

REPORT OF THE BOARD OF EXAMINERS

April 2003

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.

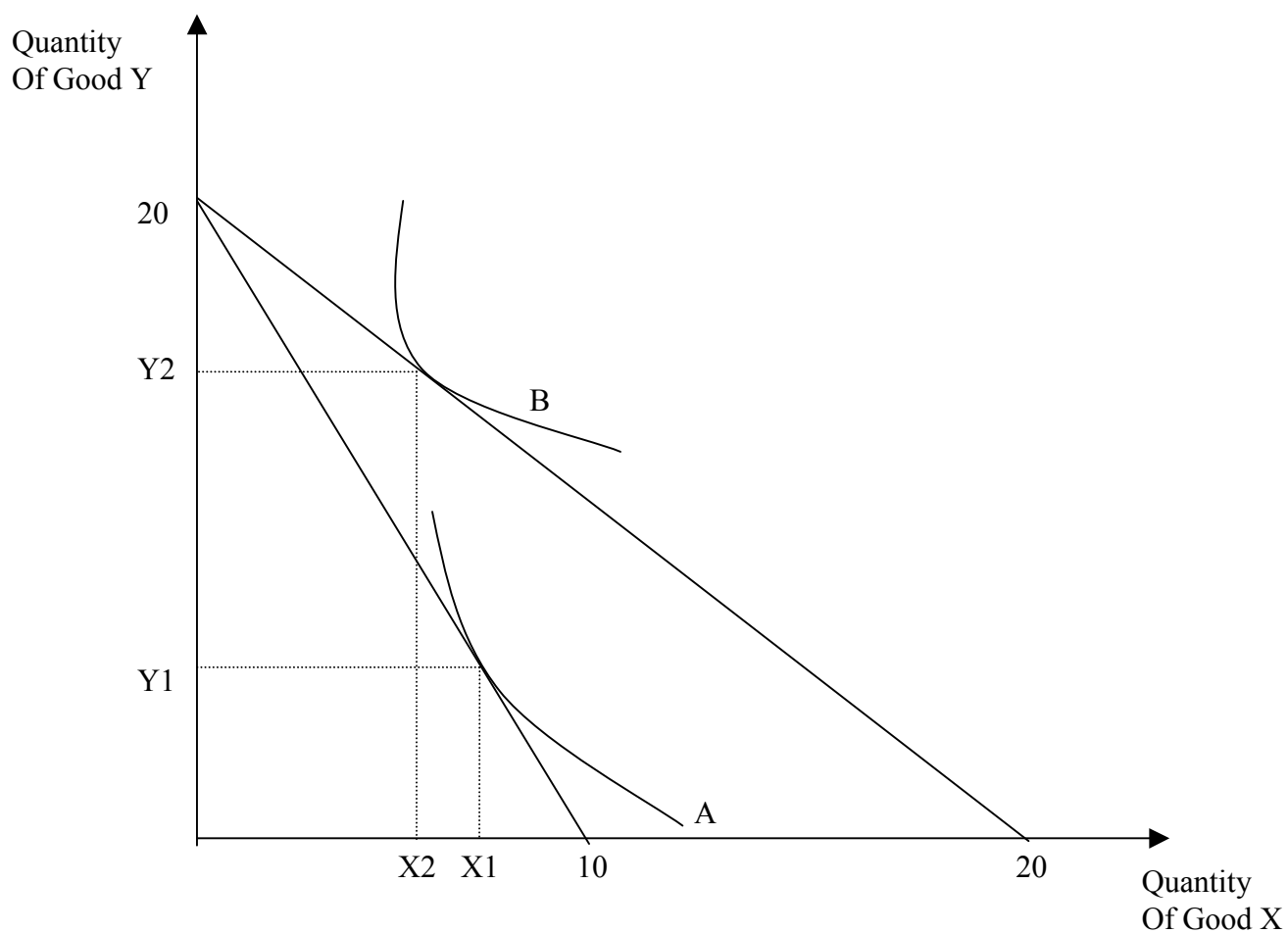
J Curtis
Chairman of the Board of Examiners

3 June 2003

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

The multiple choice part was in general well answered and many students secured high marks. The questions which contained most incorrect responses were 7, 11, 13, 15, 16, 21, and 24.

27

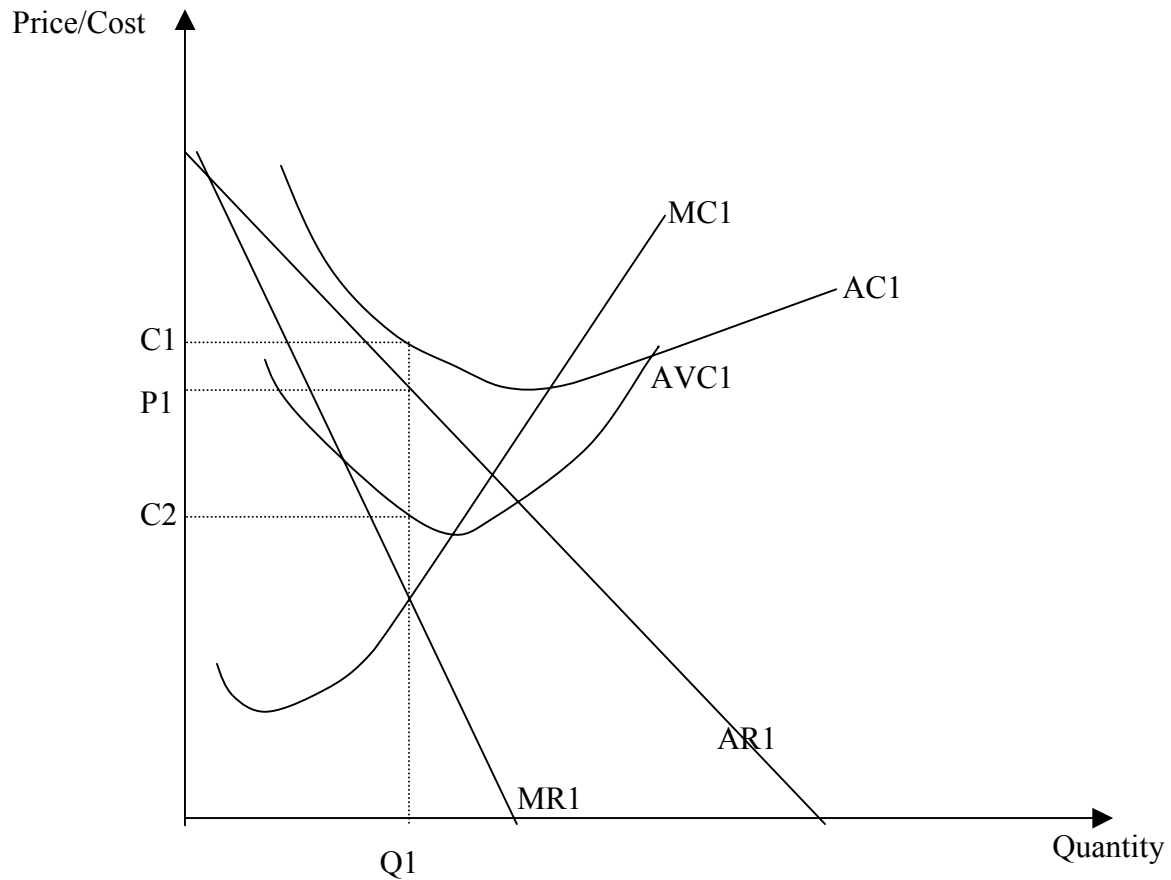


Some candidates put x_2 to the right of x_1 , and failed to show the impact of a Giffen good.

- 28**
- (i) A, E
 - (ii) C, D, E
 - (iii) E
 - (iv) B

Generally well answered.

29

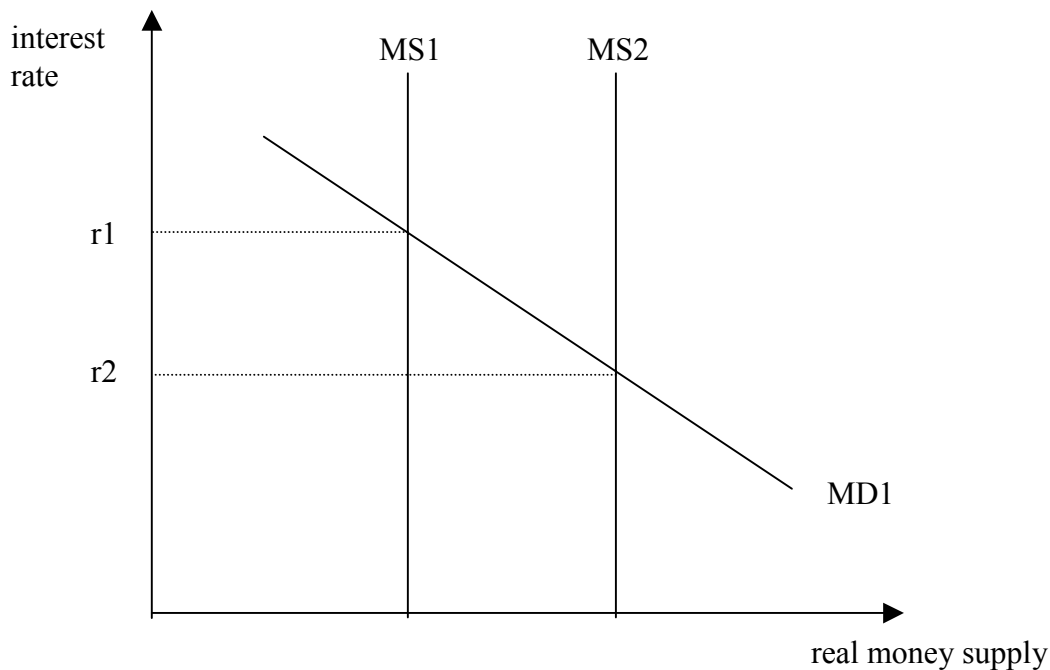


Many candidates failed to place the price $P1$ below the average cost curve but above the average variable cost curve. Some candidates drew the average cost curves poorly not showing the correct relationship with the marginal cost curve.

- 30**
- (i) Country B
 - (ii) 4 units of Good Y
 - (iii) Yes, country A will be better off if less than 4Y is traded for 1X and country B will be better off if more than 2Y is traded for 1X.

Generally well answered.

31 (i)



- (ii) An increase in the real money supply resulting from open market operations will raise the price of treasury bills.

The diagrams was generally well drawn but in part (ii) many candidates failed to indicate that a rise in the money supply will raise the price of Treasury bills.

32 (i) $Y = 0.75(1 - 0.2)Y + 20 + 60$

$$Y = \text{£}200 \text{ billion}$$

- (ii) Since $G = \text{£}60$ billion with 20% tax rate we require national income to be

$$\text{£}60 \text{ billion} = 0.2 Y$$

$$\text{so that } Y = \text{£}60 \text{ billion} / 0.2 = \text{£}300 \text{ billion}$$

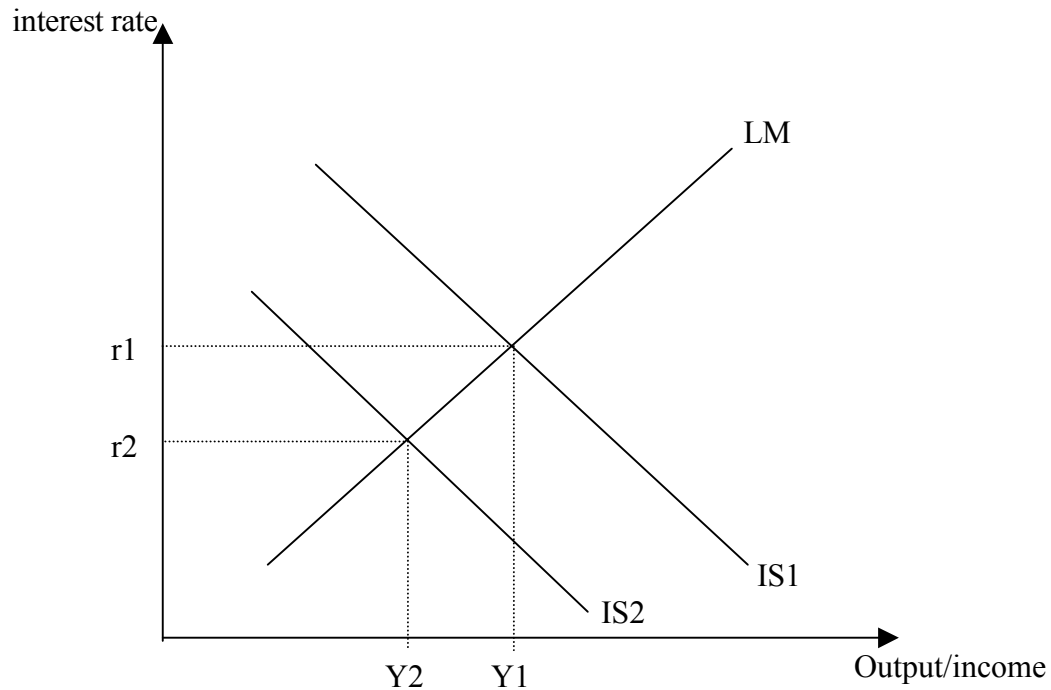
- (iii) The fiscal multiplier is $\frac{1}{1 - c(1 - t)} = \frac{1}{1 - 0.75(1 - 0.2)} = 2.5$

Hence to increase income from £200 billion to £350 billion requires an increase in government expenditure of $\text{£}150 \text{ billion} / 2.5 = \text{£}60 \text{ billion}$.

Hence government expenditure needs to be £120 billion while tax revenue at £350 billion is £70 billion implying a budget deficit of £50 billion.

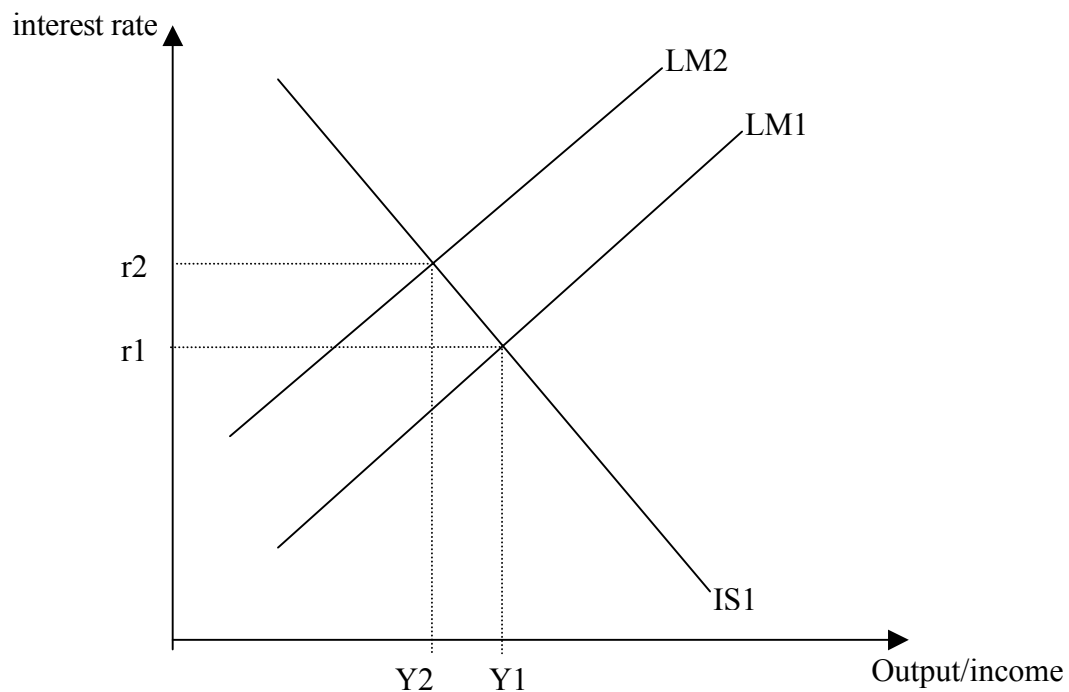
Generally well answered.

33 (i)



A fiscal contraction via either a cutback in government expenditure or a rise in taxes will result in a shift to the left of the IS curve from IS1 to IS2. The result will be a fall in the rate of interest from r_1 to r_2 and a fall in the level of national income/output in the economy from Y_1 to Y_2 .

(ii)



The fall in the money supply will result in a shift to the left of the LM curve from LM1 to LM2. The result will be a rise in the rate of interest from r_1 to r_2 and a fall in the level of national income/output in the economy from Y_1 to Y_2 .

Diagrams were usually correct but many candidates failed to give good explanations of the reasons for fiscal and monetary contractions causing interest rate and output changes.

- 34** (i) Voluntary unemployment. A worker who is registered as part of the labour force but is not prepared to immediately accept a job at the going wage rate for his skills is voluntarily unemployed.

Involuntary unemployment. A worker who is registered as unemployed and is prepared to accept a job immediately at the going wage rate for their skills is involuntarily unemployed.

- (ii) People are more likely to choose to be voluntarily unemployed on a long term basis if:
- high state benefits for being unemployed reduce the opportunity cost of being unemployed
 - high rates of tax on earned income reduce the incentive to work
 - finding out about jobs and travelling to interviews is expensive (i.e. high search costs)
 - retraining is difficult to obtain and / or expensive.

Many incorrectly defined voluntary and involuntary unemployment.

- 35** (i) This year's fiscal deficit may be financed by bond sales which will increase the size of the national debt. A higher national debt will then impact upon next year's fiscal deficit because interest on the national debt is part of the government expenditure used to calculate the fiscal deficit.
- (ii) The national debt of a country is the outstanding stock of government bonds in the market. The higher a country's national debt the higher the stock of bonds available on the market and, other things being equal, the higher the interest rate. Apart from this, governments with a high national debt tend to be distrusted by the financial markets. The markets may attach a higher risk to countries with high national debts for fear that the government may ultimately redeem the debt by printing money which could lead to inflation. This extra inflation risk will tend to be priced into the rate at which the government can borrow.

Many of the responses were weak and the majority of candidates did not demonstrate an understanding of the link between fiscal deficits and the national debt.

- 36**
- (i) An appreciation of the exchange rate will make imports cheaper and therefore result in a rise in import volumes.
 - (ii) An appreciation of the exchange rate will make imports cheaper and therefore help to lower the inflation rate.
 - (iii) An appreciation of the exchange rate will make exports more expensive in foreign currencies and therefore result in a fall in export volumes
 - (iv) An appreciation of the exchange rate will make exports more expensive in foreign currencies and therefore result in a fall in export volumes and, therefore, lower export earnings measured in the domestic currency.

Generally well answered, but many candidates failed to give a correct response to part (ii), an appreciation of the domestic currency by lowering the price of imports will lower the inflation rate.

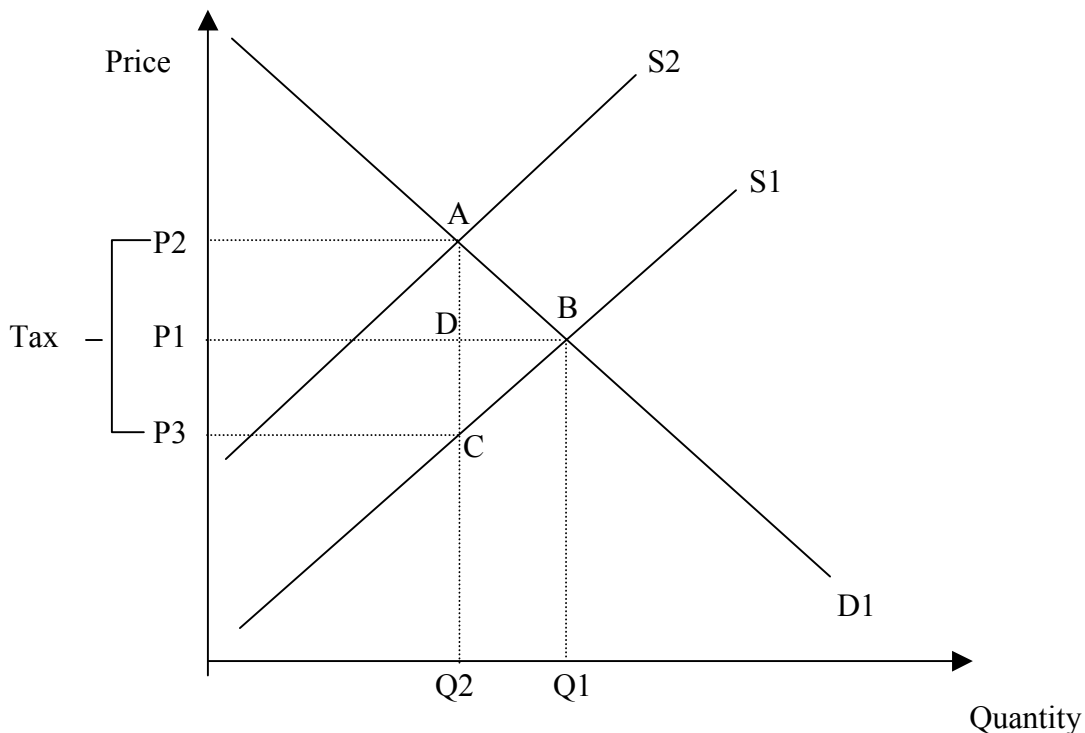
- 37**
- (i) There are significant differences between the market structures of monopolistic competition and monopoly. With monopolistic competition there are many competing firms whereas with monopoly there is only one firm. Under monopolistic competition each firm sells a differentiated product whereas a monopoly may sell either a single product or a range of differentiated but similar products.

A crucial difference between the two structures is that with monopolistic competition there are no barriers to entry whereas with monopoly there are barriers to entry. The absence of barriers to entry mean that firms in a monopolistic competition industry will only make normal profits in the long run although super normal profits can be made in the short run. With monopoly, the existence of barriers to entry means that in both the short and the long run excess profits can be made.

Although both monopolistic and monopoly firms face downward sloping demand curves, the market demand curve is the demand curve for a monopolist whereas a monopolistic competitor firm only has a share of the market. The presence of competition will also tend to make the demand curve facing a monopolistic firm more price elastic than for a monopoly firm.

While both types of firm can be profit maximisers, competition means that a monopolistic competitor firm will have to seek to minimise costs whereas a monopoly firm can afford to some extent to be inefficient. Monopoly firms will be better able to exploit economies of scale as their production runs will be bigger than monopolistic competitor firms.

- (ii) The effect of a per unit sales tax is illustrated in the diagram below.



Before the introduction of the tax the supply and demand curves S1 and D1 intersect to give the equilibrium price and quantity of P1 and Q1 respectively. If a per unit sales tax is introduced this will have the effect of shifting the supply curve to the left by the full amount of the tax per unit from S1 to S2. The result is a new equilibrium price and quantity given by the intersection of the new supply curve S2 and the original demand curve D1 giving a new equilibrium price and Quantity of P2 and Q2 respectively. It should be noted that the rise in the price of the good is less than the amount of the tax.

The effect of the tax is to create a wedge between the price paid by the consumer P2 and the price received by the producer P3. There is a reduction in consumer surplus equal to area P2ABP1. There is also a reduction in producer surplus equal to area P1BCP3 as they suffer both a lower price received from P1 to P3 and produce a lower quantity of units Q2 than before the imposition of the tax. There is one party that gains from the tax and that is the government which receives a tax of $P2 - P3$ per unit sold, hence the government receives tax revenue equal to area P2ACP3. The gain to the government is less than the combined losses of consumers and producers, so that there is a net loss from the tax given by the area ABC. The net loss is relatively easy to explain, the area ABD is the consumer surplus loss suffered by consumers who are willing to pay between price P1 and P2 but unable to do so at the price P2, while the area BCD is the producer surplus loss suffered by domestic producers who are willing to produce the good between the price P3 and P1 but who no longer do so as a result of the tax.

This section was the poorest part of the examination.

In part (i) many defined some of the characteristics/ differences but overall there were relatively few good explanations and too few candidates made direct comparisons of monopoly and monopolistic competition as required by the question.

Part (ii) was not well answered, diagrams were poor and many moved the demand curve instead of the supply curve. The analyses were generally weak with poor explanations of producer and consumer surplus effects and many candidates were not able to explain the welfare implications.