

CIPFA TREASURY  
MANAGEMENT PANEL

DISCUSSION PAPER ON RISK  
MANAGEMENT

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## **Introduction**

The Treasury Management Panel have recognised a need for CIPFA to lead a discussion on how best to promote the practice of active and effective treasury risk management in local government. This need has been highlighted by recent developments including the 2007 SoRP chapter on Financial Instruments, the change to PWLB repayment arrangements in November 2007 and differing responses to the 'credit crunch', all of which, in their different ways, have served to focus attention on the issue of treasury management risk. This paper is the culmination of a piece of work CIPFA's Treasury Management Panel has been carrying out on extending the risk management techniques used by local authorities. It incorporates earlier discussion papers on the use of benchmarking and proposals for a treasury management 'tool-kit'. Its publication is seen as the first step in pursuit of what the Panel has termed 'the risk management agenda'.

This discussion document is aimed, firstly, at strengthening awareness of the issues involved, and, secondly, at providing an outline of the type of developments which the Treasury Management Panel would wish to encourage in the risk management area.

The Panel expects that the issue of this discussion document will initiate a period of debate. Ultimately, it is envisaged that the need for active risk management to be undertaken by local authorities in their treasury management activities will be incorporated more explicitly into formal high-level guidance issued by the CIPFA Treasury Management Panel.

Such guidance might encourage the development of the sort of ideas, approaches and techniques which are introduced in this discussion document, but it is expected that the guidance would be accompanied by separate initiatives in, for example, the following three areas:

1. The production of a risk management 'toolkit'
2. The provision of a more formal education & training programme in treasury management
3. The development of a practitioner's treasury management manual

### **What is the treasury risk management agenda?**

At the basic level, the management of risk is all about recognising the possibility of different outcomes and trying to make sure that activities are directed towards making an acceptable set of outcomes more likely. This involves defining what the different outcomes might be, measuring the probabilities attached to them – both individually and in combination with other outcomes – and imposing a control framework which will bring the possibility of undesired outcomes within a tolerance level which is acceptable in the context of achieving an authority's objectives.

Fundamentally, in a treasury management context, it is recognised that active management is key to delivering good results. This requires the recognition, understanding, measurement and management of treasury risks. In turn, this means that local authorities need to be armed with the requisite knowledge, tools and techniques to undertake these tasks.

The risk management agenda is about making sure that everything possible is done to make sure that local authorities are equipped to the best of their ability to manage treasury management risk effectively.

### **Objectives**

CIPFA defines the objectives of local authority treasury management as:

'The management of the organisation's cash flows, its banking, money market and capital market transactions and loan management; the effective control of the risks

associated with those activities; and the pursuit of optimum performance consistent with those risks’.

This definition expects a ‘best value’ approach in which authorities seek to minimize the cost of borrowing (or maximize the returns from investment), subject to the over-riding management of risks, with risk limitation being more important than return.

### **Existing CIPFA Guidance**

CIPFA’s Treasury Management Code identifies nine treasury management risks, and requires local authorities to maintain various Treasury Management Practices, of which TMP1 deals with treasury risk management. Key risks identified include interest rate risk; credit and counterparty risk; refinancing risk; fraud and error; and market risk. The potential scale of these risks at the total local government level can be judged from the magnitude of local authority borrowing (over £60bn at 31 March 2007) and treasury investments (well over £20bn at 31 March 2007). The Treasury Management Code expects authorities to adopt a risk management approach to their treasury activities. TMP1 requires that:

‘This organisation will manage its exposure to fluctuations in interest rates with a view to containing its interest costs or revenues... by the prudent use of its approved financing and investment instruments, methods and techniques... retaining a sufficient degree of flexibility to take advantage of changes in the level or structure of interest rates...’

This places treasury management in an authority’s overall Risk Management Strategy. A risk management approach is further reinforced by CIPFA’s Balance Sheet Management Framework and the expectations of the Use of Resources Key lines of Enquiry (4.1: the Council manages its significant business risks).

All this good practice expects active review and management of risks. In relation to treasury management risks it implies that local authorities should not passively retain their existing debt and investment portfolios without any ongoing risk review in relation to their treasury and organisational objectives. It may be good management to repay borrowing, or sell investments, before their maturity date. CIPFA’s 2007 Guidance on Treasury and Investment Management in Local Authorities states:

‘It is an accepted principle in local government that active treasury management can deliver good results over time. Such active management will involve the shifting and shaping of the structure of debt and investment portfolios to achieve a risk profile and long term net revenue cost which is in line with an authority’s objectives. This approach, which lies at the heart of these guidance notes, represents the antithesis of that approach which sees individual financial market transactions as fixed for their lifetime to maturity... rather, it is good practice to continually assess the potential to restructure debt and investment portfolios.’

Finally, CIPFA’s Prudential Code requires local authorities to set and monitor a range of Treasury Management Indicators and limits. This requires quantified limits for risk to be set: for example, maximum and minimum limits for exposure to variable interest rates and for the loan maturity profile.

### **Local authorities’ attitude to treasury management risk**

Local authorities are financially risk-averse and greatly value revenue budget stability. The volatility of variable rate loans can be a major risk to Council tax levels, so – assuming a neutral view on the level and direction of long-term interest rates (see appendix on use of benchmarks as a risk management tool) – authorities would tend to borrow mainly long term fixed rate loans. For example, an authority with a debt portfolio of £500m might not wish to be exposed to more than £1m revenue cost volatility in its interest budget for every 1% movement in variable rates. It would therefore limit its short term and variable

rate loans to £100m, requiring at least £400m to be in long term fixed interest loans with a wide spread of maturities. Authorities may well be prepared to pay (or accept the risk of) higher interest rates for the certainty of fixed rate loans.

Authorities also tend to maintain very long term loan portfolios because they are financing mainly long life assets – infrastructure assets, land and buildings. This is underlined by the statutory MRP arrangement for debt repayment, which repays debt over the life of the assets or at 4% each year on a reducing balance. On this basis, the life of local authority debt portfolios will run on to infinity, but the *average* life of a portfolio of loans maturing in line with MRP is over 25 years.

With such long-dated debt portfolios, changing market and local authority circumstances make it appropriate to continuously review existing loans and investments. This is likely to include periodically repaying or restructuring long-term loans, if the terms are suitable – even at the risk of incurring repayment premiums due to adverse interest rate movements.

Risk management guidance (both in a general and treasury management context) makes it clear that doing nothing does not avoid or minimize risks: ‘a risk can also be in the failure to take advantage of opportunities to optimise the Council achieving its planned objectives’.

A general principle behind local authority treasury risk management is that such activity should hedge or reduce the underlying treasury risks. Local authorities are not in the business of increasing their risks beyond their underlying treasury exposures with a view to making a profit or speculating.

In the light of the Guidance above, local authority treasury risk management could be defined as ‘the ongoing activity of adjusting the authority’s treasury exposures due to changing market or domestic circumstances, in order to manage risks and achieve better value in relation to the authority’s objectives’. The key point is that circumstances can change after a loan or investment is made: market conditions change, affecting an authority’s risk exposure, and the authority itself may change over time in its financial position (e.g. the level of debt) or its objectives or its level of risk acceptance.

In relation to interest rate risk, debt management and cash investment management are the mirror image of each other. For both debt and investment portfolios, authorities (or their fund managers) seek to borrow or invest according to where they perceive good value in the structure of interest rates (the yield curve). They will repay borrowings or sell investments to adjust their portfolios as the yield curve changes, in order to improve the portfolio return and adjust the incidence of risks, within agreed risk limits (such as the prudential limits for treasury management). In this context, PWLB loan rescheduling was essentially the same activity as fund managers use to seek good value by buying and selling gilts within defined portfolio objectives and limits.

### **Constraints on active treasury risk management in local authorities**

By comparison with their peers in the private sector, and public sector bodies such as Registered Social Landlords, local authorities are somewhat limited in their ability to use established treasury risk management techniques. In particular, it is generally accepted that local authorities do not have a power in general circumstances to use interest rate swaps, and the shadow of the 1980’s swaps cases still lingers.

The Treasury Management Code, the 2003 Act capital system and the Prudential Code have provided a new regime with a different outlook. Accounting standards have also become more discerning and demanding, in general and in relation to financial instruments and derivatives in particular. But the question remains as to whether the techniques currently available to local authorities are adequate to this task?

PWLB debt management via rescheduling was clumsy and is now effectively ruled out under most market conditions by the wide repurchase spread costs introduced by the PWLB in November 2007. This had long been considered to be the main way for authorities to manage their interest rate risks actively.

There is, therefore, a need for a strategy to assist local authorities to monitor, analyse and actively manage treasury risks in the absence of derivatives powers, especially following the introduction of the PWLB repurchase spread. Such an approach would aim to strengthen the culture of risk management awareness in local authorities, by developing more advanced techniques and tools for monitoring and managing treasury risks, applying concepts from corporate (private sector) treasury within a strong and appropriate risk-controlled framework. For example, a proper understanding of the financial instruments behind complex products like LOBOs or callable deposits will help authorities to monitor and manage their treasury risks more effectively. The Treasury Management Panel is seeking to support this by developing more specialist and expert treasury training, to give local authority treasury managers wider access to advanced treasury skills.

All of this supports the fundamental approach to treasury risks promoted by the Treasury Management Code, whereby authorities are encouraged to understand their exposures; understand the treasury products and techniques which are available to them; develop a cohesive strategy based on achieving a set of explicit objectives within a risk-controlled framework; and implement it.

### **The Treasury Management 'Toolkit'**

Such an approach is supported by the type of management information encouraged by the Disclosure provisions on financial instruments set out in Chapter 4 of the 2007 (see relevant section in CIPFA's 2007 Guidance on Treasury and Investment Management in Local Authorities). The Treasury Management Panel wishes to encourage local authorities to develop a 'toolkit' of available risk management techniques, procedures and approaches which could assist in the active management of their treasury management risk. Such a 'toolkit' might incorporate:

- The development of a recognised way of producing a 'Risk Monitor' for all financial assets and liabilities.
- Recognition of the need for authorities to identify neutral or benchmark portfolios or positions against which to measure and control the extent of the risks they are taking.
- The development of a recognised local authority approach to sensitivity analysis for treasury risks (doing a similar job to more sophisticated financial market techniques like probability analysis or Value at Risk). Outputs might include cashflow forecasts and NPVs (value for money implications) and revenue account consequences (affordability implications).
- Use of market-standard techniques to provide management information to assist in decision-making where appropriate eg fair value (mark-to-market) or loan duration analysis.
- An emphasis on monitoring of total (ie net) treasury exposures, eg monitoring investments and loans together to identify the net interest rate risk to the authority or the net borrowing requirement of the authority.
- A recognition that appropriate skills and training standards for treasury management are increasingly appropriate for certain officers (including perhaps a CIPFA accredited qualification in public sector treasury management).
- Development of a manual of Principles and techniques for local authority treasury risk management for practitioners to understand and use; including dynamic, up-to-date

material such as a set of recommended model treasury reports, case studies, information sources, best practice examples.

The appendix to this document provides an example of how individual authorities might use the process of identifying an appropriate benchmark for their debt and investment portfolios to assist in the measurement and control of the treasury risks which they are running.

### **Education and Training**

Alongside encouraging the development of a treasury management 'toolkit' and practitioners' manual, the Treasury Management Panel has recognised that there is general support for the view that there is both a need and a desire for formal education and training to lift the skills and knowledge base in treasury management and is actively discussing the ways in which this could be achieved through a diploma or certificate potentially provided in partnership with the Association of Corporate Treasurers.

### **Furthering the debate**

Contributions to the debate from local authorities, treasury advisers, and other interested parties will be welcomed by the Treasury Management Panel, either formally by writing to the Secretary at Robert Street, e-mail to [Alison.scott@cipfa.org](mailto:Alison.scott@cipfa.org), or informally through feedback from seminars, events, and discussions. The Panel's aim, in promoting the risk management agenda, is to initiate a debate which will result in the development of techniques, provisions, procedures and knowledge which will enhance the active management of treasury management risk in local government. Volunteers to assist in developing a 'toolkit' would be particularly welcome.

## **Appendix: Risk Management and the use of benchmarks for debt portfolios**

### **Investment portfolio methodology**

Investment portfolio management has a well developed methodology for risk measurement and management. This includes industry standard techniques such as the use of benchmarks against which to measure portfolios, and the use of measurement at fair value and calculation of duration. These enable treasury risk to be assessed in well understood ways, which encourages comparison between portfolios and a shared perception about appropriate levels of risk for a given type of portfolio (this can be seen in the approach to local authority cash portfolio investment for example, or pension funds).

Portfolio benchmarks are key to investment risk management. The owner establishes a 'neutral' or benchmark portfolio and gives the portfolio manager a range either side in which the manager can take a position: eg a benchmark duration of 10 years with a permitted range of 8 to 12 years, or for a pension fund the benchmark percentages and permitted ranges for different asset classes. The use of a benchmark portfolio:

- establishes the general 'neutral' risk position the organisation finds appropriate;
- allows the measurement and management of risk-taking by comparison with the benchmark, making it easier to express the strength of positive or negative investment views in terms of the degree of divergence from the benchmark;
- enables a performance measurement framework whereby the success of the portfolio managers (in terms of the correctness or otherwise of their views) can be assessed against the performance of the benchmark portfolio.

It goes without saying that investment portfolios are measured at fair value as well as nominal. Fair value measurement:

- shows the consequences of management decisions to buy, hold or sell.
- shows the present value of the portfolio ie provides a 'whole life cost' estimate, which is important when very long term decisions are being made.

For loan portfolios, benchmarks are likely to be expressed in terms of the maturity profile or duration which is appropriate to the owner's risk appetite.

### **Application to local authority debt portfolios**

Why are benchmark methods and fair value measurement tools not used by local authorities for their debt portfolios as well as their investments? One difficulty is that the size of the portfolio is constantly changing and the life of the portfolio is long term and uncertain (although this is also true of pension fund investment portfolios). There are, however, straightforward ways to deal with these difficulties. Another view sometimes expressed is that fair values are not relevant to local authorities who do not trade their debt with a view to a profit. Nevertheless, authorities do actively manage their debt for the purposes of risk management and cost reduction.

The Prudential Code has gone some of the way towards encouraging authorities to establish their own benchmarks. The indicators for the maturity profile and variable rate exposure define a range, but the authority does not have to define or justify a benchmark, and the ranges are typically broad, with the implied benchmark somewhere in between.

The 2007 SORP Chapter on Financial Instruments requires fair value analysis of financial instruments (although not necessarily presented as a whole portfolio analysis, unfortunately). However, fair value portfolio presentation is not yet embedded in the culture of local authority treasury management. The lack of fair value analysis enables authorities to avoid a better understanding of complex instruments such as LOBOs and callable deposits.

Local authorities still therefore have no clear concept of what level of treasury risk they are broadly comfortable with on average, and they are not using basic market techniques to express and manage the risks they are taking. Some local authority treasury systems make little or no use of basic management information such as fair value or duration calculations.

Authorities are encouraged to start applying market measures and benchmarking techniques for their debt portfolios. Authorities need a better understanding of industry standard risk management methodology if they are to be in a position to argue for access to a wider range of treasury management techniques at any point in the future. Over the years, authorities have undertaken huge shifts in their debt portfolios from short to long without defining a risk management standard against which to measure the size of the position the authority is taking.

## An example

### XYZ Council Treasury Management objectives and risk management

#### Objectives

1. XYZ Council supports the objective of treasury management as stated by CIPFA, ie to find the right balance between risk and return.
2. The Council attaches a high priority to revenue cost stability. This aids stable financial planning and avoids a stop-start approach to service delivery. This means it adopts a low-risk attitude to treasury management, and accepts that this may come at a cost.
3. The Council is likely to remain a substantial net borrower for the long term. Its debt portfolio should be managed on a long term basis with a high regard to the effect on future taxpayers and citizens as well as current ones. Fiduciary duty applies to the future as well as the present. Treasury management activity should seek the lowest 'whole life cost' at an appropriate level of risk.
4. Treasury management risks will be most efficiently and effectively managed if they are aggregated and managed as a net position. In particular, treasury debt and investment risks will be managed on the basis of the net exposure.
5. External constraints on active portfolio management will be taken into account and may sometimes limit or prevent treasury activity. These factors include accounting for financial instruments (especially premium writeoffs) and HRA Item 8 recharge implications.

#### Risks and risk management

6. Credit risk and transaction or fraud risk are managed largely through procedural requirements and controls. The other key treasury risk for the Council is interest rate risk.
7. Short term interest rate risk is straightforwardly measured in terms of net short term interest volatility ('short book exposure'). Due to HRA notional debt recharges based on 3 month LIBID, the Council's short book is neutral to interest rate movements at around net £32m of net debt:

#### Short book exposure GF effect of a 1% change in base rate

net short term debt	budget impact
+£110m	+£0.7m
+£30m (= HRA's share of notional debt)	£ zero
+£ zero	-£0.3m
-£ 50m	-£0.7m

A revenue cost volatility of +/- £0.7m feels like somewhere near the maximum risk the Council would wish to take (it would matter whether the £2m resulted in a budget overspend or not) This establishes an acceptable short book range of £110m to -£50m around a neutral benchmark of £30m.

8. Long term interest rate risk can be effectively measured and managed in terms of the maturity profile.
9. The nearest approach to a neutral or 'model' maturity profile for the Council is the MRP repayment profile because this matches loan maturities to the amount set

aside each year for debt repayment. It therefore enables maturities to be paid without introducing any new interest rate risk and leaves the risk profile unchanged (assuming no new borrowing requirement). An MRP maturity profile on the old 4% reducing balance method has an average loan life of over 25 years.

10. The proposal is to use the MRP profile as a benchmark for risk measurement and monitoring and 25 years as the benchmark average maturity for net debt. The risks involved in new borrowing and rescheduling strategies and decisions will be considered in terms of their effect in relation to the benchmark: does the proposal move the portfolio closer to or further from the benchmark? ie does it increase or reduce the Council's tactical position long or short of the benchmark, and is that tactical position appropriate to the interest rate outlook?
11. It would then be possible to control the level of risk in the portfolio by limiting how far 'long' or 'short' of the benchmark maturity the portfolio may be moved. The upper and lower Prudential Limits for the maturity profile already start to do this, and deciding on a benchmark profile provides a rational basis for setting these maturity limits.
12. A more sophisticated measure than average maturity would be modified duration. That would show more precisely the impact of interest rate changes on the value of the portfolio and the level of interest rate risk implied by the departure from the benchmark.
13. Debt management is more constrained than investment management, and an authority's ability to micro-manage against a benchmark is limited by accounting treatments, the PWLB premature repayment margin cost, Item 8 recharges, the illiquidity of market loans, and an ever-changing portfolio volume.

Nevertheless, the use of a benchmark maturity profile to monitor the portfolio's average maturity or duration can provide a language to express and manage the level of risk in a portfolio which is currently lacking, and enables the risk inherent in new borrowing or rescheduling proposals to be assessed.