EXAMINATION

September 2007

Subject CT7 — Economics
Core Technical

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.

M A Stocker
Chairman of the Board of Examiners

December 2007

Comments

Comments on individual questions are as follows:

Q1–26 Overall the multiple choice questions were well answered. There were several questions which had poor success rate most notably questions 1, 6, 15 and 16.

Q27 Answers to this question were often very weak. Many candidates failed to illustrate correctly the relationship between the average product curve and the marginal product curve. Some confused the average product/marginal product curves with average cost /marginal cost curves, others simply labelled the axes wrongly. Also a surprisingly large number of candidates failed to distinguish between the short run and long run when explaining diminishing marginal returns.

Q28 Generally well answered with most candidates doing the correct calculations.

Q29 Generally well answered but more care needs to be taken by candidates to correctly label the diagram and ensure the marginal cost curve cuts the average cost curve at the minimum of the average cost curve.

Q30 Generally well answered.

Q31 Well answered by the vast majority of candidates but again care need to be taken to0 correctly label all points as requested in the question.

Q32 In part (iv) candidates frequently ignored the multiplier effect, hence assumed income rose by £30 million rather than £30× 1/0.3 = £100 million.

Q33 There were many good, accurate answers to all parts of this question. Mistakes which were made related to reference to a deficit instead of a surplus in part (ii) and sometimes failing to calculate the multiplier correctly in part (iv).

Q34 There were too many vague definitions of the term "crowding out" but nevertheless a surprising number proceeded to provide three clear examples of the term.

Q35 Part one was very straightforward and a majority of candidates gained full marks. Part two was less well answered with many candidates failing to make the link between the statement and the Quantity Theory of Money. Increases in money demand were also accepted as a correct response.

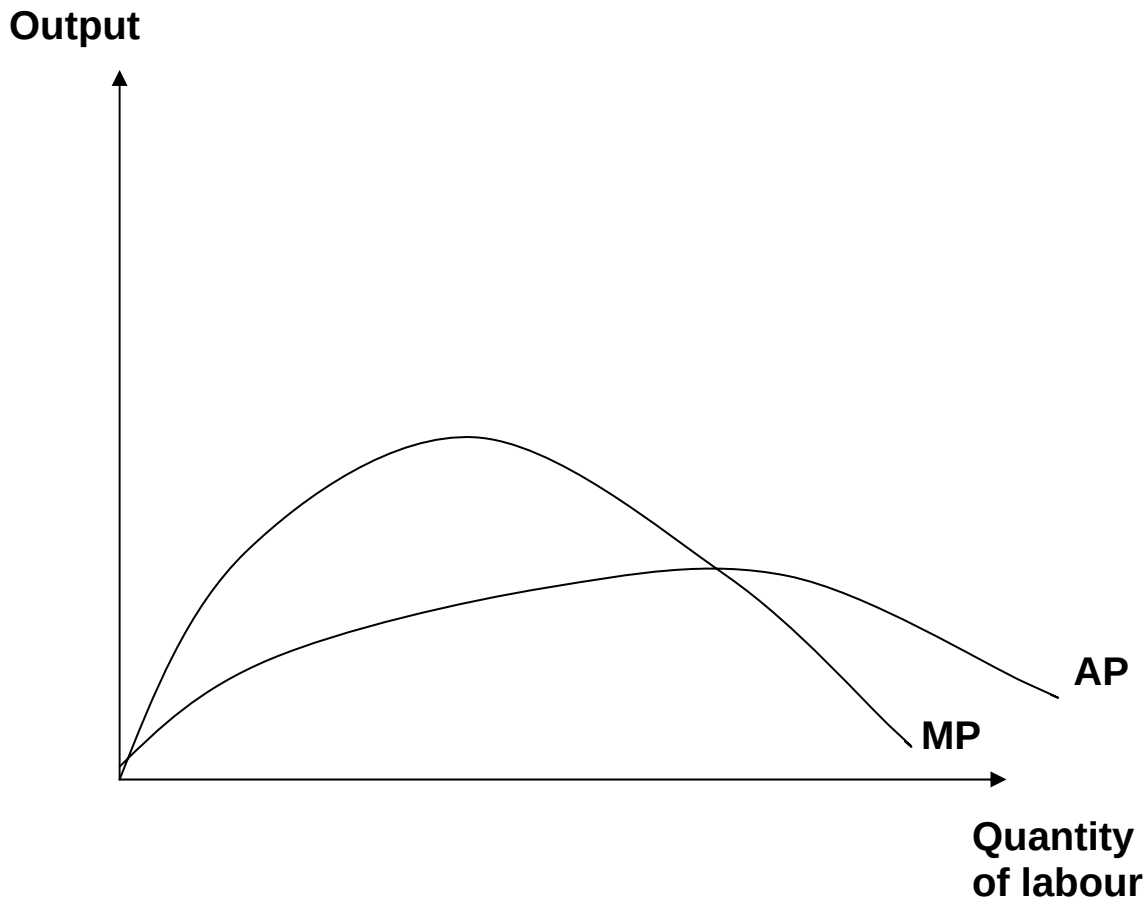
Q36 Well answered with most candidates able to make the correct calculations.

Q37 Generally, answers to this question were disappointing. Whilst many did distinguish between short run and long run Phillips curves, they were not able to effectively link the two curves incorporating expectations. Very few distinguished between adaptive and rational expectations. Very few referred directly to the natural rate of unemployment.

Q38 This was generally well answered with many candidates doing particularly well. Good clear explanations of what the IS/LM curves depicted were followed by some excellent clearly labelled diagrams accompanied by concise, well written explanations.

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

27 (i) & (ii)



MP = Marginal Product, AP = Average Product

(iii) It is applicable only in the short run as it requires one fixed and one variable factor of production.

28 (i)

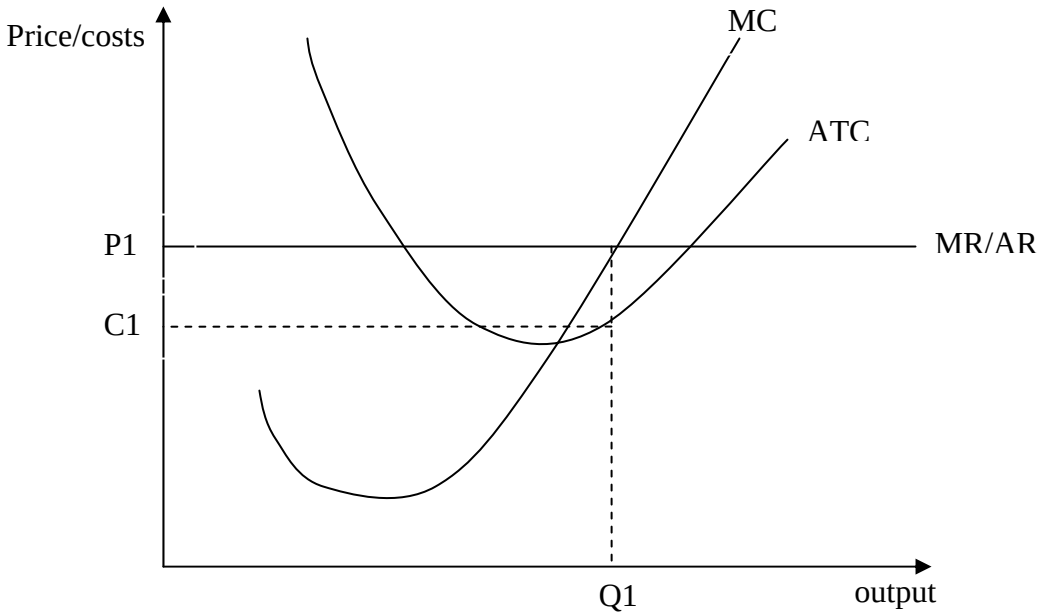
Price	*Quantity Sold*
10	10
9	20
8	30
7	40
6	50
5	60
4	70

(ii) Use MR = MC. 40 units

(iii) Profit = TR – TC = £280 – £220 = £60

(iv) AVC constant throughout at £3

29



30 There are numerous factors that could lead to a leftward shift in the supply curve for Good X.

(i) An increase in raw material costs.

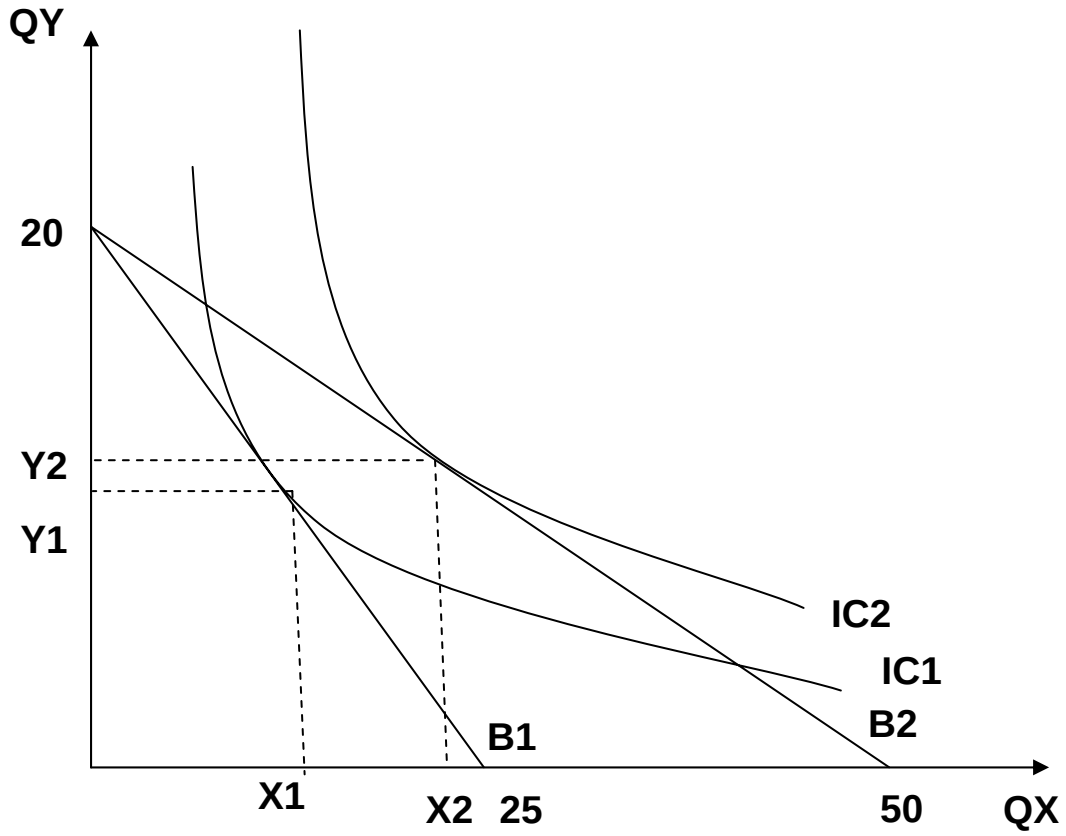
(ii) A decrease in labour or capital productivity

(iii) A rise in wage costs.

(iv) A rise in profit margins applied by firms

(v) A sales tax that is imposed on Good X.

31 (i) (ii) and (iii)



32 (i) £60 million ($Y = C + S$ and $Y = C + I$, $S = I$, Savings = Investment)

(ii) 0 (Income = Planned C + Planned I)

(iii) No

(iv) £100 million

33 (i) $Y = C + I + G + X - M$

$= 0.8\ Y(1 - 0.25) + 80 + 70 + 50 - 0.1Y$

$= 0.5\ Y + 200$

$0.5\ Y = 200$

Y = £400 million

(ii) £50 million less 0.1(£400 million)

= surplus £10 million

(iii) Tax revenue = 0.25(400) = £100 million

Government expenditure = £70 million

Hence budget is in surplus by amount of £30 million

(iv) Multiplier is:

$$\frac{1}{1-c(1-t)+m} = \frac{1}{1-0.8(1-0.25)+0.1} = 2$$

Hence national income would rise by 2 × £30 million = £60 million

Therefore the current account would deteriorate by:

£60 million (0.1) = £6 million

34 "Crowding out" refers to various factors that reduce the effect of increased fiscal expenditure on output.

Examples of "crowding out" effects include:

(i) Interest rate effects — a fiscal expansion which is financed by government borrowing will lead to higher interest rates due to the depressing effect on bond prices. The higher interest rate will then reduce investment and consumer expenditure.

(ii) Tax effects — an increase in government expenditure which is financed by taxation will reduce consumer and firm investment expenditure.

(iii) Expectational effects — an increase in government expenditure financed by borrowing will lead to expectations of future increases in taxes. This will lead to increased saving and reduced investment by firms.

(iv) Supply side effects — fiscal expansion may lead to a tightening of the labour market and inflationary effects on the economy which will reduce investment and the demand for labour.

35 (i) If the rate of inflation is less than expected then this is likely to benefit lenders of funds especially those that lent at a fixed rate of interest. The reason being that when lenders of funds lent money they will have charged an inflation premium that reflected a higher expected rate of inflation than actually occurred so they benefit when the rate of inflation turns out to be less than expected. Conversely, borrowers of funds will lose since the interest rate they have been charged on the loan will have been higher than was necessary as the expected inflation rate and hence the nominal rate of interest on the loan will turn out to have been higher than necessary given the lower actual inflation rate.

(ii) According to the quantity theory of money then there will be two reasons why an increase in the money supply of 5% will not result in a rise in the general price level. One is that the velocity of money may have fallen sufficiently to offset the money supply expansion and secondly the real national income may have risen such that there is no inflationary impact from the increase in the money supply.

36 (i) $1.80/£1

(ii) The pound is expected to depreciate by 3%

(iii) $18,900/£10,800 = $1.75/£1

(iv) $1.80/£1

37 In their answer to this question candidates should examine the Phillips curve trade-off.

The Phillips curve shows the relationship between inflation and unemployment. Phillips curves are drawn on a graph with inflation on the vertical axis and unemployment on the horizontal axis.

Candidates should then examine various economic arguments for the trade off. The two most popular ones are the demand pull explanation and the union explanation. The demand explanation argues that when aggregate demand in the economy is high unemployment will tend to be low and inflationary pressures high. The union explanation argues that when unemployment is low unions are strong and therefore wage cost pressures lead to inflationary pressures in the economy.

Candidates should develop the answer by outlining and discussing short and long run Phillips curves. The long-run Phillips curve (LRPC) is vertical at the natural level of unemployment. The short-run Phillips curve (SRPC) slopes downwards.

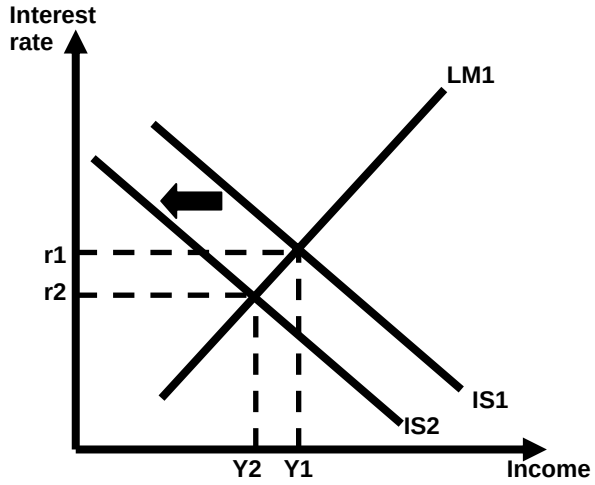
It is easiest to see why the LRPC is vertical by ignoring productivity gains. In the long-run wage contracts can be re-negotiated and money illusion is overcome. Thus if the money supply expands at, say, x% p.a. (so long run inflation should also be x% p.a.) wages should also increase at x% p.a. This means that there is no incentive for firms to change the level of output/employment. This is true at any inflation rate. Hence, in the long-run, there is no trade-off between unemployment and inflation.

The SRPC is drawn for a given level of expected inflation. It slopes downwards because in the short-run money illusion and wage contracts may prevent wages from responding to changes in the rate of growth of the money supply.

38 (i) The IS/LM model shows the goods and money market sides of the economy. The IS curve for a closed economy shows different combinations of the rate of interest and level of national income for which the injections investment and government expenditure ($I + G$) are equal to the leakages savings and taxation ($S + T$). While the LM curve shows different combinations of the rate of interest and level of national income for which the money market is in equilibrium, that is, money demand equals money supply.

(ii) (a) The likely impact of a contractionary fiscal policy in a closed economy is depicted below:

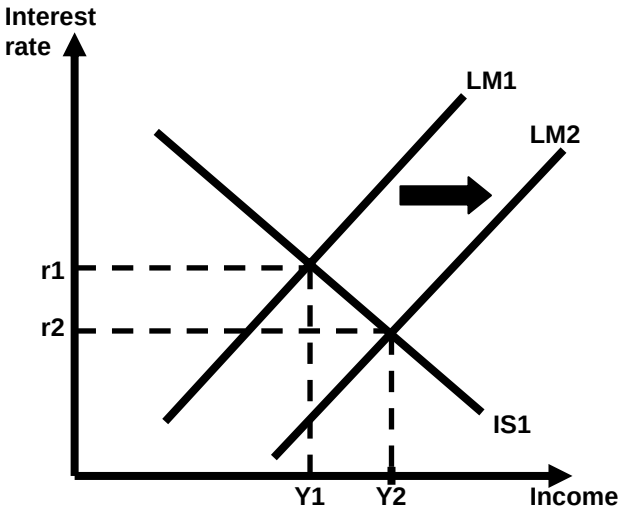
Effects of a Fiscal Contraction (A decrease in Government Expenditure)



Initial equilibrium is at interest rate r1 and income level Y1. The government then decides to decrease government expenditure. The effect of the decreased government expenditure is to reduce aggregate demand and shift the IS curve to the left from IS1 to IS2. The result is a fall in income and a fall in the rate of interest so as to maintain money demand equal to money supply. The fall in income will in turn reduce the level of employment in the economy.

(b) The effects of a monetary expansion are depicted below:

Effects of a Monetary Expansion (An increase in the Money Supply)



Initial equilibrium is at interest rate r1 and income level Y1. The central bank then conducts an expansionary open market operation. It will purchase Treasury securities in exchange for money. The effect of the increased purchases of Treasury securities is to raise their price and lower the rate of interest. The fall in the rate of interest then stimulates an increase in investment which then has a multiplier effect on the level of output. The money market remains in equilibrium because the increased money supply has increased output and lowered the rate of interest both of which raise money demand. Final equilibrium is obtained at the interest rate r2 and output level Y2. Hence, in principle when an economy is operating at less than full employment a monetary expansion can increase the level of employment and the level of output.

END OF EXAMINERS' REPORT