generally well answered.*

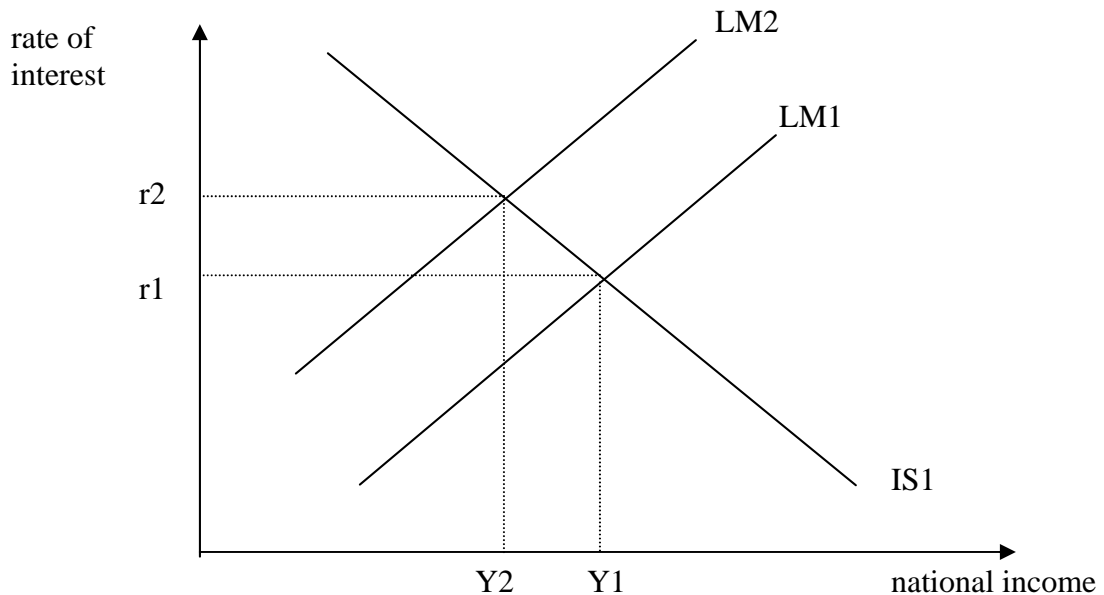
- 33** (i) Price will be reduced, quantity supplied will fall, quantity demanded will rise.  
There will be a shortage.
- (ii) Price will be increased, quantity supplied will rise, quantity demanded will fall.  
There will be a surplus.

*Many used diagrams but failed to state the effects on all the factors specified in the question. Some candidates failed to answer the question by explaining explicitly what would happen to prices, quantity demanded and supplied.*

- 34** (i) Economies of scale refer to the situation where long run average costs fall as output is increased. Diseconomies of scale refer to the situation where long run average costs rise as output is increased.
- (ii) The four reasons might include:
- Indivisibilities
  - Specialisation
  - Physical economies
  - Finance
  - Bulk purchases
  - By-products
  - The principle of multiples

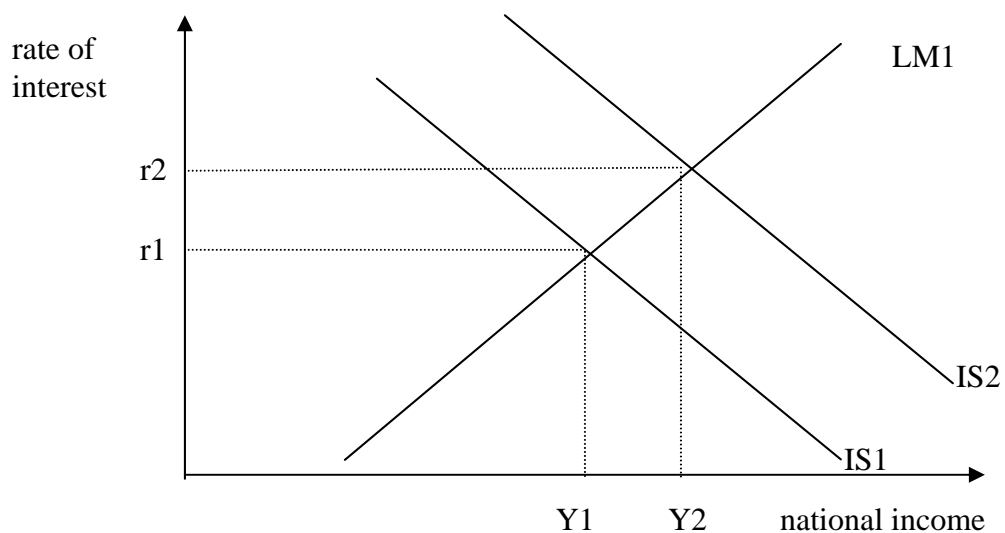
*Generally well answered. However many candidates did not mention long run. There was some confusion between average costs and total costs, and also confusion between diseconomies of scale and diminishing marginal returns. Part (ii) was very well answered.*

- 35** (i) With a contractionary open market operation the Central Bank will sell Treasury bills in exchange for money. The result is that the price of treasury bills falls, the short term rate of interest rises and the rise in interest rates will reduce investment and consumption so lowering the level of national income. This is depicted in the diagram below with the reduction in the money supply shifting the LM curve to the left from LM1 to LM2, the interest rate rising from  $r_1$  to  $r_2$  and the level of national income falling from  $Y_1$  to  $Y_2$ .





- (ii) With an expansionary fiscal policy financed by the sale of bonds, the government sells bonds and uses the proceeds raised to finance increased government expenditure. The effect on the money supply should be zero as the money raised from the bond sales is spent by the government, however, the increase in the supply of bonds for sale pushes down bond prices and raises the interest rate. There is a multiplier effect associated with the increase in government expenditure which is only partially offset by the effect of rising interest rates on consumption and investment so there is a net increase in the level of national income. This is depicted in the diagram below with the increase in government expenditure shifting the IS curve to the right from IS1 to IS2 and the interest rate rising from  $r_1$  to  $r_2$  and the level of national income rising from  $Y_1$  to  $Y_2$ .



*Part (i) was better answered than part (ii). Few mentioned the money supply in part (ii) despite question specifically for this.*

- 36**
- (i) Deficit –£10 million
  - (ii) minus –£5 million
  - (iii) The increase in official reserves indicates that the Central Bank has been buying foreign currency and selling sterling in the foreign exchange market.
  - (iv) It is not possible to calculate the trade balance as this is the balance of exports in goods minus imports of goods only. The above figures are for both goods and services and we need to know the value of the services component before we can calculate the trade balance.

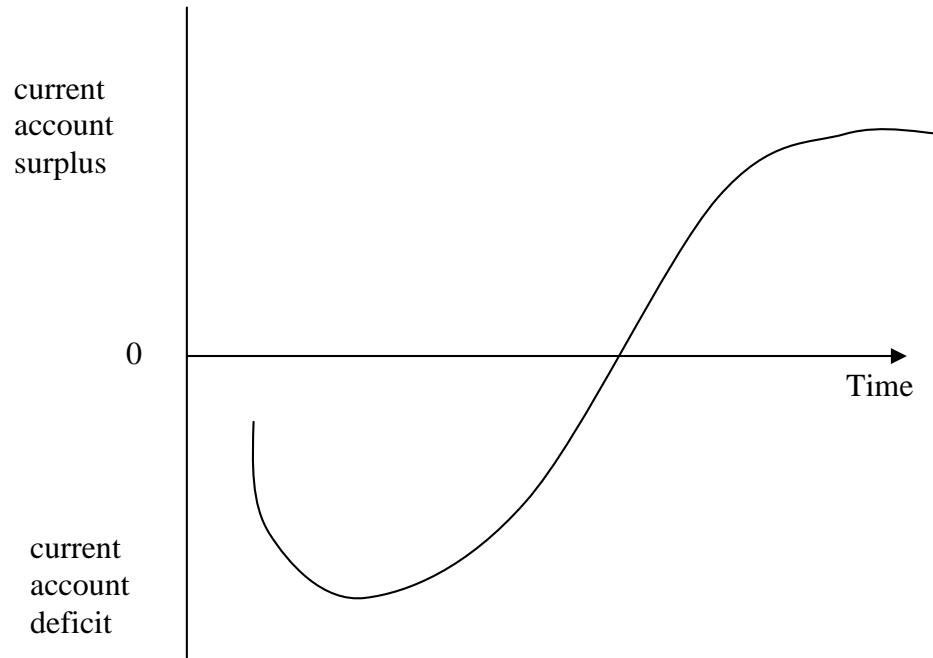
*Generally well answered. Although part (iv) was not particularly well answered.*

- 37** (i) There is no easy way to tackle a current account deficit. A current account deficit means that a country's expenditure on goods/services from the rest of the world is greater than its revenues received from exports of goods/services from the rest of the world.

Devaluation is certainly a useful tool in the medium to long term in helping to correct a current account deficit. This is because a devaluation makes exports more competitive as measured in the foreign currency and imports more expensive as measured in the domestic currency. According to the Marshall Lerner condition provided the sum of the elasticity of demand for exports and imports is greater than unity then a devaluation will improve the current account.

In the short run, devaluation is less likely to be effective in correcting a current account deficit since elasticities of demand for imports and exports are lower in the short run. Imports cost more in the domestic currency while import volumes do not decline sufficiently and exports earn less with exports not increasing sufficiently. Indeed, empirical evidence tends to suggest that the elasticities of demand for imports and exports in the short run are so low that the current account initially deteriorates. The idea of an initial deterioration in the current account followed by a subsequent improvement is known as the J-curve effect depicted in the figure below:

The J-curve



One major problem with devaluation is that by making imports more expensive it could spark off wage and price pressures which to some extent will undermine the increased competitiveness one might otherwise have expected. In addition, the effectiveness of devaluation will be undermined if other trading competitors devalue their currencies so as maintain their international competitiveness.

There are other means that a government can use than devaluation to correct a current account deficit. These include tighter fiscal and monetary policies. The current account which ignoring transfers is given by exports minus imports ( $X - M$ ) has its counterpart in either domestic investment ( $I$ ) being greater than domestic savings ( $S$ ) and/or government expenditure on goods and services ( $G$ ) exceeding tax revenue ( $T$ ) as given by the equation below:

$$(X - M) = (S - I) + (T - G)$$

Introducing a tighter monetary policy by raising the domestic interest rate will discourage consumption (encourage savings) and reduce investment so helping to improve the first bracketed expression on the right hand side. Tighter fiscal policy in the form of a rise in taxes or cut in government expenditure will reduce national income and with it expenditure on imports also helping to improve the current account.

Devaluation is by no means the only mechanism for improving the current account and its relative effectiveness as compared to fiscal and monetary policies will depend upon the structural parameters of the particular economy under consideration. However, there can be little doubt that a combination of devaluation supported by tighter fiscal and monetary policies will be the most effective means of tackling a current account deficit although this may have adverse consequences for employment and output.

- (ii) There are numerous potential advantages that fixed exchange rates may have over floating exchange rates.
  - (a) Reduction in exchange rate uncertainty — fixed exchange rates provide a degree of stability that may not be present under floating exchange rates. As such they help to promote trade and investment.
  - (b) Discipline for economic policy — provided the currency is pegged to a low inflation currency then it will provide a degree of discipline for economic policy that may not be present if the country has a floating exchange rate. The need to keep its inflation rate in line with a low inflation currency will mean the authorities will have to conduct prudent fiscal and monetary policies.
  - (c) Fixed exchange rates promote international policy cooperation — the need to maintain fixed exchange rates means that the countries involved in the arrangement need to coordinate their macroeconomic policies and this may lead to better economic policies than under floating exchange rates where the need to coordinate is less.
  - (d) Fixed exchange rates reduce the dangers of destabilising exchange rate speculation, which can lead to misaligned exchange rates under floating. It is sometimes claimed that floating exchange rates can be characterized by bouts of destabilizing speculation which moves exchange rates out of line with economic fundamentals which then

causes harm to the real economy and such misalignments can be reduced by fixed exchange rates.

- (e) Fixed exchange rates reduce the need to engage in hedging activity. Under fixed exchange rates the greater certainty about the future spot exchange rate means that there is less need for businesses to engage in costly hedging of foreign exchange risk. By contrast, the greater uncertainty that exists under floating exchange rates requires businesses to engage in greater hedging activity.

*The Essay questions were the least well answered part of the examination with many candidates writing insufficient quantity and quality.*

*Part (i) few mentioned the 'J' curve effect and distinguished between short and long run effects of a devaluation. Reducing aggregate demand was not given sufficient emphasis by a significant minority of candidates.*

*In part (ii) many candidates found it difficult to stick to the advantages as the question asked. Candidates need to stick to the question asked and not just talk about fixed and floating exchange rate regimes in a general way.*

## **END OF REPORT**