# Annex B

# Context for decisions on the Debt Management Office's financing remit

#### Introduction

- B.1 This annex provides the context for the government's decisions on gilt and Treasury bill issuance in 2021-22, setting out the qualitative and quantitative considerations that have influenced them.
- B.2 The government's decisions on the structure of the financing remit, which are taken annually, are made in accordance with the debt management objective, the debt management framework and wider policy considerations (see Chapter 2).
- B.3 In determining the overall structure of the financing remit, the government assesses the costs and risks of debt issuance by maturity and type of instrument. Decisions on the composition of debt issuance are also informed by an assessment of investor demand for debt instruments by maturity and type as reported by stakeholders, and as manifested in the shape of the nominal and real yield curves, as well as the government's appetite for risk.
- B.4 Alongside these considerations, the government takes into account the practical implications of issuance (for example, the scheduling of operations throughout the year).

#### **Demand**

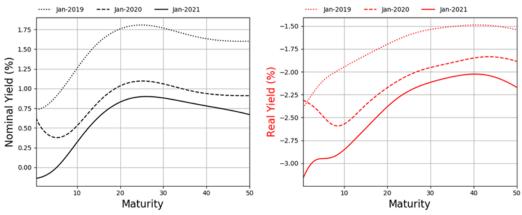
B.5 Both Gilt-Edged Market Makers (GEMMs) and end-investors have reported ongoing demand for all instrument types. This includes demand for shorter-dated gilts, not least given the large size of redemptions in 2021-22; for medium gilts as a key liquidity point; and for duration in the form of long-dated conventional gilts (in particular, in the 15-25-year sector). There has also been positive feedback for the forthcoming green gilt issuance. Renewed demand has been expressed for index-linked gilts (ILGs), in particular, for longer-dated maturities following the conclusion of the government's and UKSA's consultation on the timing of RPI reform.

#### Cost

B.6 This section evaluates the relative cost effectiveness of different types of gilt issuance. Chart B.1 displays the shapes of the nominal and real spot yield

curves as of end-January 2019, 2020 and 2021. Both nominal and real yield curves have shifted downward over the years.

Chart B.1 Nominal and real spot yield curves (as of end-January 2019, 2020 and 2021)



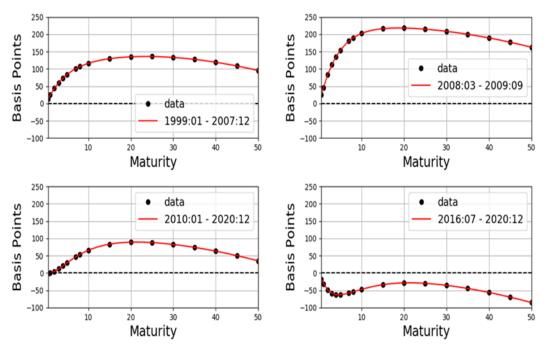
Source: DMO.

- B.7 Yields on long-term bonds can be decomposed into two components: a 'risk neutral' yield and a risk premium. The former corresponds to the average expected future short-term interest rates over the life of the bond. The latter is normally thought of as the additional return that risk-averse investors demand as compensation for the possibility of capital loss if a bond is sold before maturity and, in the case of conventional bonds, the risk of the bond value being eroded by inflation. The risk premium may also be determined by supply and demand imbalances for a specific instrument. It is usually cost-effective for a government to issue at maturities where the risk premium demanded by investors is lowest relative to other maturities.
- Risk premia are typically maturity-specific and time-varying. Several factors contribute to the variation and trends in risk premia, among which are changes in investors' risk preferences and expectations, and unanticipated macroeconomic shocks. Chart B.2 displays the term structure of risk premia, with each individual panel showing a selected time period. The top left panel is the period before the financial crisis when yields and risk premia were higher than today. Risk premia increased during the global financial crisis (top right panel). Since then there has been a steady decline and they are currently at historically low levels across all maturities (bottom right panel). This suggests that conventional gilts across the maturity spectrum are currently more cost-effective than has historically been the case.

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More generally, the risk premium can be decomposed into several components, including: (i) a premium which compensates investors for duration risk that increases for longer maturity investments; (ii) a credit and default risk premium; (iii) a liquidity discount or premium owing to the different levels of liquidity in some bonds or maturities, which enhances or restricts investors' ability to hedge; and (iv) an inflation risk premium to compensate investors in nominal bonds for uncertainty owing to inflation.

Chart B.2 The term structure of risk premia in the UK conventional gilt market over selected sample periods<sup>2</sup>



<sup>2</sup>Averages over selected time period of time-varying risk premia based on the AFNS model of Christensen, J. H., Diebold, F. X., & Rudebusch, G. D. (2011). The affine arbitrage-free class of Nelson–Siegel term structure models. Journal of Econometrics, 164(1), 4-20.

Source: DMO.

- B.9 The government undertakes an evaluation of the relative cost-effectiveness of ILGs, in addition to its analysis of conventional gilts. ILGs differ from conventional gilts as both the principal and coupon payments are linked to the value of RPI. One motivation for issuing ILGs is that investors are willing to pay a premium for the protection from inflation that these securities provide.
- B.10 The difference between the yield on a nominal and on an ILG of the same maturity is referred to as the breakeven inflation rate ('BEIR'). The BEIR can be seen as the rate of inflation at which investments in ILGs and conventional gilts would result in the same return. The BEIR can be decomposed into an expected inflation component and two additional factors: the additional premium investors are willing to pay for protection against inflation, and the discount they require for holding less liquid bonds. Consequently, one possible way to assess the cost-effectiveness of ILG issuance relative to conventional gilts is to compare actual inflation outturns with market-implied BEIRs.
- B.11 This analysis is complicated by the planned reform to RPI which will take place in 2030 when the methods and data sources of CPIH will be brought into RPI. Chart B.3 illustrates potential savings from ILG issuance under different RPI inflation scenarios. It is expressed in £millions saved per £billion of each bond issued. At end-January 2021, it shows that, under the scenario which assumes that the future average RPI rate is 3% (equal to the long term RPI average) until 2030 and 2% thereafter, all ILGs over approximately seven years in maturity generate cost savings.

40 Annual saving in £ million per £billion of gilts reopened 30 20 10 -10 3% RPI until 2030, 2% RPI thereafter 3.5% RPI until 2030, 2.5% RPI thereafter 2.5% RPI until 2030, 1.5% RPI thereafter -20 0 5 10 15 20 30 40 45 50 25 35 Years to maturity

Chart B.3 The cost effectiveness of index-linked gilts under different RPI assumptions (end-January 2021)

Source: DMO.

## Risk

- B.12 In the context of the long-term focus of the debt management objective, the other key determinant in the government's decisions on debt issuance by maturity and type of instrument is its assessment of risk. In reaching a decision on the overall structure of the remit, the government considers the risks to which the Exchequer is exposed through its debt issuance decisions and assesses the relative importance of each risk in accordance with its risk appetite.
- B.13 The government places a high weight on minimising near-term exposure to refinancing risk. This exposure is managed partly by maintaining a sizeable proportion of long-dated debt in the portfolio, which reduces the need to refinance debt frequently. Relatedly, all else equal this also reduces our exposure to interest rate risk in the near term. The government places importance on avoiding, when practicable, large concentrations of redemptions in any one year. To achieve this, the government will issue debt across a range of maturities, smoothing the profile of gilt redemptions.
- B.14 The government is mindful of the long-term inflation exposure in the public finances and gives due consideration to ensuring inflation risk is prudently managed. The government will manage this exposure through its decisions on the appropriate balance between index-linked and conventional gilts in its debt issuance in the coming years.

- B.15 Prudent debt management is also served by promoting sustainable market access, which the remit is designed to support. The government places significant importance on encouraging the development of a deep, liquid and efficient gilt market and a diverse investor base in order to maintain continuous access to cost-effective financing in all market conditions.
- B.16 Promoting these features of the gilt market will also serve to minimise debt costs to the government over the long term because investors reward an issuer for providing a continuous and ready market and a globally recognised benchmark product.

### Gilt distribution

- B.17 Auctions will remain the primary method of issuance in 2021-22.
- B.18 Any type and maturity of gilt can be sold through syndication and the DMO will announce on a quarterly basis its planned syndication programme.
- B.19 The government currently expects to hold six syndicated offerings in 2021-22, three each of long conventional and index-linked gilts.
- B.20 Gilt tenders may be used in 2021-22 to issue any type and maturity of gilt. Further details are set out in the DMO's 2021-22 financing remit announcement.
- B.21 The scheduling of gilt operations during the course of 2021-22 will as usual take into account the timing of gilt redemptions in the financial year.
- B.22 The government remains committed to the GEMM model to distribute gilts through auctions, syndications and gilt tenders and the government recognises that GEMMs play an important role in helping to facilitate liquidity in the secondary market.

# Gilt issuance by maturity and type in 2021-22

- B.23 In determining the split of gilt issuance, the government has considered its analysis of the relative cost-effectiveness of the different gilt types and maturities, its risk preferences including for the portfolio as well as the issuance programme, and the market feedback it has received.
- B.24 Continuing demand for short conventional gilts is anticipated, in particular owing to redemption reinvestment flows, which has been balanced against managing the government's near-term exposure to refinancing risk.
- B.25 In deciding the proportion of medium conventional gilts to issue, the government recognises the important role that medium conventional gilts (particularly at the 10-year maturity) play in facilitating the hedging of a wide range of gilt market exposures through the futures market, which helps underpin liquidity in the sector.
- B.26 A materially higher proportion of short and medium conventional gilts was issued in 2020-21 than originally planned in order to help meet the exceptionally high financing requirement. Relative to the current plans for 2020-21, lower proportions of issuance in both short and medium conventional gilts are planned in 2021-22.

- B.27 Market feedback also suggests ongoing demand exists for long conventional gilts from domestic investors in particular. Additionally, in determining the amount of long-dated conventional gilts to issue, the government has taken into account the role of long conventional issuance in mitigating its near-term exposure to refinancing risk.
- B.28 Issuing index-linked gilts has historically brought cost advantages for the government due to strong demand, and has built the UK's financial resilience by supporting both the UK's long average debt maturity and diversifying the investor base. Tying debt interest payments to inflation has also underscored the government's commitment to price stability in the period prior to central bank independence; however, the UK's relatively large stock of index-linked debt also increases the sensitivity of the public finances to inflation shocks, as highlighted in the OBR's 2017 'Fiscal risks report'.
- B.29 At Budget 2018 and as part of the government's responsible approach to fiscal risk management the government announced that it would look to reduce the proportion of index-linked gilt issuance in a measured fashion over the medium term, which it has been doing since.
- B.30 Due to the exceptionally high financing requirement in 2020-21, and against the backdrop of the government's and UKSA's consultation on the timing of RPI reform, the proportion of index-linked issuance was significantly lower than in previous years, although in absolute terms, it will be around £10 billion higher than in 2019-20. Current plans assume a similar absolute supply of index-linked gilts in 2021-22.
- B.31 A larger proportion and significantly higher absolute amount of issuance will be initially unallocated in 2021-22 compared with plans announced at the March 2020 Budget. The existing purposes of the unallocated portion of issuance to give increased flexibility to the DMO to issue any type or maturity of gilt by any issuance method, while remaining consistent with the principles of openness, predictability and transparency will continue to apply. In 2021-22 the unallocated portion will be used additionally to account for the issuance of green gilts. Once an initial green gilt offering has been executed, the proceeds from that transaction (and any future transactions) will be reported separately in the financing arithmetic table for 2021-22, and deducted accordingly from the balance of the unallocated pot.

# Treasury bill issuance in 2021-22

- B.32 Treasury bills are used for both debt and cash management purposes. With regard to the former, changes to the Treasury bill stock have historically offered an efficient way to accommodate in-year changes to the financing requirement.
- B.33 The government does not target a planned end-year Treasury bill stock. Information on the outstanding stock of Treasury bills will continue to be published monthly in arrears on the DMO's website.<sup>2</sup>

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<sup>2</sup> www.dmo.gov.uk/data/treasury-bills

B.34 It is expected that net issuance of Treasury bills will make a small contribution to debt financing in 2021-22 of £1.8 billion.