Chapter 7: The UK Government's debt management strategy

The UK government's primary strategic objective for debt management is:

"To minimise over the long term the costs of meeting the Government's financing needs, taking into account risk, whilst ensuring that debt management policy is consistent with the aims of monetary policy".

This chapter explores how the debt management authorities interpret the terms 'over the long term', 'costs' and 'risk'. It also discusses, in generic terms, the factors which are considered by the authorities in determining the debt management strategy each year. It does not examine the interaction of debt management with monetary policy.

'Over the long term'

The Government's fiscal and debt management policy framework is based on the five key principles set out in the *Code for Fiscal Stability*⁶ – transparency, stability, responsibility, fairness and efficiency. The Code requires the Government to state its objectives and the rules through which fiscal policy will be operated. The objectives of fiscal policy are implemented through two fiscal rules, against which the performance of fiscal policy can be judged. Box 1 below explains the fiscal aggregates used to measure performance against the fiscal rules. The fiscal rules are:

- *the golden rule:* over the economic cycle, the Government will borrow only to invest and not to fund current spending; and
- the sustainable investment rule: public sector net debt as a proportion of gross domestic product (GDP) will be held over the economic cycle at a stable and prudent level. Other things being equal, net debt will be maintained below 40 per cent of GDP over the economic cycle.

The fiscal rules provide flexibility over the economic cycle, allowing the fiscal balances to vary between years in line with the cyclical position of the economy, permitting the automatic stabilisers to operate freely to help smooth the path of the economy in the face of variations in demand. In addition, under the 'sustainable investment rule', the Government may borrow over the economic cycle to fund longer-term investment provided net debt remains below 40% of GDP measured over the economic cycle.

The fiscal rules work together to promote capital investment while ensuring sustainable public finances in the long-term. The golden rule requires the current budget to be in balance or surplus over the economic cycle, allowing the Government to borrow only to fund capital spending over the cycle. The sustainable investment rule ensures that borrowing is maintained at a prudent level.

⁶ The Code for Fiscal Stability is available on HM Treasury's website at the following address: http://www.hm-treasury.gov.uk/documents/uk_economy/fiscal_policy/ukecon_fisc_code98.cfm

This is important because it means that when considering debt management the UK authorities assume that the Government expects to continue to borrow in the future, in a sustainable way⁷. This horizon assumption needs to be reflected in the selection of appropriate debt management strategies. For example, it will make sense actively to promote secondary market liquidity because the Government knows it will be a 'repeat' borrower. In addition, the Government is willing to ignore financing strategies with near-term opportunistic gains if those strategies run the risk of adversely affecting investors' attitudes towards the entire debt programme in future, thereby raising costs over the long run.

In summary, then, the term 'over the long run' means that the UK authorities assume an indefinite borrowing horizon when selecting between possible debt strategies. Further work is envisaged to explore this, in particular how best to evaluate the relative value of strategies with different costs and risks across all future periods. Currently, we do not apply our own judgements about the relative value of costs occurring at different times; in practice, our starting point is to assume that the time value of money is fairly and efficiently priced into the term structure of interest rates.

Box 1: Explanation of fiscal aggregates

Under the Government's fiscal framework a number of fiscal aggregates are reported. Set out below is an explanation of the aggregates with most relevance to the fiscal rules and the impact of the Budget on Government borrowing. The fiscal aggregates are usually reported in both nominal terms and as proportions of gross domestic product (GDP), the latter providing a better indicator of trends since they allow for the impact of inflation and real growth in the economy.

Public Sector Net Debt *is the measure of debt against which the sustainable investment rule is assessed* and is defined as gross debt minus liquid financial assets. Public debt can be defined in both gross and net terms with gross figures capturing the total amount of the Government's financial liabilities. Net debt is used in the Government's fiscal framework because it provides a fairer reflection of the Government's immediate solvency. The Government also reports figures for General Government Gross Debt – the Maastricht Treaty debt measure which is comparable across EU Member States.

Public Sector Current Budget is the difference between current receipts and current expenditure including depreciation. The *golden rule* commits the Government to borrow only for net investment over the economic cycle and not to fund current spending. *The key indicator of progress against the golden rule is the average surplus on current budget over the economic cycle*. The golden rule is met when the average current budget over the economic cycle is in balance or surplus. (The average is taken of the current budget as a proportion of nominal GDP.)

Public Sector Net Borrowing (PSNB) is the sum of current spending (including depreciation) and net investment, less total revenues. *The key indicator for assessing the overall fiscal impact of the Budget is the change in PSNB.* Although

⁷ In recent years public sector net debt levels have been around 31% to 33% of GDP and are forecast in Budget 2004 to rise to around 36% of GDP by 2006-07.

the primary objective of fiscal policy is to ensure medium-term sustainability of the public finances, fiscal policy can also play a short-term role in supporting monetary policy. It is for this reason that the Government's fiscal rules are set over-the-cycle, allowing PSNB to vary between years, in keeping with the cyclical position of the economy. PSNB differs from the surplus on the current budget because it includes net investment – investment spending will have an impact on economic activity and so should be included when assessing the impact of fiscal policy.

The Central Government Net Cash Requirement (CGNCR) is the measure of Central Government's requirement (after re-financing of maturing debt), To move from PSNB to CGNCR it is necessary to deduct local authority borrowing and borrowing by public corporations and to add in Central Government financial transactions (such as lending and accrual adjustments). A more detailed explanation of the relationship between PSNB and CGNCR is presented in Table C20 on page 274 of Budget 2004.

Costs, for any debt manager, refer to the charges associated with servicing the debt portfolio⁸. These arise directly from any interest income payable (coupons) and from any difference between the issuance proceeds and redemption payments. Although accounting treatment may vary for these elements of debt servicing costs, from a debt management perspective the UK does not see any meaningful distinction between them and treats them as one in the cost minimisation task.

Thus, the costs we consider are the realised costs of the debt and not those related to a complete mark-to-market value of the debt. This is not to imply that changes in the market value of the debt do not matter; they clearly have an impact on the net worth of the Government. However, the bulk of the debt is not (and indeed cannot be) refinanced at short notice and is left outstanding until maturity. This implies that short-term changes in market values arising from fluctuations in market interest rates have little consequence for the realised costs of the debt. This focus on the nominal value of the debt and its associated realised costs is also consistent with the definition of the public sector net debt used in defining the "sustainable investment rule".

When the UK authorities talk about cost minimisation, sometimes the reference is to absolute nominal debt servicing costs. For example, nominal cost projections are needed for planning purposes in the budgetary process (see Box 2). But when the concept is discussed in a longer-term context it usually refers to the nominal costs of servicing the national debt over time as a proportion of nominal GDP. This latter ratio also serves another useful purpose: it is an approximate way of capturing balance sheet considerations, since it reflects the costs associated with the government's liabilities relative to the source of its tax revenues, which are its principal asset.

Risk

In considering risk from the debt management perspective, it is worth bearing in mind that the health of the public finances over the economic cycle is closely linked to developments in the national economy. Real government income and

⁸ There are also transactions and administration costs, but these are relatively insignificant in relation to the value of transactions involved in the UK government debt programme.

expenditure show a reasonably predictable relationship to variations in real GDP growth (and to real interest rates). In particular, the value of government's main asset – future tax receipts – and of some of its expenditures – welfare payments and so on – vary with the economic cycle.

Box 2: Public finance projections and public expenditure

Projections of the public finances are published as part of the Budget each year. These include five-year projections for the public sector current budget and public sector net debt, the key fiscal aggregates for assessing performance against the fiscal rules.

The fiscal balances (including current budget and net borrowing) represent the difference between two large aggregates of expenditure and receipts, and forecasts are inevitably subject to wide margins of uncertainty. For this reason, the Government has created a margin against unexpected events that might impact on the accuracy of the public finances forecast through the use of cautious assumptions (audited by the National Audit Office) and the 'cautious case' to stress test the resilience of public finance projections to unexpected events. Details of the cautious assumptions and the cautious case can be found in Chapter C of Budget 2004.

Projections presented in the Budget for public expenditure, covering the whole of the public sector, use the National Accounts aggregate Total Managed Expenditure (TME). For the purposes of the fiscal aggregates, TME is split into national accounts components covering public sector current expenditure (including debt interest costs), public sector net investment and depreciation. For budgeting and other purposes, TME is split into; (i) Departmental Expenditure Limits (DELs) – three year limits for departments' programme expenditure which are set in cash terms; and (ii) Annually Managed Expenditure (AME) – expenditure that is not easily subject to firm multi-year limits (for example benefit payments covering unemployment). Debt interest costs are captured in AME.

It is, therefore, the impact of nominal expenditures on the fiscal projections that is of most importance over the three-year horizon of the Spending Review, because expenditure limits are set in nominal terms. In the medium- to long-term, however, it is the impact of expenditure on the economy that is the focus from a fiscal perspective. This is because the primary medium term objective for fiscal policy is to ensure sustainability of the public finances. Measuring the fiscal aggregates as proportions of GDP gives a reasonable indication of affordability by taking into account the growth in the Government's nominal financing requirement and fiscal position.

For these reasons, the fiscal aggregates are presented in the Budget in both nominal terms and as a proportion of nominal GDP. Table 2.5 in Budget 2004 presents projections to 2008/09 for current surplus and net borrowing in nominal terms and Table C4 presents nominal year-end net debt stocks. Table 2.6 of Budget 2004 presents projections for these aggregates as proportions of GDP.

From a fiscal policy perspective the key risk comes from unanticipated volatility in debt servicing costs. Whether nominal or real debt servicing cost volatility is of more concern will depend on the time horizon over which costs are being considered. The public finance forecasts presented in successive Budgets and updated in each Pre-Budget Report cover a five-year horizon and a profile for debt servicing costs is forecast as part of the overall public finance forecast. Over a one-year horizon, it is unanticipated volatility in nominal debt servicing costs relative to this profile that is the key risk. Unanticipated volatility may impact on near-term budgetary planning, requiring budgetary decisions to be re-visited at subsequent forecasts. Although the need for re-visiting decisions will not arise if unanticipated volatility is 'small' or temporary, it will become increasingly likely if unanticipated volatility one-year ahead is 'large' or reflects some structural change. Unanticipated volatility in nominal rather than real debt servicing costs is also likely to be of concern from a fiscal perspective up to three years ahead because this is the horizon over which departmental expenditure limits are set (in cash terms) as part of the Spending Review (see Box 2 above).

In the medium- to long-term, however, it is nominal debt servicing costs as a proportion of GDP that will be the focus from a fiscal perspective. Ultimately, it is the affordability of debt servicing costs that is the key concern. Measuring debt servicing costs as a proportion of GDP gives a reasonable indication of affordability by taking into account the growth in the Government's nominal financing requirement and fiscal position.

In principle, a balance sheet approach to risk management of the Government's debt portfolio is feasible: broadly this would equate to trying to make debt servicing costs vary countercyclically – in particular increases in debt servicing cost would be avoided in recessions. (This is linked to the concept behind the 'golden rule' whereby changes in borrowing levels are permitted to help stabilise the economic cycle). This concept is known as 'fiscal insurance'. HM Treasury and the DMO believe that work is still needed to explore how desirable and feasible fiscal insurance is in practice (e.g. the optimal debt strategy to achieve fiscal insurance against a demand shock could be very sub optimal for a supply shock). Further work may also be needed to enable us to measure the intended gain from fiscal insurance against which to assess any possible adverse impact on cost minimisation.

The specific debt management risks taken into account by the UK authorities may be defined as follows: interest rate risk, inflation risk, liquidity risk and operational risk.

Interest rate risk

This arises in the following three ways:

- i) Financing risk the interest rate risk associated with raising new principal borrowing. The Government is exposed to interest rate risk since an exposure arises to the yield at issue on new borrowings. This can occur:
 - a) as the Government's financing needs evolve as planned; or
 - b) if the Government's financing needs evolve in an unexpected way, e.g. due to unexpected changes in Government revenues and expenditure (budget risks). This could be called contingent financing risk.

- ii) Refinancing risk the interest rate risk associated with the rolling over of the principal borrowing of any maturing debt. This can occur:
 a) as redemptions occur as planned; or
 - b) if early redemptions are triggered, for example, by embedded options (debt portfolio risks). This could be called contingent refinancing risk.
- iii) Refixing risk the interest rate risk associated with resetting coupons on variable rate debt⁹. (Embedded conversion options could also cause refixing risk this could be called contingent refixing risk.)

The interest rate risk exposure is managed jointly by HM Treasury and DMO primarily through the choices made each year for issuance with regard to the proportions of different types of exposures in the debt portfolio over time and by management of the redemption profile of the debt portfolio. Refixing risk is managed through the choices made each year for issuance with regard to the proportion of variable relative versus fixed rate debt, although no formal target is indicated for this ratio. (Note that the UK authorities do not consider interest rate risk in the sense of the risk of near-term changes in the marked to market value of the debt portfolio. This is because the UK's debt management approach does not involve significant active management of the debt portfolio and so the basic assumption is that debt once issued will not be redeemed before maturity, as was stated above).

Inflation risk

Inflation risk is the exposure to inflation arising on index-linked debt, which arises from both coupons and principal due to index-linked uplift on coupons and principal. This risk is managed jointly by HM Treasury and DMO primarily through the choices made each year for issuance with regard to the proportion of index-linked versus other debt. Although no formal target is indicated for this ratio, as explained below, broadly a quarter of the debt portfolio has tended to be in the form of index-linked debt (in the period the DMO has been in operation).

Liquidity risk

The risk that difficulties will be experienced in raising borrowing due to, for example, unexpected changes in market capacity. This risk is managed by the DMO by ensuring, for example, the target investor base is well diversified, instrument design is kept up-to-date and an effective primary dealer arrangement is in place.

Operational risk

The risk that the processes of raising funds will not work smoothly due to error, systems and procedures failures etc. Management of this risk falls to the DMO, and is managed through its operational and business continuity strategy.

The cost / risk trade off

Like any other economic agent (the best analogy, but in reverse, might be an investor), a government debt manager may face a basic trade off between cost and risk minimisation. The following example illustrates the position of many sovereign debt managers.

⁹ Including Floating Rate Notes.

For a debt manager focussing on nominal debt servicing cost, minimising cost is often in conflict with minimising risk, a tension that arises because of the fundamental characteristics of nominal debt instruments. If we consider a fixed rate bond, the longer the maturity of the bond, the longer the period during which interest payments are known. Issuance of a longer bond reduces the extent to which the Government will be exposed to unanticipated nominal debt servicing cost volatility. However, economic theory and cross-country experience suggest that for many sovereign debt managers the yield curve is on average upward sloping. Hence, bonds with longer maturities will tend to be issued with higher average interest rates attached to them than bonds with shorter maturities. Ideally the debt manager seeking to minimise costs will prefer to issue shorter bonds. Shorter maturity bonds, though having lower average interest rates, will have to be refinanced in the relatively near future. As short-term interest rates tend to be more volatile than long term interest rates this implies that there is greater risk that the refinancing of shorter maturity bonds will take place when conditions are adverse. Therefore, the choice of the maturity structure of the nominal issuance strategy is a trade-off between average cost and nominal debt servicing cost volatility.

The theoretical literature on debt management has provided useful insights, particularly on the trade-off between cost and risk. Box 3 below summarises what insights can be drawn from the theoretical literature for debt management policy.

Box 3: Theoretical literature on public debt management

Research into the main theoretical motivations for debt management has provided some useful insights for policy particularly in respect of the trade-off between cost and risk and the allocation of risk. However, it does not yet offer strong guidance as to the 'optimal' composition of the debt portfolio. The key conclusions that can be drawn from the literature are:

- the first step towards lower debt financing costs is likely to be a *liquid and* efficient secondary market for government debt. Moreover, the government may be able to reduce the cost of financing through its choice of institutional design for the market;
- predictability and transparency in debt management policy will help to reduce uncertainty over the 'true' price for government debt, which in turn reduces the risk premium attached to government debt;
- if markets are efficient, there will tend to be a *trade-off between risk and return*. Hence, government could in principle aim at debt cost minimisation by issuing instruments which carry lower risk from the investors' perspective, although only to the extent that this did not exceed its own risk appetite; and
- the optimal taxation literature makes a strong case for the *debt management* objective being to minimise budgetary risk (i.e. insuring against unexpected fluctuations in government revenue and expenditure). However, further work is needed before this could be used to provide a practical basis for debt management. In particular, given uncertainty over the nature of future shocks, there does not appear to be a consensus in the literature on the 'optimal' risk minimising portfolio.

On this basis, UK debt management policy is consistent with a number of aspects of the literature; (i) the UK government debt market has a good level of secondary market liquidity. Moreover, the Government's objective is that of cost minimisation which, as explained in this chapter, is primarily focussed at the microeconomic level (e.g. concentration on benchmark issuance, introduction of the strips market and the choice of auction format) thereby enhancing market efficiency; (ii) issuance policy is strongly focussed on transparency and predictability; (iii) the portfolio is reasonably diversified and, as a result, it provides insurance against a range of possible shocks making it attractive to a broad base of investors; and (iv) issuance policy tends to result in a relatively smooth redemption profile which reduces the exposure at any point in time to unpleasant shocks, thereby reducing some budgetary risks.

Further reading

Balls E, and G O'Donnell (Eds.), *Reforming Britain's Economic and Financial Policy*, Palgrave, 2002. An analysis of debt management theory and practice can be found in chapter 16. The foreword can be found on the HM Treasury website at: http://www.hm-treasury.gov.uk/Documents/UK Economy/UKecon reform.cfm) Barro R, *On the determination of the Public Debt*, Journal of Political Economy (1979) 87(5) pp 940-91.

Missale A, Public Debt Management, Oxford University City Press, 1999. Wheeler G, Sound Practice in Government Debt Management, the World Bank, 2004

Factors considered in determining the UK's debt management strategy

The example above does not necessarily reflect the position facing the UK debt management authorities, for two key reasons. First, the relative importance of nominal debt servicing cost volatility to the issuer needs to be assessed before embarking on such a trade-off exercise. As noted above, the UK authorities are currently further refining analytical work in this area. Secondly, there have been relatively long periods when the UK yield curve has not been normally shaped (upward sloping). Chart 9 below shows the spread between 5-year and 30-year yields in the UK, USA and Germany since February 1996. This clearly illustrates the inverted nature of the UK yield curve for most of the period from 1997 onwards and is in sharp contrast to the upward sloping nature of the US and German curves.

As mentioned above, the interest rate and inflation exposures of the debt portfolio are managed over time by HM Treasury and the DMO through the plans for the maturities and instrument types which will be issued over the year ahead. This results in an annual debt management 'Remit', which is described in more detail in Box 4.

In arriving at the issuance plans, the UK authorities have indicated in previous publications that the following factors are taken into account:

- the Government's own attitude to risk (both nominal and real);
- the shape of both the nominal and real yield curves and the expected effects of issuance policy;
- investors' demand for gilts; and
- cash management requirements for Treasury bills and other short-term debt instruments.



Chart 9 International spreads between 5- and 30-year bonds

> We consider the first three in more detail below. (In practice, we have integrated analysis of the Treasury bill programme into our analysis of the overall debt programme; we do not separately consider Treasury bills but consider them as part of the same continuum of debt instruments as gilts).

Box 4: Gilt financing annual remit

The UK authorities hold an annual remit setting process which results in HM Treasury publishing a 'Remit' for the financial year ahead, which indicates what issuance the DMO will undertake. This is published in conjunction with the Government's annual Budget, usually in March. The Remit sets out the total of planned gilt sales, along with the planned split between fixed rate ('conventional') and index-linked issuance. Further, within the 'conventional' sector, there is a breakdown of planned issuance across the 3 maturity groups, categorised as follows: 'short' (1 -7 years maturity), 'medium' (7-15 years maturity) and 'long' (over 15 years maturity). The UK believes that this approach is a transparent way to communicate to the market its plans for the different maturity sectors.

In addition, a calendar of scheduled auction dates is published for the whole financial year ahead. This specifies which type of instrument will be auctioned on which date but does not indicate which specific bond will be auctioned nor the precise amount for sale, although an indication is given of the possible size range.

All of this gives the market a long period of notice of (together with precommitment to) issuance plans – probably the longest internationally. The adoption of this very transparent approach was the outcome of a debt management review in 1995 and represented a clear break with the previous policy. It reflects the UK's judgement that this approach will help to reduce the long run financing costs because it lowers the risk premium investors demand from the issuer as compensation for the unpredictability in issuance supply to the market.

Government's attitude to risk

As noted earlier, the implications for the structure of the debt portfolio of the Government's attitude to risk are being actively explored but for the time being we continue to draw on past observations of the relative proportions of the debt portfolio in nominal versus real exposures and carry this forward as a guideline in our analysis. This means in practice that we assume a preference for maintaining roughly a quarter of the overall debt portfolio in the form of real exposure (i.e. index-linked, floating rate and variable rate instruments such as Treasury bills). As this is a portfolio assumption, we could take account of previous years' issuance to determine whether issuing more or less of one type of exposure may be appropriate in the next year.

We also follow a well-diversified issuance strategy for nominal gilts (conventionals). This is our preferred approach because it helps to spread our refinancing risks over future periods, thereby reducing the risk of refinancing when conditions are adverse. Drawing on past observations to establish a rough guide we tend to adopt the approach used in the financial year 1997-98 as a starting point – to define a 'neutral' or 'default' strategy. This means that on a cash weighted basis issuance would generally be split fairly evenly between the 3 conventional maturity bands. As this is an annual issuance assumption we would not necessarily take account of the patterns of issuance in previous years, which have deviated from this 'neutral' strategy, in determining the next year's issuance even though this could have portfolio consequences over time.

Another area under investigation currently is the extent to which the UK's debt management portfolio strategy should take account of other elements of Central Government's financial assets and liabilities, in particular those elements bearing interest rate exposures. In principle, we see this as a very desirable objective. However, how this would work in practice has not yet been fully worked through and, as a more immediate practical matter, sufficient information is not currently available. For this reason, we do not currently take explicit account of other interest rate exposures in Central Government's financial assets and liabilities.

As noted above, assumptions need to be made about the Government's refinancing risk appetite. Currently, we assume that past preferences for maintaining a fairly even redemption profile for each financial year continue to be valid. In deciding maturity dates of new lines of stock, consideration is therefore given to the interplay between redemption dates of existing stocks and proposed new issuance for the current (and near future) financial year(s). Hence there will be a preference to 'fill in' any gaps in the maturity profile of the portfolio as redemption years get nearer. As an alternative, it could be argued that the debt issuer should target larger redemptions at those years where the public finances are forecast to be at their healthiest, but given the uncertainty that would inevitably surround such forecasts, this might turn out to be a risky (and costly) strategy. A regular flow of redemptions (and associated new issuance) is also likely to be of benefit to the ongoing liquidity of the market.

Shape of the yield curve and investor demand

As noted above, we assume that current policy suggests the Government will continue to borrow in a sustainable way in the future. This is important because it

means that any issuance strategy will need to be rolled over indefinitely and, therefore, will tend eventually to have a cost and risk profile which is representative of the long run average for that strategy. We also take as a starting point that the UK term structure is fairly and efficiently priced and is the best guide to the value of future interest rate expectations. This means that there is unlikely to be a long run benefit from pursuing an opportunistic issuance strategy since, as the implied forward rates at which the strategy will be rolled forward are fairly priced, there would be likely to be an offsetting future disbenefit and thus, on average, no net gain. Finally, the annual Remit process, described above, delivers the market a predictable and transparent issuance regime but it also means that the gap between when issuance choices are made at the start of the year and when they can be put into practice is very long. As a result of all these considerations, we do not give a high weight to prevailing observations of absolute yield levels (i.e. we do not weight issuance towards the absolutely lowest yielding part of the curve) in determining the annual Remit.

We do, however, investigate the shape of the yield curve to see if there are any significant medium- or long-term demand factors - 'preferred habitats' - at particular maturity sectors which indicate that the term structure is not fully reflecting expectations about future interest rates. A preferred habitat is said to exist where a distinct group of investors strongly prefers to hold bonds within a specific maturity range, or a specific instrument type, to hedge its liabilities or to comply with regulatory requirements, which depresses yields for these types of bonds. The preference can be so strong that such investors dominate demand and do not substitute alternative strategies which would be cheaper but which would move them away from their preferred risk profile. Based on consultations with market participants, as well as observations of the shape of the yield curve, the UK authorities may seek to meet preferred habitat demand, which means relatively lower funding costs, by skewing issuance slightly from the neutral maturity issuance strategy. For example, in 2000-01 against the background of a low financing requirement, 92% of total gilt issuance in that financial year (including all conventional gilt issuance) was long-dated, reflecting the issuance premium available because of strong demand for these instruments primarily from pension funds.

Other relative value indicators, which we may consider – although with different weightings – are implied break-even inflation rates, and major sovereign yield spreads. Where any major shifts in break-even inflation rates are determined to be structural and permanent in nature, these can be useful in informing the marginal issuance split between conventional and index-linked gilts. Although we monitor the level and shape of the UK yield curve relative to those of other major sovereigns – for example as a possible indicator of preferred habitats and of potential issuance demand at auction – we do not give a high weighting to these relative differences in determining the annual issuance split.

As explained earlier, the UK authorities are also concerned about managing the debt portfolio's liquidity risk. Thus issuance decisions may also need to take account of market capacity considerations. These would include strategic decisions such as those taken in 2000-01 to continue gross issuance, even though there was no net financing requirement, in order to maintain the infrastructure of and liquidity

in the UK government debt market, as it was anticipated that issuance would rise again in the following years. A clear example of such a strategy was the commitment to issue a minimum amount of index-linked stock to support the introduction of index-linked auctions and specialist index-linked GEMMs. At the other end of the scale, there may also be a maximum amount of issuance that the market is able to accommodate, without forcing the Government to pay an unacceptable premium. For example, this concern was a factor that led us to indicate a maximum of £6.5 billion of index-linked issuance in 2003-04. In addition, there may be operational considerations surrounding implied auction size and calendar that we may also take into account when determining the precise quantities of sales by gilt type.

In relation to ensuring both the minimisation of long run costs and the reduction of liquidity risk, we also take account of market structure and market management considerations. These would include for example ensuring that there are and will continue to be sufficient bonds, in size and number, eligible for delivery under gilt futures contracts. Another example would be responding to the market's preference for liquid, benchmark stocks available at key points on the yield curve, such as in each of the first ten years, and other dates further out, for the benefit of cross border trading, corporate issuance, swaps and other derivatives markets. There may also be times where secondary market supply-and-demand imbalances mean particular stocks are 'squeezed', either in the repo market or the gilt market, making it difficult for market makers to sustain liquidity. In such circumstances, the DMO might provide temporary issuance solutions, under its standing or special repo facilities, or it may decide to bring forward issuance planned for the future, as was the case in August 1999.

Conclusion

This chapter has explored what is meant by the terms 'over the long term', 'costs' and 'risk' in the UK Government's primary strategic objective for debt management. Debt management strategies are implemented on the assumption that the UK Government has an indefinite borrowing horizon. This implies that as a repeat borrower the promotion and maintenance of secondary gilts market liquidity is important to the Government and it has a preference for debt strategies that offer long-term benefits over ones that provide short-term opportunist gains but which may raise its long-term financing costs.

Depending on the time-horizon, both the absolute nominal costs of servicing the debt portfolio and their relationship to nominal GDP are of interest to the Government. Nominal debt servicing costs are considered in the short-term (one-to three-year horizons) because of their impact on the near-term budgetary planning process. However, in the medium- and long-term, nominal debt servicing costs measured as a proportion of GDP are more important from a fiscal perspective.

The Government may be concerned about a variety of risks that are associated with the management of its debt portfolio. From a fiscal perspective, and depending on the time-horizon being considered, it is the unanticipated volatility of both nominal and real debt service costs that is relevant. Financing, refinancing, refixing, inflation and operational risks are other types of risk that the Government takes into account in the management of its debt portfolio. HM Treasury and the DMO jointly undertake the management of these risks, with the exception of operational risk, which is solely the responsibility of the DMO.

The factors that are considered by the authorities in determining the annual debt management Remit have also been discussed. Three main factors have been looked at in some detail: the Government's attitude to risk; the shape of both the nominal and real yield curves; and investors' demand for gilts.

Work is currently being done to clarify further the implications for the structure of the debt portfolio of the Government's attitude to risk. Our current practices are therefore based on past observations on the structure of the debt portfolio and issuance strategies, which we use as broad guidelines. The previous share of the debt portfolio with nominal versus real exposures demonstrates a preference for having approximately a quarter of the overall debt portfolio in the form of real exposure. We also maintain a well-diversified issuance strategy for nominal gilts such that our 'default' issuance strategy is broadly an even split between the three conventional maturity bands, on a cash weighted basis. Further, we retain a preference for maintaining a fairly even redemption profile.

For a number of reasons, the issuance strategy is not tilted towards the absolutely lowest segment of the yield curve. However, issuance in nominal gilts may deviate from our 'default' strategy, when there is evidence that the shape of the nominal yield curve implies the existence of a "preferred habitat" premium.

Finally, both market capacity and market management or market structure considerations may be taken into account in deciding the issuance strategy in a given financial year and might also lead to a deviation from the 'default' strategy.