

**Subject CT7 — Economics
Core Technical**

EXAMINERS' REPORT

April 2008

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.

M A Stocker
Chairman of the Board of Examiners

June 2008

Comments

Comments on solutions presented to individual questions for this April 2008 paper are given below.

- Questions 1–26* The multiple-choice questions were generally well answered, with the exception of questions 8, 12, 22 and 26.
- Question 27* Well answered.
- Question 28* Well answered. Candidates appeared to have no problems with this style of question.
- Questions 29* Well answered. Many candidates produced accurate well labelled diagrams.
- Question 30* Part (i) was well answered, however, part two was poorly answered. Students defined opportunity cost but many failed to use an appropriate diagram or to refer to the slope of the curve.
- Question 31* Part (i) was well answered. Part (ii) some errors in calculations of AVC and MC. Part (iii) generally well answered regarding profit, however some students failed to answer on output level.
- Question 32* Well answered by most candidates. Some basic arithmetic errors parts one and two plus inappropriate treatment of transfers and subsidies.
- Question 33* Poorly answered. Many candidates did not attempt this question or failed to provide an acceptable definition.
- Question 34* Well answered with clear and accurate diagrams.
- Question 35* Well answered
- Question 36* Part (i) – Answer quality and detail varied however, this section was generally well answered. Clear and accurate definitions and analysis were supported by good diagrams.
- Part (ii) – Once again the quality of answers varied however, this section was not as well answered as part 1. Many candidates did not provide clear definitions of different exchange rate systems or use appropriate diagrams to support analysis.

- | | |
|-----------|-----------------|
| 1 | C |
| 2 | C |
| 3 | C |
| 4 | B |
| 5 | B |
| 6 | C |
| 7 | A |
| 8 | B |
| 9 | C |
| 10 | A |
| 11 | C |
| 12 | B |
| 13 | D |
| 14 | C |
| 15 | C |
| 16 | A |
| 17 | D |
| 18 | B |
| 19 | A |
| 20 | D |
| 21 | B |
| 22 | A or C accepted |
| 23 | D |
| 24 | D |
| 25 | C |
| 26 | C |

- 27** Centrally controlled – production, quantity and method of production is determined by an agent of the state.

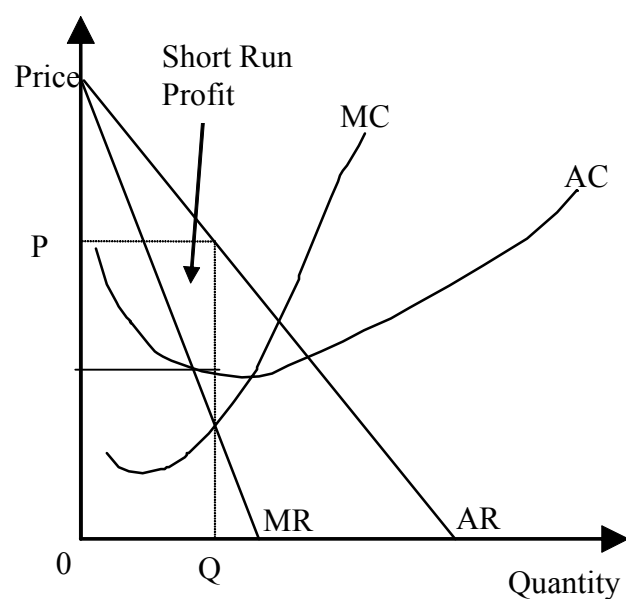
Free market – no government intervention, allocation is determined by the forces of supply and demand with the allocation of the factors of production motivated by profit.

Mixed economy – lies between a centrally controlled and a free market economy, with some allocation determined by the market with other areas subject to government intervention.

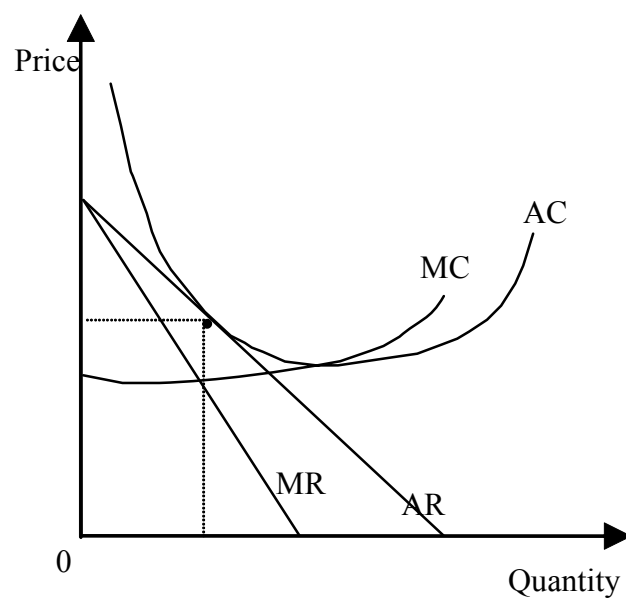
- 28 (i) 5
(ii) 1.2
(iii) 2
(iv) 2.4

29

◆ Profit Making: Short Run
Monopolistic Competition
Supernormal profits

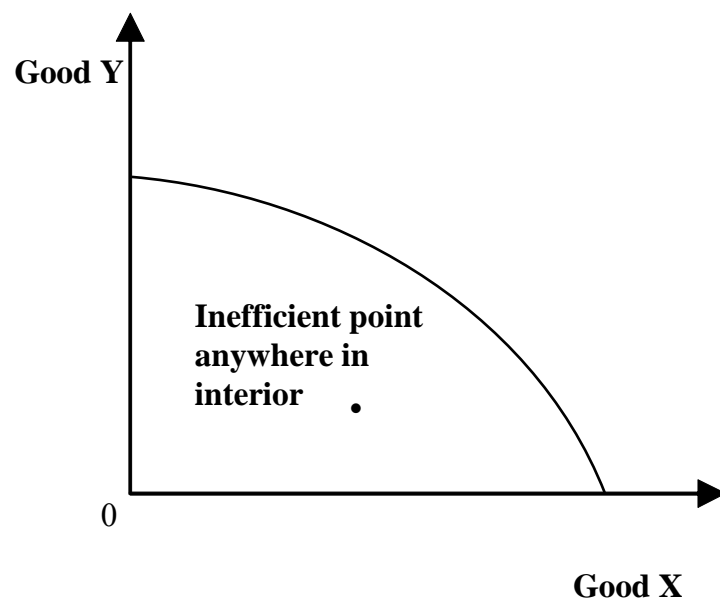


◆ Monopolistic Competition: Long Run Equilibrium



SR drawn correctly
LR drawn correctly

30 (i)



- (ii) When producing on the production possibility frontier it is only possible to produce one of more good by producing less of the other good. The production of the good foregone is the opportunity cost of the good produced. As the production of one good is increased the opportunity cost i.e. the amount of the other good foregone has to increase. This accounts for the concave shape of the production possibility frontier.

31 (i) 10

(ii)

Q	TR	MR	TC	TFC	TVC	ATC	AVC	MC
0	0		10	10	0	0	0	
10	30	3	45	10	35	4.5	3.5	3.5
20	60	3	75	10	65	3.8	3.25	3
30	90	3	100	10	90	3.3	3	2.5
40	120	3	120	10	110	3	2.75	2
50	150	3	145	10	135	2.9	2.7	2.5
60	180	3	175	10	165	2.9	2.75	3
70	210	3	210	10	200	3	2.857	3.5

Note: MR and MC show change over a range of output 10–20, 20–30 etc. Therefore MR and

MC should be placed midway between the figures.

Profit max where $MR = MC$ output of 50–60 Accept 60.

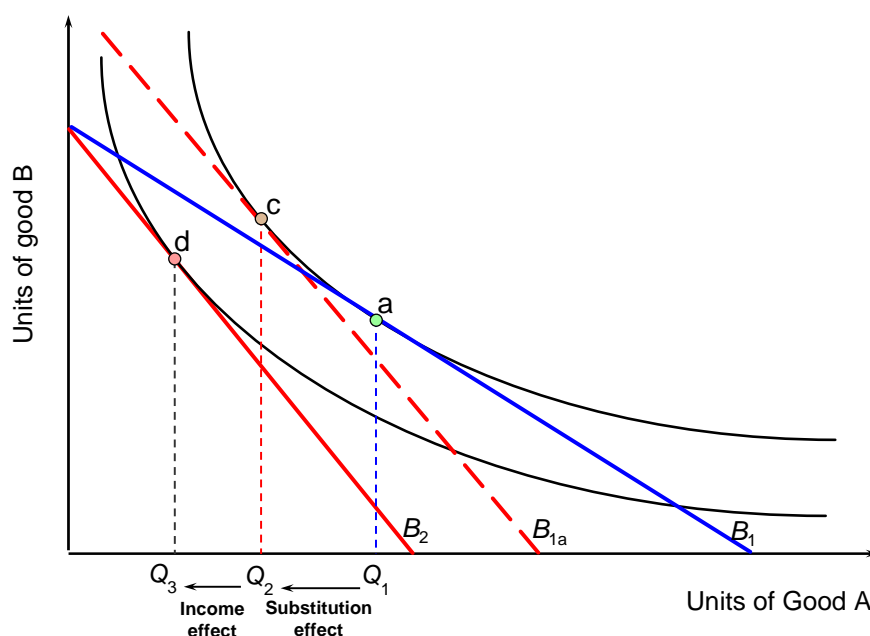
(iii) 60, £5

- 32** (i) $Y = C + I + G + X - M = 710 + 250 + 320 + 180 - 190 = \text{£}1,270\text{m}$
- (ii) $1,270 - 25 = \text{£}1,245\text{m}$
- (iii) Market prices include taxes meaning that GDP at market prices can be increased if the taxation rate is increased. Basic prices remove the impact of taxes Market Prices less taxes plus subsidies = Basic Prices.

- 33** The accelerator principle relies on the $Y = C + I + G + X - M$ identity and is closely related to the multiplier. It states that the level of investment is determined by the rate of change of national income. Small changes in national income can lead to large rises/falls in the demand for investment expenditure, and these are further amplified by the multiplier effect.

Investment is required to establish and maintain the capital stock, but the capital stock is very long lasting as it is not used up in the production process, it merely facilitates it, thus the annual demand for capital stock replacement is relatively small. Therefore changes in national income requiring changes in the level of capital stock can have a huge impact on investment demand. The fact that $I = f(Y)$ and that the marginal propensity to invest impacts on the multiplier means that the “loop” can mean small changes have much larger impacts resulting in economic cycles.

- 34** (i)



An increase in the price of Good A results in a new budget B_2 .

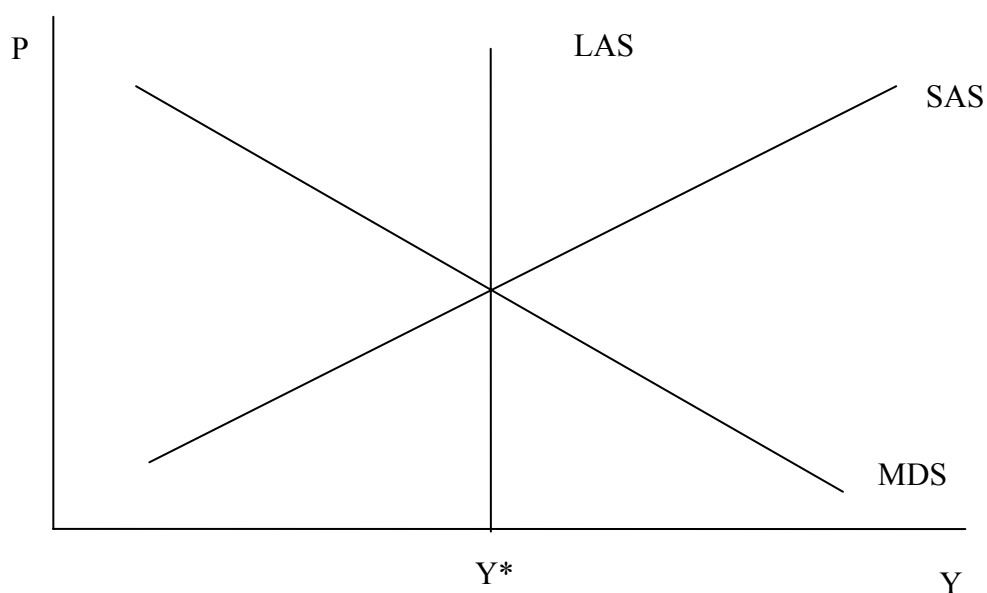
Since both Goods A and B are normal goods, an increase in the price of good A will lead to a reduction in the consumption of Good A and an increase in the

consumption of Good B. The substitution effect always moves in favour of the now relatively cheaper good (B). Since Good A is a normal good, the income effect will work in the same direction as the substitution effect and augment it.

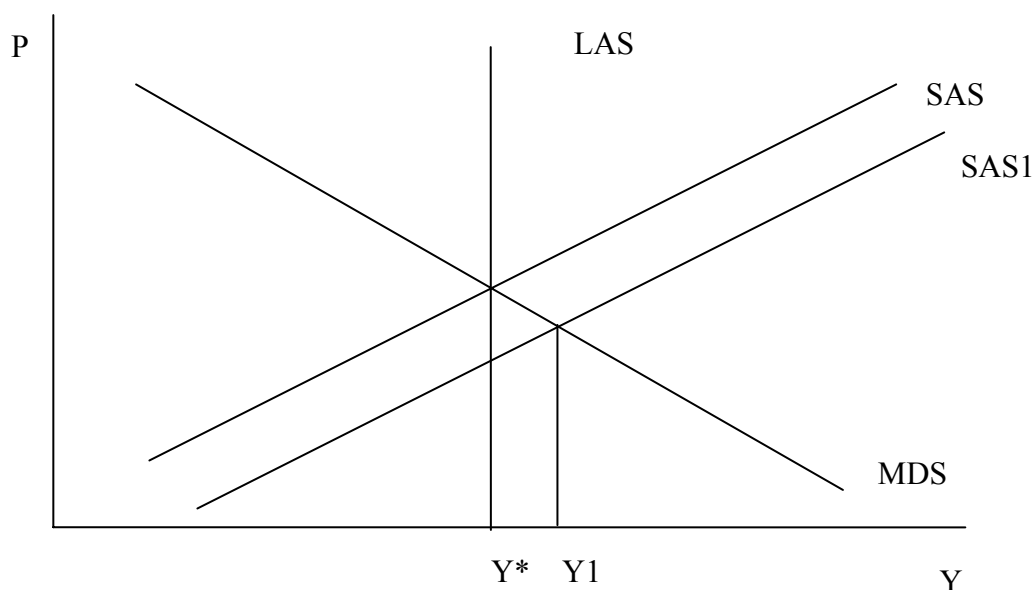
The combined income and substitution effect result in an overall change in consumption $a \rightarrow d$. The substitution effect $a \rightarrow c$. The income effect $c \rightarrow d$

- (ii) While the substitution effect is in favour of the relatively cheaper good, the income effect is in the opposite direction and moves in favour of the more expensive good.

35 (i)



(ii)



A positive supply shock will move the SAS curve to the right, lowering the aggregate price level and increasing the level of national income from Y^* to Y_1 . In order for this position to become the long run equilibrium labour and capital must be able to accommodate the change. If there is not labour available then higher demand for workers will increase wages and prices and return Y_1 to Y^* , or the increase in demand for capital may increase the interest rate and reduce the demand for investment until national income returns to the natural rate.

- (iii) The SR demand for money function shows the relationship between money and the rate of interest. The rate of interest represents the opportunity cost of holding money, therefore a decrease in the rate of interest would, other things being equal, result in an increase in the quantity of money demanded.

- 36** (i) Fiscal policy – the use of taxes and government expenditure. Lowering taxation increases consumption while increasing government spending boosts national income through the $Y = C + I + G + (X - M)$ identity. Government spending need not be funded by taxation but may instead be funded by borrowing. Although this will impact on future consumption, the impact on present income is boosted by the multiplier acting on the increase in government expenditure and because consumption is not decreased by the requirement to pay taxation.

Fiscal policy acts on aggregate demand (some candidates may have used an IS-LM framework rather than AD-AS). Generally a fiscal stimulus, either by increasing government spending or by increasing consumption through a reduction in taxation, will move the AD curve to the right, increasing national income and increasing the price level. Government can mitigate this increase in prices by operating an expansionary monetary policy. However, if the economy is near full employment or the capital stock is nearly fully employed

then the impact of the injection into the economy through the multiplier will be lessened. This “crowding out” may mean that a fiscal stimulus increases the demand for money and so the interest rate. With full crowding out the increase in fiscal stimulus has no impact on national income and leads only to an increase in prices.

While fiscal policy remains a powerful macroeconomic lever, it is considered slow to implement.

Monetary policy – the use of the money supply, interest rate and credit system. Altering the money supply with a given price level means that the real money supply and so the level of interest rate needed to maintain required money balances, can be changed. Altering the money supply can be used to influence national income through the $MV = PY$ relationship. With a given velocity of circulation and price level increasing M leads to an increase in Y . However, the impact of this change may not be complete. An increase in the money supply only increases Y if workers can be convinced that a real change has taken place in the economy. If they are convinced then they will supply more labour and national income will also increase. Should they perceive this only as a nominal increase then the price level will rise so that the increase in the nominal money supply does not result in a change in the real money supply. National income will be unchanged and the price level increased.

Different schools of economic thought place different worth on monetary policy as an economic instrument. If expectations are adaptive then there is a place for monetary expansion, as in the short term at least it can lead to real changes in national income. Where expectations are rational then monetary stimuli lead only to higher price levels. Monetary policy can, however be used in conjunction with fiscal policy to accommodate fiscal expansion and reduce crowding out.

Monetary policy is widely used as a macroeconomic control by influencing the interest rate. Where there is extensive use of credit within the economy changing the costs of borrowing can have a direct and quick influence on the levels of consumption and investment.

- (ii) Fixed exchange rates demand that interest rates are also fixed. Where interest rates diverge from the world level monetary flows will force their return to the world rate.

In an IS-LM framework an expansionary monetary policy with fixed prices would reduce the interest rate below the world rate and increase the level of national income. Interest rates below the world level would lead to capital outflows until the money supply returns to its original level, national income to the starting level and interest rates to the world level. Similarly, a contractionary monetary policy would increase the interest rate above the world level. This would attract large capital inflows and reduce the interest rate to the world level as the money supply increased.

Only fiscal policy can have a lasting effect with fixed exchange rates. A fiscal stimulus moves the IS curve to the right. This increases the level of national income and the interest rate. With a fixed exchange rate system the increase in the interest rate leads to large capital inflows. The only way this can be accommodated is to allow the money supply to increase (as it will with capital inflows) until the interest rate returns to the world level with an increased level of national income. Under fixed exchange rates fiscal policy is highly effective while monetary policy is ineffective.

END OF EXAMINERS' REPORT