

United Kingdom
**Debt
Management
Office**

**UNITED KINGDOM
DEBT MANAGEMENT OFFICE**

**CPI-linked Gilts:
A Consultation Document**

29 June 2011

UK DEBT MANAGEMENT OFFICE

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Introduction

1. In July 2010, the Government announced its intention to use the Consumer Prices Index (CPI) as the measure of price inflation for the statutory minimum revaluation and indexation of occupational pension schemes. The move to CPI will affect the value of many pension schemes' liabilities and may affect the preferred choice and type of hedging instruments that schemes use to manage liabilities.

2. The UK Debt Management Office (DMO) is consulting to build an evidence base to inform the Government's consideration of whether to issue CPI-linked gilts. For CPI-linked gilts to be introduced, the Government would need to be satisfied that the introduction of such an instrument would be consistent with achieving the Government's debt management objective of long-term cost minimisation, subject to risk. In that context, the decision as to whether the Government will introduce CPI-linked gilts will be largely driven by the depth and suitability of investor demand for such an instrument and its assessment of the impact on the smooth functioning of the market in inflation-linked UK government debt. The Government is not inclined to issue an instrument that is likely to appeal to a very limited group of investors and one of the aims of this consultation is to ascertain the likely size of demand for CPI-linked gilts, both in an absolute context and also relative to RPI-linked gilts.

3. Comments on the subject matter in this consultation paper should be sent by **close of business on 22 September 2011¹** to:

Gurminder Bhachu
UK Debt Management Office
Eastcheap Court
11 Philpot Lane
London EC3M 8UD
E-mail: policy@dmo.gsi.gov.uk

¹ The Government's Code of Practice on Consultation advises that consultations should normally last for at least 12 weeks. The Government's "*Code of Practice on Consultation*", July 2008, can be found on the website of the Department for Business, Innovation and Skills (BIS) at: <http://www.bis.gov.uk/files/file47158.pdf>

4. Respondents are requested to submit comments in writing². Market participants may request a meeting with the DMO following the submission of their written response to follow up any of the points or discuss the matter more generally.

5. Following the consultation process, the DMO will publish a response to the comments received. If the decision is taken to issue CPI-linked gilts, the DMO would allow sufficient lead time before issuance to give the market time to prepare for the event.

² Please note that the DMO is subject to the provisions of the Freedom of Information Act 2000 and consequently information disclosed by us in response to requests for information under the Act could enter the public domain. If you are providing information that is commercially sensitive please mark it as such and we will endeavour not to disclose it to the extent that such non-disclosure is permissible under the Act.

Context / rationale for the consultation

6. In July 2010, the Government announced its intention to use the CPI as the measure of price inflation for determining the statutory minimum percentage increase for revaluation and indexation of private sector occupational pensions. The move to CPI will also affect the Pension Protection Fund (PPF) compensation and Financial Assistance Scheme (FAS) payments³. In practice, the shift to CPI means that the annual Revaluation Order will use CPI to determine the minimum rate at which occupational pension schemes should revalue deferred pension rights and pay increases to pensions in payment⁴. The Revaluation Order in use in 2011 used data on price inflation to the year ending 30 September 2010 based on CPI.

7. In December 2010, the Department for Work and Pensions (DWP) published a consultation document setting out the Government's preliminary views, in the form of a series of proposals, on whether there should be legislative provision to enable schemes to adopt CPI as their preferred inflation measure if they are currently unable to do so; and the case for legislation to avoid schemes having to pay the higher of CPI or the Retail Prices Index (RPI). On 16 June 2011, the Government published a response to the consultation document⁵. In summary, the Government is not: (i) introducing legislation that would directly override the rules of occupational pension schemes without the consent of trustees or employers; or (ii) introducing a modification power to allow schemes to use CPI as the basis for revaluation and indexation of members' benefits. The Government has addressed the "CPI underpin" issue by making legislative provisions so that

³ *Statement on moving to CPI as the measure of price inflation*, 12 July 2010, can be found at: <http://www.dwp.gov.uk/newsroom/press-releases/2010/july-2010/dwp088-10-120710.shtml>

⁴ Legislation governing statutory revaluation and indexation of occupational pensions requires the Secretary of State each year to publish an Order setting out a percentage figure based on "the percentage which appears to the Secretary of State to be the percentage increase in the general level of prices in Great Britain" over the relevant reference period (i.e. the year to the previous 30 September). In broad terms, the Revaluation Order sets out the minimum rate at which occupational pension schemes should generally revalue deferred pension rights and pay increases on pensions in payment.

⁵ The response to the consultation can be found at: <http://www.dwp.gov.uk/docs/cpi-private-pensions-consultation-response.pdf>

schemes that pay RPI increases each year would not have to pay the increase at the higher of RPI or CPI in any given year.

8. As a result of the shift to CPI as the basis for determining the statutory minimum for revaluation and indexation of private sector occupational pensions, the Government is considering the case to issue CPI-linked gilts. The Government is aware that the availability of CPI-linked gilts may afford some pension funds and insurance companies an instrument with which to better hedge some of their liabilities. Pension scheme Liability Driven Investment (LDI), where investors seek to match the characteristics of their liabilities with specific investments, is a significant source of investor demand in the index-linked gilt market. The change from RPI to CPI for the purpose of indexing occupational pension schemes may affect the value of many pension schemes' liabilities and the preferred mix and type of hedging instruments schemes use to manage liabilities.

9. In that context, the Government welcomes views on the extent to which CPI-linked gilts may help both the Government as gilt issuer and gilt investors more effectively to achieve their objectives. In particular, the Government welcomes views from the pensions and insurance sector and other key investors in index-linked gilts. The Government is particularly interested in understanding the extent to which investors would prefer in the future to invest in CPI-linked gilts over RPI-linked gilts, the substitutability between the two instruments and the size and source of future demand for both RPI and CPI-linked gilts.

10. From the Government's perspective as issuer, providing demand is sufficient, there could be potential benefits to meeting the inflation protection required by investors. In theory, investors should be willing to pay a higher price for the debt instruments that best hedge their particular inflation exposure, all other things being equal. The Government welcomes any analysis as to whether or not this is likely to be the case.

11. The Government is aware of the potential market risks of introducing a new index-linked gilt, including the risk of fragmenting liquidity in the index-linked gilt market and, in that context, views are equally sought on the perceived risks of issuing CPI-linked gilts.

12. In reaching its decision, the Government will weigh the expected benefits, costs and risks of issuing CPI-linked gilts for itself as issuer and for the gilt market. In particular, the Government will assess the case for the launch of a new instrument with reference to:

- (i) consistency with the debt management objective and the principles on which debt management policy is based;
- (ii) the impact on liquidity and the good functioning of the gilt market more generally;
- (iii) the likely size of demand for the new instrument; and
- (iv) an assessment of the cost and resource commitment required for implementation in comparison with the potential size of demand.

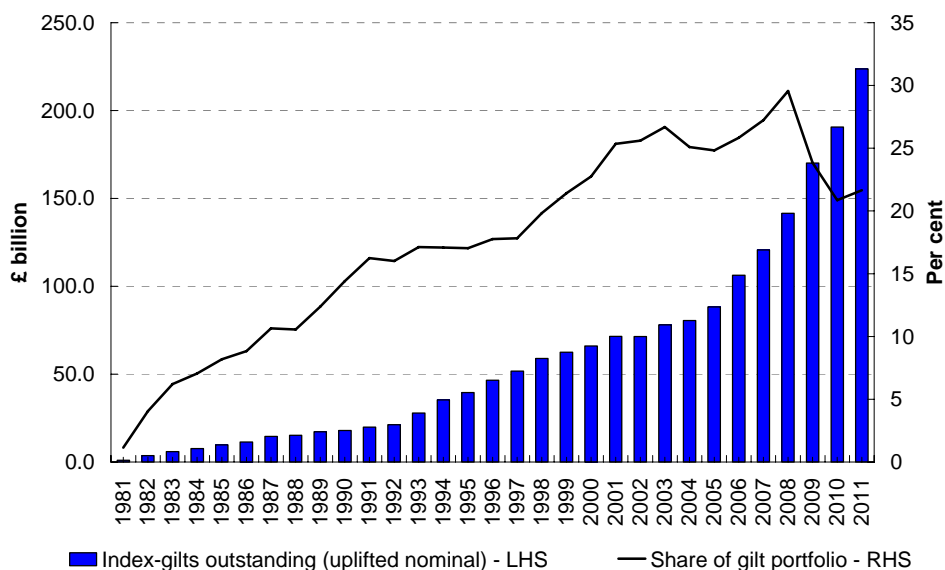
Background

13. The Government's debt management objective is: *“to minimise, over the long term, the costs of meeting the Government's financing needs, taking into account risk, while ensuring the debt management is consistent with the aims of monetary policy.”*

14. HM Treasury has overall responsibility for meeting the debt management policy objective, but has delegated operational responsibility for debt management to its agents. In the case of borrowing in sterling in the wholesale markets, this responsibility is delegated to the DMO.

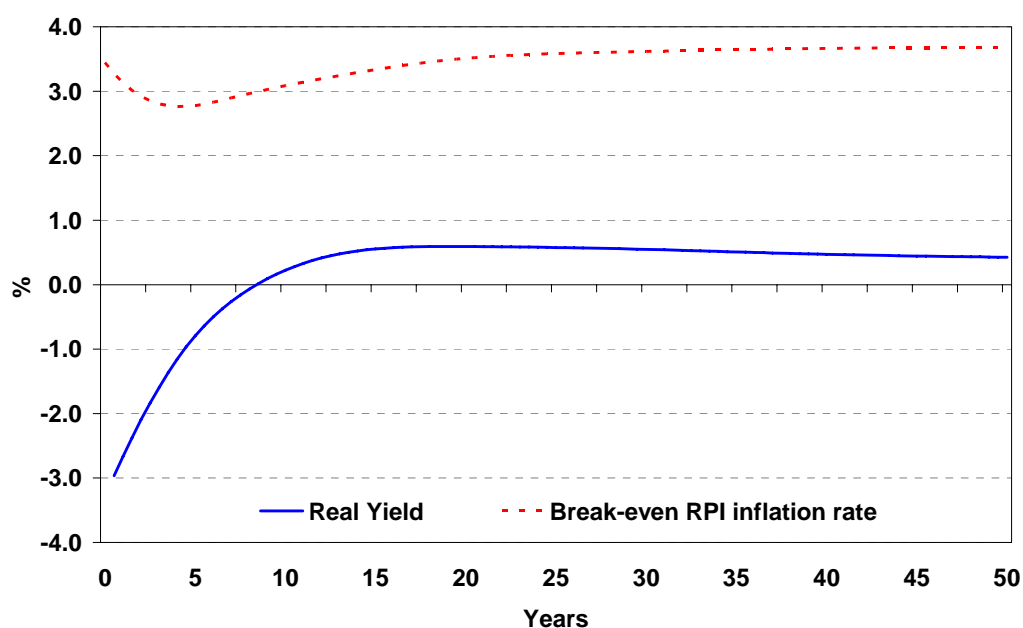
15. The UK has issued inflation-linked debt since 1981 and index-linked gilt issuance is a very important component in enabling the Government to meet its debt management objective; index-linked gilts are important from both a cost and risk perspective. Chart 1 below illustrates the growth of the index-linked gilt market since its inception and shows the size of the index-linked gilt market as at the end of March in each year from 1981. As at end-March 2011, the index-linked gilt portfolio accounted for 22.6 per cent of the total gilt portfolio (in uplifted nominal terms).

Chart 1: Size of index-linked gilt market (uplifted nominal)



16. From a cost perspective, the sustained inverted shape of the real yield curve at medium to long maturities (see Chart 2) supports the assumption that a negative term premium exists in long-dated real yields. On the neutral assumption that inflation is at the Bank of England's target over the medium to longer term, an assessment of the path of long-term inflation relative to that priced in by the market (as evidenced through break-even inflation rates⁶) indicates that a cost advantage exists for the Government from issuing long-dated index-linked gilts relative to equivalent maturity conventional gilts. This assumption is supported by qualitative evidence (e.g. market feedback) which suggests that there is strong structural demand for long-dated index-linked gilts from pension funds and insurance companies in particular.

Chart 2: Real yield curve and break-even RPI inflation rates (as at 24 June 2011)



17. Inflation-linked gilts also play an important role in risk management for the Government, for example, through a diversification of financing sources - there is ongoing structural demand for inflation-linked cash flows from institutional investors, especially pension funds.

⁶ Broadly, break-even inflation is calculated as the difference between the nominal yield on a fixed-rate bond and the real yield on an inflation-linked bond of the same maturity and credit quality.

18. The measure of inflation and choice of price index was one of the most important features that was considered thoroughly at the outset by the Bank of England - the debt manager at the time - prior to the introduction of index-linked gilts. It was decided that the General Index of Retail Prices (RPI) would be adopted due to: (i) its frequency of publication (monthly); (ii) the fact that it is not subject to revision; (iii) it being viewed as the index most likely to protect savers against inflation risk; and (iv) it had already been used for the index-linking of state pensions. Since the introduction of inflation-linked gilts, all gilts have been linked to RPI, though there are two designs of RPI-linked gilts: eight-month lag and three-month lag indexation. Prior to September 2005, all index-linked gilts issued were on an eight-month lag design. However, all new index-linked gilts issued from the 2005-06 financial year have used a three-month indexation lag in line with international best practice, and this design of gilt accounted for 53% of the index-linked gilt market⁷ at the end of March 2011. Index-linked gilt design is discussed specifically on pages 16 and 17.

19. In recent years the CPI⁸, as an alternative measure of prices, has become prominent. In December 2003, the Chancellor changed the index used for inflation targeting by the Monetary Policy Committee of the Bank of England to CPI⁹ and, as already discussed, in July 2010 the Government announced its intention to use the CPI as the measure of price inflation for the purposes of revaluation and indexation of occupational pension schemes. The Government's change to CPI for regulating occupational pension schemes will affect how some pensions in payment are increased and the way that pension rights for deferred members are revalued. In short, the changes will affect the statutory minimum requirement for revaluation and indexation, though occupational schemes will still be able to pay more than the statutory minimum if they wish to, and their scheme rules allow them to do so.

⁷ In uplifted nominal terms.

⁸ Formally known as the Harmonised Index of Consumer Prices (HICP).

⁹ From May 1997 until December 2003, the index used by the Bank of England for inflation targeting was the All Items Retail Prices Index excluding Mortgage Interest Payments (RPIX).

Issues on which respondents' views are sought

Size and source of future demand for RPI and CPI-linked gilts

20. The decision as to whether the Government will introduce CPI-linked gilts will be largely driven by the depth of investor demand for such an instrument. When pursuing its debt management objective, the Government is concerned with ensuring that the gilt market remains liquid and efficient. This is achieved, in part, by issuing gilts that aim to achieve a benchmark premium and are potentially attractive to a broad investor base. The Government is therefore not inclined to issue an instrument that is likely to appeal to a very limited group of investors or for a temporary period. In that context, one of the aims of this consultation is for the Government to ascertain the likely size of demand for CPI-linked gilts, both in an absolute context and also relative to RPI-linked gilts. The Government therefore welcomes responses on continuing demand for (i) RPI-linked gilts, and (ii) CPI-linked gilts, from market participants.

21. The UK pensions and insurance sector represents a significant investor group in the index-linked gilt market (in particular at longer maturities) and the Government is particularly interested in understanding the extent to which the shift to CPI as the statutory minimum for regulating occupational pensions will affect the preferred choice of inflation-linked gilts for pension fund LDI purposes. The Government is aware that the move to CPI affects pension funds to differing degrees because of: (i) the interaction between legislation and the rules of individual schemes; and (ii) the preference of individual funds. In summary, some pension funds will be largely unaffected by the change in the statutory minimum from RPI to CPI due to: (i) a desire to pay above the statutory minimum; or (ii) an inability to amend scheme rules which explicitly reference RPI. Other funds, however, which have a default provision to pay the statutory minimum increase or wish to and are able to shift from RPI to the statutory minimum for uprating pensions will be affected to a greater degree.

22. Research recently published by DWP¹⁰ found that, based on scheme membership numbers, around 74 per cent of pension indexation is explicitly linked to RPI, 22 per cent linked to the statutory minimum and 3 per cent linked to a measure other than RPI or the statutory minimum. For revaluation, results of the survey suggest that 28 per cent are explicitly linked to RPI, 68 per cent linked to the statutory minimum and 3 per cent linked to other measures. These findings are comparable to estimates produced by surveys conducted by private sector financial institutions for the proportion of scheme liabilities that are likely to be affected by the change in pension policy. The results of the DWP research are valuable to the Government in understanding how pension schemes are affected by the policy changes for revaluation and indexation. However, the Government is also seeking to understand how the policy changes are likely to affect preferred asset allocation decisions and the preferred choice of index-linked gilt for pension fund LDI purposes.

23. The Government welcomes responses from gilt market stakeholders, and in particular from pension funds, insurance companies and also financial institutions providing inflation derivatives, on:

- how the legislative changes will affect future demand for index-linked gilts;
- the suitability of RPI-linked gilts for investors seeking to hedge CPI-linked liabilities;
- the prospects for CPI/RPI hedging products emerging as an alternative liability management tool to CPI-linked gilts;
- the desirability of CPI-linked gilts and at what maturity (ies); and
- the relative demand between CPI-linked gilts and RPI-linked gilts (and implications for their relative values).

Respondents are requested to provide any supporting analysis in relation to their comments.

¹⁰ IFF Research conducted a survey on behalf of DWP on the effect of uprating by CPI on occupational pension schemes. The survey consisted of a telephone interview with 200 pension scheme managers representing a cross-section of small, medium and large defined benefit schemes. The results of the survey can be found at: <http://research.dwp.gov.uk/asd/asd5/WP102.pdf>

24. In addition, the Government would also appreciate views from respondents who hold RPI-linked gilts as to whether they would ideally prefer to shift a proportion of their portfolio from RPI-linked gilts into any CPI-linked gilts and what form this may take (including any relevant Government support such as conversion/switch operations).

Risks

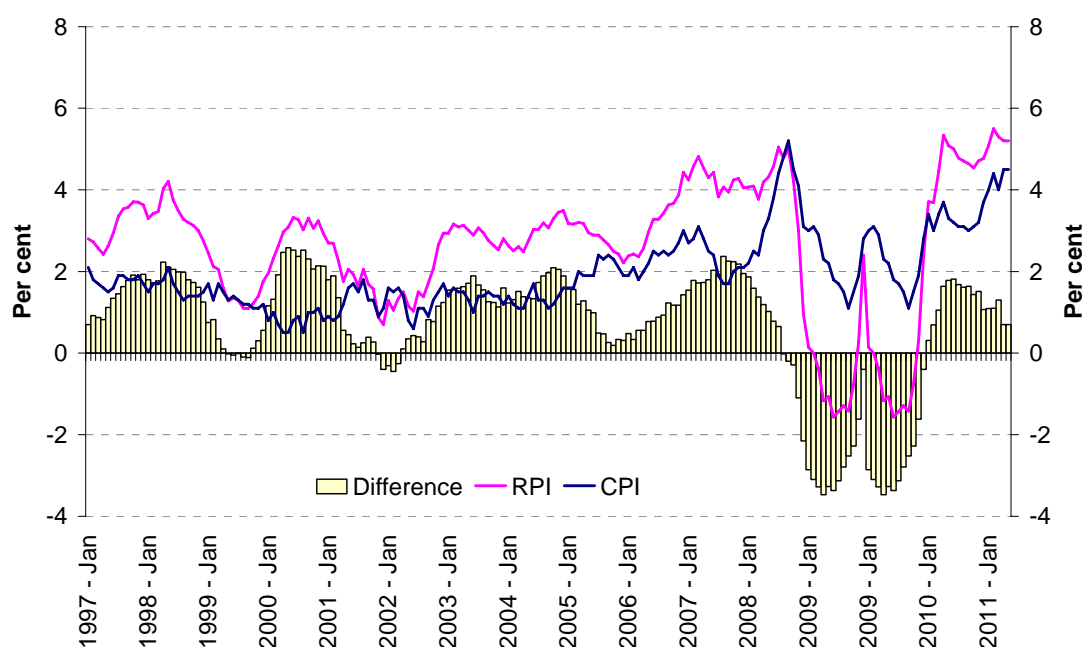
25. One of the objectives of the DMO is to conduct its market operations, liaising as necessary with regulatory and other bodies, with a view to maintaining orderly and efficient markets and promoting a liquid market for gilts. The Government would be reluctant to issue a new instrument if there is a likelihood of damage to liquidity in the gilt market. The introduction of CPI-linked gilts would mean that there would be three different index-linked gilt instruments trading in the market: three-month lag RPI-linked gilts; eight-month lag RPI-linked gilts; and CPI-linked gilts. In that context, the Government welcomes respondents' views as to the risk of issuing CPI-linked gilts on liquidity in the index-linked gilt market, and how such risks should be managed. The Government also welcomes views on other perceived risks associated with issuing CPI-linked gilts.

Implications of a potential change in CPI methodology

26. The official annual inflation rate for the UK CPI (formerly known as the Harmonised Index of Consumer Prices - HICP) begins in January 1997. Since the start of the official series, annual RPI inflation has been, on average, 88 basis points higher than the CPI. One of the reasons for the difference between RPI and CPI lies in the different formulae used to calculate RPI and CPI: the calculation of RPI uses an arithmetic mean at the first stage of aggregation while the calculation of the CPI mainly uses a geometric mean. The difference in the annual change created by this methodological difference means that RPI shows a higher rate of change for a given set of price data relative to CPI. Since 1997, the formula effect (that is, the effect of using mainly geometric means for elementary aggregation in CPI, rather than

arithmetic means) has contributed at least 0.4 percentage points, and on average about 0.5 percentage points, to the difference between RPI and CPI annual rates of change. In other words, the CPI annual rate would typically have been about 0.5 percentage points higher if the elementary aggregates had been calculated using arithmetic means as in RPI. It is worth noting, however, that since February 2011 the formula effect has contributed at least a 1.0 percentage point difference between RPI and CPI annual rates. The overall difference between the annual change in RPI and CPI can, though, fluctuate significantly over time as highlighted in Chart 3 below.

Chart 3: Annual change in RPI and CPI



Source: Office for National Statistics

27. The volatility in the variation between the annual change in RPI and CPI is to a large extent reflective of the inclusion of owner-occupied housing costs (principally mortgage interest payments and housing depreciation) in RPI, which are not included in the calculation of CPI. In very broad terms, whenever housing costs increase faster than other prices, there is the potential that increases in RPI will be higher than those in CPI. According to the Office for National Statistics (ONS), many owner occupiers' housing

(OOH) costs are currently excluded from CPI because of practical difficulties both in determining the most appropriate way of calculating these costs and in obtaining the necessary data to do so.

28. There are currently independent workstreams underway, at both the European level, through Eurostat¹¹, and at the domestic level, examining the inclusion of OOH costs in the CPI. The Annex describes these workstreams more fully, as well as explaining the relationship and roles of the key organisations and committees associated with the decision making on methodological changes and the production of the UK CPI, namely: (i) the UK Statistics Authority and ONS; (ii) the Consumer Prices Advisory Committee (CPAC); and (iii) Eurostat.

29. The rules underlying the construction of the CPI (HICP) for EU countries mean that although the UK can influence and help shape methodological developments, ultimately the composition and calculation methodology of the UK CPI (i.e. the “main” UK CPI) is a decision for the European Statistical System. These decisions do not preclude ONS from publishing an alternative and additional version of CPI. For example, ONS could decide to publish its own variant of the CPI which includes OOH costs, in advance of any decision by Eurostat to include OOH in the main CPI.

30. Any use of the main CPI or potential variants of the CPI for macroeconomic purposes is a matter for the Government. The legislation on indexation and revaluation of private sector occupational pensions does not specify a particular measure of inflation. In previous years the figures in the Revaluation Order have been calculated by reference to RPI. The Revaluation Order in use in 2011 has been prepared using CPI as the measure of the level of general increase in prices for the 12 month period ending on 30 September 2010. The Government welcomes views as to whether the possibility of eventual inclusion of owner-occupier housing in the

¹¹ Eurostat is the statistical office of the European Union. Its task is to provide the European Union with statistics at European level that enable comparisons between countries and regions.

CPI would affect the relative demand for CPI-linked gilts compared with RPI-linked gilts, and/or the appropriate timing of the introduction of any CPI-linked gilts.

Instrument design

31. In December 2004, the Government announced the decision to adopt a new indexation structure for new issues of index-linked gilts¹². More specifically, all new index-linked gilts issued from the 2005-06 financial year use a three-month as opposed to an eight-month indexation lag, reflecting the adoption of a three-month lag as international best practice. The Government intends that any CPI-linked gilt issue would adopt the same design (three-month indexation lag, with no deflation floor¹³ on the principal payments), but respondents may wish to offer views on this¹⁴.

32. Revisability of index¹⁵. Once the RPI indices are published, they are never revised. When errors have been identified, an announcement has been made about the size of the error and by how much the correct value differed from the published value. Although the index is not revised for the month or months in error, it is set to the correct level going forwards at the earliest opportunity so that the error is not continued into the future¹⁶. The CPI, on the other hand, is a revisable index, although revisions have historically been minimal¹⁷. The potential to revise the index introduces a new requirement to

¹² UK DMO, *Issuance of ultra-long gilt instruments, Consultation Document*, 2 December 2004.

¹³ Deflation floors mean that the issuer guarantees that the redemption payment on index-linked bonds will not be less than the original par value; i.e. it protects the nominal value of the principal should deflation occur over the life of the bond. RPI-linked gilts do not include a deflation floor.

¹⁴ Design features of RPI-linked gilts (3-month indexation lag) can be found at:

<http://www.dmo.gov.uk/documentview.aspx?docname=/giltsmarket/formulae/yldeqns.pdf&page=Gilts/Formulae>, and <http://www.dmo.gov.uk/documentview.aspx?docname=/giltsmarket/formulae/indexlinked3m.pdf&page=Gilts/Formulae>

¹⁵ A detailed description of how the RPI and CPI are constructed and the rules around revision can be found in the ONS publication: *Consumer Price Indices – Technical Manual*, 2010 Edition at:

http://www.statistics.gov.uk/downloads/theme_economy/CPI_Technical_manual-2010.pdf

¹⁶ The decision never to revise published RPI figures is a consequence of the special governance arrangements for the RPI specified under the *Statistics and Registration Service Act 2007*, which can be found at: <http://www.legislation.gov.uk/ukpga/2007/18/contents>

¹⁷ In February 2006, the ONS changed the reference period for the CPI from 1996=100 to 2005=100. At the same time, it changed its rounding procedure for the CPI. Revisions to

specify in advance how any such revisions should be taken account of in the terms of issue (prospectus).

33. There are essentially two options for dealing with index revisions to the uprating of index-linked bonds: (i) to make subsequent adjustments to the nominal value and/or interest payment on an index-linked bond to account for an index revision; or (ii) not to make any subsequent adjustment to the nominal value and/or coupon payment on the bond to take account of any revision (i.e. only the originally published index figure is applied for the purposes of indexing bonds). In Australia, for example, if revisions are made to the Australian CPI (the index that Australian Treasury Index Bonds are linked to), then subsequent adjustments are made to the index-linked bond, as per option (i)¹⁸. Conversely, in the US and France¹⁹ for example, Government bonds linked to the price index are indexed exclusively on the first estimate of that price index, regardless of any potential later revisions as per option (ii).

34. In order to avoid introducing an additional source of potential uncertainty, relative to RPI-linked gilts, for investors holding a CPI-linked gilt, the Government is minded to adopt option (ii) above: i.e. not make a subsequent adjustment to the nominal value and/or coupon payment on the gilt to take account of any revision. In addition, the Government would also propose that the accrued interest calculation on CPI-linked gilts would be based on the originally published CPI. If CPI-linked gilts were to be issued, the Government welcomes views on the proposal to index CPI-linked gilts exclusively on the first publication of the CPI for the relevant month(s), regardless of any potential later revisions.

around one-third of the monthly and annual rates of change were solely due to the rebasing exercise and the use of unrounded indices to derive the rates of change.

¹⁸ In the Commonwealth of Australia's terms and conditions of issue for Treasury Indexed Bonds, it states that: "If a relevant CPI number is revised after the payment of interest at a particular interest payment date, a subsequent adjustment will be made to the nominal value and/or interest payment to take account of any discrepancy".

¹⁹ The Agence France Trésor states in its publication, *The Reference of Index-linked Bonds in the Eurozone*, that: "In order to offer investors all of the necessary legal security, the French Treasury is adopting for the OATei the same technique used by the United States Treasury for TIPS. Thus, the OATei is indexed exclusively on the first estimate of the HICP, regardless of any potential later revisions".

Other issues for consideration

Incorporation in the gilt indices

35. Given the importance in the UK market of investors who benchmark against indices, it would be important that any CPI-linked gilts would be included in such indices, similar to RPI-linked gilts. For example, FTSE has stated publicly that in the event that CPI-linked gilts are issued, they will be included in FTSE gilt indices²⁰. While FTSE has not yet announced how it would incorporate any CPI-linked gilts in gilt indices, it has amended rule 5.1.1 of its Ground Rules to allow for their inclusion²¹. Index providers are invited to consider how they might respond to the issuance of CPI-linked gilts.

Tax legislation

36. Under the existing framework of taxation provisions, the interest uplift on RPI-linked gilts is taxable, but the uplift in principal as a result of index-linking is not treated as interest, and is not taxable²². If the Government were to introduce CPI-linked gilts, it is important that the same tax treatment should apply as for RPI-linked gilts. The Government would make use of provisions in the legislation to extend the taxation provision on RPI-linked gilts to CPI-linked gilts.

²⁰ FTSE announcement of 21 January 2011, *FTSE Actuaries UK Gilt Indices Ground Rule Change*, can be found at:

http://www.ftse.com/tech_notices/2011/Q1/30027_20110121_FTSE_UK_Gilts_GroundRuleChange_CPI.jsp

²¹ Full details of the rules for FTSE gilt indices can be found in the publication, *Ground Rules for the Management of the FTSE Actuaries UK Gilts Index Series*, Version 3.2 (January 2011) at: http://www.ftse.com/Indices/FTSE_UK_Gilts_Indices/Downloads/gilts_indexrules.pdf

²² Index-linked gilts are an inflation hedging tool and therefore only real gains should be taxed in order not to impair the inflation-hedging quality of the asset.

Key questions

The DMO welcomes views on any of the issues raised in this paper, or any others that stakeholders consider relevant to the decision about whether or not to introduce CPI-linked gilts. Respondents are requested to provide any data and/or analysis in support of their views and recommendations, taking into account the key criteria that the Government will consider in weighing up the case to issue CPI-linked gilts. These criteria, which would apply to the launch of any new instrument, are:

- (i) consistency with the debt management objective and the principles on which debt management policy is based;
- (ii) impact on liquidity and the good functioning more generally of the gilt market;
- (iii) the likely size of demand for the new instrument; and
- (iv) an assessment of the cost and resource commitment required for implementation in comparison with the potential size of demand.

Particular issues that the DMO would appreciate comments on are:

Potential demand for CPI-linked gilts

1. What is the potential source, scale and depth of demand for CPI-linked gilts in an absolute context and also relative to RPI-linked gilts? How might such demand translate into cost-effective issuance for the Government? What would be the size of any premium that potential investors would be willing to pay for CPI-linked gilts (e.g. as a spread to RPI-linked gilts)?
2. What is the substitutability between potential CPI-linked gilts and RPI-linked gilts? If the Government were to continue only to issue RPI-linked gilts, to what extent would they provide a suitable hedge for CPI-linked liabilities? What are the prospects for CPI/RPI hedging

products emerging as an alternative liability management tool to CPI-linked gilts?

3. If the Government were to issue CPI-linked gilts, how would issuance of these gilts fit into the existing index-linked gilt issuance strategy? What would be respondents' preferred split of issuance between RPI-linked gilts and CPI-linked gilts? What maturities or maturity range would be most suitable for hedging CPI-linked liabilities, taking into account the existing range of RPI-linked gilts?
4. If the Government were to issue CPI-linked gilts, would respondents who hold RPI-linked gilts ideally prefer to shift a proportion of their portfolio from RPI-linked gilts into CPI-linked gilts? If so, what form might this take (e.g. relevant Government support such as conversion/switch operations)?

Market fragmentation and other risks

5. Would the introduction of CPI-linked gilts detract from the liquidity of RPI-linked gilts or otherwise fragment the index-linked gilt market? How might any such fragmentation be minimised?
6. Are there any other issues and risks that the Government should be aware of in launching a new CPI-linked gilt and developing a market for such gilts? If so, how might any such risks be managed?

CPI methodology

7. Does the possibility of eventual inclusion of owner-occupier housing in the CPI affect the relative demand for a CPI-linked gilt compared with an RPI-linked gilt, and/or the appropriate timing for its introduction?

Instrument design

8. If the Government were to issue CPI-linked gilts, it is proposing that they would follow the same design as three-month lagged RPI-linked gilts, unless there were a compelling case to make any modifications. Are there any such modifications to instrument design that the Government should consider? In addition, how should any CPI-linked gilts be distinguished from RPI-linked gilts (e.g. in the naming convention). Please state the rationale for your comments.

9. If the Government were to issue CPI-linked gilts, do respondents agree with the Government's proposal not to make subsequent adjustments to the nominal value and/or coupon payment on CPI-linked gilts to take account of any revision in the CPI following its original publication? In addition, do respondents agree with the Government's proposal that accrued interest should be calculated using the first publication of the CPI, regardless of any potential later revisions?

Lead time for implementation and inaugural issuance

10. If the Government were to issue CPI-linked gilts, when should the first issuance be? What would be the lead times required by investors, primary dealers and other interested stakeholders?

11. Is there a preferred maturity point at which the Government should focus any initial issuance of CPI-linked gilts?

ANNEX: CPI and owner-occupied housing costs

1. The Office for National Statistics (ONS) produces two main measures of consumer prices: the Retail Prices Index (RPI) and the Consumer Prices Index (CPI). Unlike the RPI, the rules underlying the construction of the CPI are governed by the European Union (EU) with changes determined by a qualified majority vote of the Member States; the CPI was developed as a comparable measure of inflation across EU Member States. Internationally, it is known as the Harmonised Index of Consumer Prices (HICP). It was created by an EU Council Regulation passed in October 1995.

2. One of the key differences between the RPI and CPI is the inclusion of owner-occupied housing costs (OOH) in the RPI, but not in the CPI. This is because of practical difficulties both in determining the most appropriate way of calculating these costs and in obtaining the necessary data to do so. Housing components (such as mortgage interest payments, council tax, dwelling insurance and house depreciation) included in the RPI but which are excluded from the CPI account for approximately 13 per cent of the total RPI weight.

3. Over the last year, the Consumer Prices Advisory Committee²³ (CPAC) has been guiding the development by ONS Prices Division of approaches for introducing OOH into the CPI to produce an extended CPI including OOH (CPIH).

4. ONS will continue to develop two new indices of housing costs for potential inclusion in an expanded CPI: one which looks at the costs incurred in buying and maintaining a house (net acquisitions approach); and one which estimates housing costs from the actual rents paid for equivalent rented properties (rental equivalence approach). In its statement of 6 December

²³ The Consumer Prices Advisory Committee (CPAC) was established to advise on changes to the arrangements for producing and presenting consumer price indices. Its 2010 Annual Report to the UK Statistics Authority is available at:

http://www.statistics.gov.uk/downloads/theme_economy/cpac-annual-report2010.pdf

2010²⁴, the UK Statistics Authority accepted the recommendation of the 2010 CPAC Annual Report that “ONS should develop owner occupiers’ housing costs indices, using the net acquisitions and rental equivalence approaches, for potential inclusion in an expanded CPI within two years”.

5. In parallel, Eurostat has been working for a number of years towards implementing OOH into the HICP (to note that HICP is what is termed CPI in the UK) focusing on the net acquisitions approach. This work has proved difficult and progress has been slow. In addition to the challenges outlined above, the different housing markets in the countries across the EU add another degree of difficulty in developing a harmonised measure of OOH. ONS is a leader in Europe on OOH development and participates in a Eurostat HICP Steering Group which has been investigating and advising on issues relating to implementing OOH into the HICP. Recently, Eurostat has proposed draft regulations for the production of a standalone owner occupiers’ housing cost index, with a view for quarterly production from 2014. However, this is not the same as an HICP that includes OOH and the implementation of OOH into the HICP would appear some way off.

²⁴ UK Statistics Authority statement of 6 December 2010, *Measures of Inflation*, can be found at: <http://www.statisticsauthority.gov.uk/news/measures-of-inflation.html>