

## **PUBLIC FINANCE**

**Diploma stage examination**

**6 June 2008**

## **MARKING SCHEME**

**Question 1**

- (a) (i) Economic growth is measured as the percentage increase in gross domestic product.

	%
1990/01–2000/01	42.01
2000/01–2007/08	53.66

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- (ii) Public expenditure growth can be calculated in simple growth terms or by looking at its growth as a percentage of gross domestic product (GDP). Both approaches are presented below.

	Growth in public expenditure (%)	Growth in public expenditure as % GDP
1990/01–2000/01	39.97	(1.43)
2000/07–2007/08	14.16	(25.71)

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The latter figures are derived from the trend in public expenditure as a % GDP shown below.

	%
1990/01	41.99
2000/01	41.39
2007/08	30.75

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- (b) As can be seen above, Phare achieved exceptional rates of economic growth during the period 2000/01-2007/08, averaging 7.7% growth per annum, and even during 1990/91–2000/01 growth averaged 4.2% per annum. Growth in the absolute value of public expenditure averaged 4% per annum 1990/01–2000/01 and 2% per annum 2000/01-2007.

*Note for marking:* rates do not necessarily need to be expressed on a per annum basis, but some adjustment is necessary so that 1990/01-2000/01 and 2000/01-2007/08 figures are directly comparable.

Public expenditure as % G.D.P has actually fallen in both periods, initially slowly (on average by 0.14% per annum) but by 3.7% per annum 2000/01-2007/08, reflecting both growth in real G.D.P in that period and relatively slow growth in public expenditure in real terms.

(6)

- (c) Substantial growth in public expenditure (40%) occurred 1990/01-2000/01, although expressed as a % G.D.P it fell marginally (0.14% per annum). This was a period in which the proportion of the population over 65 grew by six percentage points, suggesting that the 40% growth may have at least partly reflected growth in demand for e.g. health care and social service provision. At the same time public service employee numbers remained broadly constant, so few savings in public expenditure were likely to have been achieved from that source.

In 2000/01-2007/08 public expenditure grew slowly (0.6% per annum), unlike public expenditure as % G.D.P which actually fell 3.7% per annum. During this period public sector employee numbers fell by 24%, suggesting that policies of public service reform, probably including privatisation, helped reduce pressures on public expenditure. At the same time growth in the % population over 65 slowed to one percentage point, suggesting less growth in demand for public services than had previously been the case. The theory of Baumol's disease would suggest that the substantial increase in public sector productivity growth over the two periods, from 1.2% per annum 1990/91 to 2000/01 to 2.6% per annum 2000/01 to 2007/08, would have contributed to the slower growth in public expenditure as a % G.D.P in the latter period.

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- (d) The golden rule states that the government's current budget should balance over a whole economic cycle; this means that over the cycle all borrowing is carried out for investment purposes and therefore both the financing of the borrowing and the benefits of the borrowing will fall upon future generations. Thus there is a match between the incidences of the costs and benefits of public sector investment. Any short term borrowing for cash management purposes will have been repaid by the end of the cycle in which it occurred.

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The sustainable investment rule requires that government borrowing is kept at a level consistent with Public Sector Net Debt (PSND) remaining less than 40% G.D.P. (NB PSND equals total consolidated government debt minus public sector liquid assets). This constrains long term borrowing for capital investment - which does not occur under the golden rule - to a level where debt servicing is considered to be feasible given the stream of government revenue derived from the economic activity generating the country's G.D.P. Thus excessive amounts are not spent on servicing long term debt.

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- (e) It is argued that one cause of growth in demand for public expenditure is fiscal illusion, i.e. a complex tax system leads to people underestimating the cost of public services leading to more electoral support for manifesto commitments to public service provision than would otherwise be the case. Simplifying the tax system would be unlikely to remove fiscal illusion, but could reduce its extent.

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Different views can be expressed about the impact of reduced social security benefits. Clearly these are likely to reduce public expenditure directly; they may also generate an incentive effect to seek employment, thus increasing output, so further reducing the size of the public expenditure/G.D.P ratio. (From a more Keynesian perspective one could suggest, though, they might dampen consumer demand and hence G.D.P).

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**Question 2**

**(a) (i) Government bonds**

In order to make large issues of government bonds attractive to investors the government faces pressure to issue them at an enhanced rate of interest which will increase interest rates generally across the economy.

The principal economic effects of this are:

- as the rate of interest is the cost of borrowing this tends to reduce expenditure financed by borrowing, thus reducing economic activity;
- it increases the cost of servicing variable rate debt e.g. mortgages, thus leading to reduced discretionary income and consequently expenditure and again economic activity;
- it makes inward financial investment in the UK more attractive, thus increasing the demand for sterling; this will, *ceteris paribus*, lead to an appreciation of the exchange rate, thus reducing international competitiveness and again reducing economic activity.

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Substantial issues of treasury bills increase the liquidity of the banking system and thus increase banks' propensity to lend. This increases the supply of money which economists would generally see as inflationary. The consequences of inflation are seen to be:

- penalising those on fixed incomes such as pensioners;
- increasing economic uncertainty - particularly high inflation which can be quite volatile - thus discouraging investment expenditure;
- *ceteris paribus*, reducing international competitiveness.

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(ii) Developed secondary financial markets mean that government bonds may be purchased by banks and sold in order to purchase liquid assets. (Good students may recognise that bonds themselves are liquid assets at times of interest rate stability). Thus bond issues can increase banks' willingness to lend with the same inflationary consequences as bills issues.

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**(b) (i)** There is an inverse relationship between the rate of interest on a new bond issue and the price of bonds in the secondary market. This can be illustrated by way of an example. If interest rates rise from 6% to 7% to facilitate a large new issue of bonds, this will depress the price of existing bonds in the secondary market. This is because they now offer a lower rate than that offered by new bonds and their price will fall to equalise yields between the primary and secondary markets.

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(ii) The yield curve of a bond shows the relationship between the yield and the bond's time to maturity. It typically suggests that the longer the time to maturity the higher the yield on the bond. This is because it is argued that there is a higher risk of interest rate movements causing fluctuations in secondary market prices the longer the length of time till maturity; consequently the longer the period to maturity ( e.g. 50 years) the greater the risk associated with the bond, which is rewarded by a higher yield.

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**(c)** The DMO can influence the maturity structure of its debt by:

- issuing bonds with different times to maturity;
- purchasing bonds before they reach maturity.

A longer average time to maturity means, *ceteris paribus*, a lower average value of bonds to be redeemed each year which reduces the pressure on further government borrowing each year to 'refinance' that debt. (4)

**(d)** In 1997 the Bank of England was given responsibility for the setting of interest rates, adding to its existing responsibilities for managing government borrowing and debt repayment. Setting interest rates to meet government inflation targets might lead to relatively high and volatile interest rates; minimising costs of borrowing and debt management favoured low stable interest rates. Placing responsibility for government borrowing and debt management with the DMO resolved this conflict. (6)

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**Question 3**

- (a) The Treasury estimated that the decision means that 'most' of the £23 billion of PFI liabilities currently not on public sector balance sheets will be moved onto them. It estimated also that this would increase public sector net debt (PSND) as a proportion of gross domestic product (G.D.P) by about two percentage points. While this obviously puts pressure upon the achievement of the sustainable investment rule (PSND less than 40% G.D.P over the cycle) current Treasury projections anticipate the rule will continue to be met. (4)
- (b) Introduction of private sector capital and expertise; while the 2007 budget reform mentioned in a) means that the former no longer represents an increase in capital investment consistent with any given fiscal control framework, PFI does introduce private sector expertise into new areas, e.g. operation/maintenance of assets once constructed.  
Management of risks associated with these and other areas that the private sector is better equipped to manage.  
Extensive incentivisation of private sector partners, e.g. via tying unitary payments to achievement of contractual objectives.  
Consequently PFI projects have had better track records in (for example):
- being available on time (largely as result of unitary payments commencing only at asset's availability for operational activity).
  - staying within budget - largely as result of risks of construction cost overrun lying with the private sector. (6)
- (c) (i) The following are appropriate criteria:
- financial cost, i.e. the extent to which payment is required to be made to access funds; this excludes the resource costs of accessing funds, which is picked up within the criterion of administrative complexity;
  - flexibility in the use of the funds, i.e. how far the recipient of the funds is restricted in the use to which they may put them;
  - flexibility in the availability of the funds, i.e. how far the amount of funds available is flexible and responsive to the perceived needs of the recipient and also how far the timing of access to the funds is similarly flexible;
  - administrative complexity of the funding process; this encompasses the resource costs of applying for the funding concerned, administering and monitoring the use of the funds once received and complying with any conditions attached to the receipt of funds;
  - political attractiveness of the funding source; clearly different stakeholders will have different criteria by which to evaluate funding against this criterion; for the purposes of our evaluation here we consider the views of those who are responsible for the final decision as to whether and how to source funding;
  - ability to use funding mechanism to meet wider objectives; this criterion applies not to the use of the funds to achieve wider policy objectives but to the mechanism by which funds are accessed;
  - risk; this primarily relates to the degree of certainty attached to the funding arrangements such as the extent of variability in e.g. cost or timing of finance or how far it can be assumed to be available at the same level and on the same terms into the future. 7

- (ii) PFI as a source of funding could be evaluated against these criteria as follows (NB a table is not essential but could be included):

Financial cost	2
Flexible use	3
Flexible availability	4
Administrative complexity	1
Political attractiveness	3
Wider use of funding mechanism	4
Risk	3

Figures between 1 poor and 5 excellent

- Financial cost; while clearly PFI deals do not achieve the scores here that grants which do not need to be paid back achieve, we have scored them above 1 because such deals will not proceed unless they demonstrate better value for money than conventional procurement routes.
- Flexible use; this score is medium at best since the Treasury identifies particular profiles of projects likely to offer better vfm than does conventional procurement and thus be approved for PFI funding.
- Flexible availability is scored quite highly as timing of access is agreed by means of negotiating process; it is less than five though because of perceptions of some constraints in supply of PFI partners.
- Administrative complexity; the complexities of negotiating and managing PFI deals are well documented.
- Political attractiveness; this is given a mid way score on account of varying views of attractiveness influenced, e.g. by changing treatment of PFI on balance sheets, differing perceptions of ongoing vfm provided by PFI, etc.
- We score the wider use of the mechanism highly because of its ability to engage with and incentivise the private sector.
- We do not give a five against risk because of the problems in renegotiating variations to contracts, and other well publicised elements of risk.

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**(d)** Relevant points include

- Provide check on value for money via comparison with comparable providers or open competition, but nb only applies to 'soft' services.
- Some early PFI projects have no contractual provision for benchmarking/market testing. Although standard contract introduced 1999 changed this.
- 2007 NAO report found only three market tests had been carried out, but these had yielded real competitive benefits. Also difficulties have been experienced in identifying suitable benchmarking data.
- Price changes have, however, occurred as a result of benchmarking in both directions as a result of identifying a mismatch with trends in the market prices.
- In other cases benchmarking led to amended service specifications to maintain current prices.
- As price changes were upwards as well as downwards they could not unambiguously be seen as improving value for money, but did increase confidence of private sector in PFI arrangements.

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**Question 4**

- (a) (i) Business Improvement Districts do add some local flexibility to NNDR by granting a discretionary power for local authorities to fund improvements relevant to the local business community with the money being raised by an additional levy upon payers of NNDR. This power can only be exercised if a majority - numerically and in terms of rateable value - of NNDR payers affected by the proposal vote in favour of it. BID arrangements last for five years after which an extension may be agreed via a further ballot.

While BIDs can operate in England, Scotland and Wales the Local Authority Business Growth Incentive Scheme operates only in England. The scheme introduces local flexibility into NNDR by rewarding authorities for achieving growth in their NNDR rateable value via payments reflecting levels of growth achieved.

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- (ii) The Lyons Inquiry recommended the introduction of a power for local authorities to levy a supplement on their NNDR multiplier or 'rate' having consulted with the business community. This differs from full localisation as an individual authority would have to take the specific decision to do this rather than a general rate setting power being granted to local authorities.

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(b) Strengths:

- provides framework for effective consultation and partnership between local authorities and business communities;
- provides additional investment for the local economy;
- provides opportunity for business led decisions.

Weaknesses:

- only runs for five years unless an additional ballot specifically provides otherwise;
- tends to focus on narrow areas geographically and functionally e.g. marketing, safety and security.

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- (c) (i) A major criticism of local government finance by the Inquiry concerned its lack of flexibility.

Factors contributing to this included:

- Constraints upon use of the quite significant volume of specific or otherwise ring fenced grants
- Limited flexibility for councils to raise funds from sources other than Council Tax, eg amongst western countries UK is almost unique in only having one local tax (if one ignores NNDR)
- Restrictions upon the use of what other sources of funds exist e.g. BIDs, hypothecated charges, section 106 development contributions
- Lack of buoyancy of Council Tax
- Reserve Council Tax capping powers.

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- (ii) Generally fairness was seen by the Inquiry as relating the level of tax payment to income. In this context according to the Inquiry final report there is a positive and statistically significant correlation between income and property values, but also a significant overlap in the values of properties occupied by all but the top income deciles. (10%). Thus all bands actually contain a significant number of households with above average incomes while a small but significant number of low income households are to be found in bands F, G and H.

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(d) Three of the following criteria could be selected:

- Maximising number of potential taxpayers in order to strengthen local democratic accountability.
- Difficulty of evading tax.
- Buoyancy of the tax, i.e. how far the value of the tax base grows over time.
- Transparency, i.e. ease of understanding for the taxpayer.

Possible evaluations against these criteria are as follows:

- Maximise number of potential payers: Council Tax is normally levied upon residents of a domestic property, so it fares quite well here.
- Difficulty of evasion: again the tax fares quite well here and certainly better than Community Charge did, as houses are much less mobile than people.
- Bouyancy; Council Tax has relatively low buoyancy as (assuming that property revaluations are revenue neutral) natural growth in tax proceeds emanates purely from the growth in the number of properties in a local authority area.
- Transparency; Council Tax scores low here: the public is confused about the derivation of Council Tax bills and in particular their link to local authority spending.

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